## APPENDIX: FOR ONLINE PUBLICATION ONLY

## A Appendix Tables

Table A.1: Attrition, Team Level

|  | Non-Attrited <br> $(1)$ | Attrited <br> $(2)$ | Diff. <br> $(3)$ | Std. Diff. <br> $(4)$ |
| :--- | :---: | :---: | :---: | :---: |
| Gender-mixed team | 0.330 | 0.362 | 0.032 | 0.047 |
|  | $(0.471)$ | $(0.484)$ | $(0.062)$ |  |
| All-female team | 0.336 | 0.304 | -0.032 | -0.048 |
|  | $(0.473)$ | $(0.464)$ | $(0.062)$ |  |
| Mean A-level GPA | 2.741 | 2.724 | -0.017 | -0.074 |
|  | $(0.165)$ | $(0.150)$ | $(0.021)$ |  |
| Share top-tier high school | 0.828 | 0.815 | -0.013 | -0.048 |
|  | $(0.191)$ | $(0.190)$ | $(0.025)$ |  |
| Mean age | 22.607 | 22.525 | -0.162 | -0.080 |
|  | $(1.500)$ | $(1.369)$ | $(0.195)$ |  |
| Share foreign nationality | 0.036 | 0.065 | 0.029 | 0.205 |
|  | $(0.092)$ | $(0.111)$ | $(0.013)$ |  |
| Share study program Master level | 0.243 | 0.214 | -0.030 | -0.098 |
|  | $(0.203)$ | $(0.224)$ | $(0.027)$ |  |
| Share study program arts and humanities | 0.241 | 0.283 | 0.041 | 0.134 |
|  | $(0.210)$ | $(0.227)$ | $(0.028)$ |  |
|  | 0.192 | 0.188 | -0.004 | -0.013 |
| Share study program engineering | $(0.214)$ | $(0.194)$ | $(0.028)$ |  |
| Share study program natural sciences | 0.102 | 0.069 | -0.033 | -0.181 |
|  | $(0.147)$ | $(0.112)$ | $(0.019)$ |  |
| Share study program economics and business | 0.289 | 0.272 | -0.018 | -0.054 |
|  | $(0.240)$ | $(0.222)$ | $(0.031)$ |  |
| N. of obs. | 342 | 69 | 411 | 411 |

Notes: This table documents attrition at team level. Attrition happens because teams are disqualified if a member drops out during the team task. Column (1) shows means and standard deviation for non-attrited teams. Column (2) shows means and standard deviation for attrited teams. Column (3) shows estimated differences between attrited and non-attrited teams and corresponding standard errors. Column (4) shows standardized differences.

Table A.2: Attrition, Individual Level (First Stage)

|  | Non-Attrited <br> $(1)$ | Attrited <br> $(2)$ | Diff. <br> $(3)$ | Std. Diff. <br> $(4)$ |
| :--- | :---: | :---: | :---: | :---: |
| Gender-mixed team | 0.330 | 0.362 | 0.032 | 0.047 |
|  | $(0.471)$ | $(0.482)$ | $(0.063)$ |  |
| All-female team | 0.336 | 0.304 | -0.032 | -0.048 |
|  | $(0.473)$ | $(0.461)$ | $(0.061)$ |  |
| A-level GPA | 2.741 | 2.724 | -0.017 | -0.019 |
|  | $(0.613)$ | $(0.635)$ | $(0.020)$ |  |
| Top-tier high school | 0.828 | 0.815 | -0.013 | -0.024 |
|  | $(0.377)$ | $(0.389)$ | $(0.025)$ |  |
| Age | 22.687 | 22.525 | -0.162 | -0.038 |
|  | $(3.143)$ | $(2.890)$ | $(0.183)$ |  |
| Foreign nationality | 0.036 | 0.065 | 0.029 | 0.095 |
|  | $(0.186)$ | $(0.247)$ | $(0.014)$ |  |
| Study program: Master level | 0.243 | 0.214 | -0.030 | -0.050 |
|  | $(0.429)$ | $(0.411)$ | $(0.029)$ |  |
| Study program: Arts and humanities | 0.241 | 0.283 | 0.041 | 0.067 |
|  | $(0.428)$ | $(0.451)$ | $(0.029)$ |  |
| Study program: Engineering | 0.192 | 0.188 | -0.004 | -0.007 |
|  | $(0.394)$ | $(0.392)$ | $(0.026)$ |  |
| Study program: Natural sciences | 0.102 | 0.069 | -0.033 | -0.085 |
|  | $(0.303)$ | $(0.254)$ | $(0.016)$ |  |
| Study program: Economics and business | 0.289 | 0.272 | -0.018 | -0.028 |
|  | $(0.454)$ | $(0.446)$ | $(0.030)$ |  |
| N. of obs. | 1368 | 276 | 1644 | 1644 |

Notes: This table documents attrition at individual level in the first stage of the experiment. Attrition happens because all members of a team are disqualified if a member drops out during the team task. Column (1) shows means and standard deviation for non-attrited individuals. Column (2) shows means and standard deviation for attrited individuals. Column (3) shows estimated differences between attrited and non-attrited individuals and corresponding standard errors. Column (4) shows standardized differences.

Table A.3: Attrition, Individual Level (Second Stage)

|  | Non-Attrited <br> $(1)$ | Attrited <br> $(2)$ | Diff. <br> $(3)$ | Std. Diff. <br> $(4)$ |
| :--- | :---: | :---: | :---: | :---: |
| Gender-mixed team | 0.326 | 0.393 | 0.067 | 0.099 |
|  | $(0.469)$ | $(0.489)$ | $(0.045)$ |  |
| All-female team | 0.317 | 0.332 | 0.015 | 0.022 |
|  | $(0.466)$ | $(0.472)$ | $(0.042)$ |  |
| A-level GPA | 2.740 | 2.737 | -0.004 | -0.004 |
|  | $(0.615)$ | $(0.618)$ | $(0.043)$ |  |
| Top-tier high school | 0.818 | 0.843 | 0.025 | 0.047 |
|  | $(0.386)$ | $(0.365)$ | $(0.027)$ |  |
| Age | 22.648 | 22.991 | 0.343 | 0.074 |
|  | $(3.052)$ | $(3.498)$ | $(0.254)$ |  |
| Foreign nationality | 0.021 | 0.057 | 0.036 | 0.133 |
|  | $(0.142)$ | $(0.232)$ | $(0.016)$ |  |
| Study program: Master level | 0.231 | 0.214 | -0.017 | -0.029 |
|  | $(0.422)$ | $(0.411)$ | $(0.031)$ |  |
| Study program: Arts and humanities | 0.268 | 0.197 | -0.072 | -0.120 |
|  | $(0.443)$ | $(0.398)$ | $(0.030)$ |  |
| Study program: Engineering | 0.182 | 0.183 | 0.001 | 0.003 |
|  | $(0.386)$ | $(0.388)$ | $(0.028)$ |  |
| Study program: Natural sciences | 0.093 | 0.127 | 0.034 | 0.076 |
|  | $(0.291)$ | $(0.333)$ | $(0.026)$ |  |
| Study program: Economics and business | 0.272 | 0.288 | 0.016 | 0.025 |
|  | $(0.445)$ | $(0.454)$ | $(0.034)$ |  |
| N. of obs. | 731 | 229 | 960 | 960 |

Notes: This table documents attrition at individual level in the second stage of the experiment. Attrition happens because, starting from all subjects entering the second stage, some cannot be matched due to a missing potential partner. In addition, we consider subjects as attrited if they are from a pair where one or both potential partners did not enter correctly their partner's random number. Column (1) shows means and standard deviation for non-attrited individuals. Column (2) shows means and standard deviation for attrited individuals. Column (3) shows estimated differences between attrited and non-attrited individuals and corresponding standard errors. Column (4) shows standardized differences.

Table A.4: Balancing Stage 2: Origin from Homogenous vs. Mixed Teams

|  | Males assigned to |  | $p$-value both equal <br> (3) | Females assigned to |  | $p$-value both equal <br> (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All-male teams (1) | Mixed teams <br> (2) |  | All-female teams <br> (4) | Mixed teams (5) |  |
| A-level GPA | 2.72 | 2.72 | 0.99 | 2.76 | 2.77 | 0.85 |
|  | (0.61) | (0.61) |  | (0.62) | (0.61) |  |
| Top-tier high school | 0.81 | 0.82 | 0.79 | 0.85 | 0.76 | 0.02 |
|  | (0.39) | (0.41) |  | (0.35) | (0.41) |  |
| Age | 22.67 | 22.53 | 0.68 | 22.65 | 22.71 | 0.84 |
|  | (3.28) | (3.00) |  | (2.84) | (3.00) |  |
| Foreign nationality | 0.03 | 0.02 | 0.55 | 0.02 | 0.02 | 0.98 |
|  | (0.16) | (0.13) |  | (0.13) | (0.13) |  |
| Study program: Master level | 0.27 | 0.24 | 0.61 | 0.19 | 0.22 | 0.52 |
|  | (0.44) | (0.42) |  | (0.39) | (0.42) |  |
| Study program: Arts and humanities | 0.21 | 0.24 | 0.53 | 0.34 | 0.29 | 0.26 |
|  | (0.41) | (0.44) |  | (0.48) | (0.44) |  |
| Study program: Engineering | 0.27 | 0.18 | 0.08 | 0.11 | 0.13 | 0.46 |
|  | (0.44) | (0.37) |  | (0.31) | (0.37) |  |
| Study program: Natural sciences | 0.10 | 0.11 | 0.69 | 0.09 | 0.08 | 0.64 |
|  | (0.29) | (0.29) |  | (0.29) | (0.29) |  |
| Study program: Economics and business | 0.30 | 0.32 | 0.63 | 0.25 | 0.22 | 0.51 |
|  | (0.46) | (0.44) |  | (0.43) | (0.44) |  |
| N. of obs. | 261 | 119 | 380 | 232 | 119 | 351 |

Notes: This table reports balancing checks for stage 2 regarding the subjects' origin from gender-homogenous and mixed first-stage teams. Columns (1) and (2) show means and standard deviation for males who were assigned to all-male or mixed teams, respectively. Column (3) shows $p$-values for tests of the hypothesis that the means are equal. Columns (4) to (6) report corresponding information for female subjects who were assigned to all-female or mixed teams, respectively.
Table A.5: Balancing Stage 2: Assignment to Potential Teammates

|  | Males assigned to |  | $p$-value both equal (3) | Females assigned to |  | $p$-value both equal (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male potential teammate <br> (1) | Female potential teammate <br> (2) |  | Female potential teammate <br> (4) | Male potential teammate (5) |  |
| A-level GPA | 2.75 | 2.68 | 0.28 | 2.75 | 2.78 | 0.59 |
|  | (0.62) | (0.62) |  | (0.59) | (0.62) |  |
| Top-tier high school | 0.83 | 0.81 | 0.63 | 0.80 | 0.84 | 0.43 |
|  | (0.38) | (0.38) |  | (0.40) | (0.38) |  |
| Age | 22.43 | 22.82 | 0.24 | 22.48 | 22.82 | 0.26 |
|  | (3.12) | (3.06) |  | (2.95) | (3.06) |  |
| Foreign nationality | 0.03 | 0.02 | 0.31 | 0.03 | 0.01 | 0.28 |
|  | (0.18) | (0.11) |  | (0.16) | (0.11) |  |
| Master level | 0.24 | 0.28 | 0.32 | 0.18 | 0.21 | 0.54 |
|  | (0.43) | (0.43) |  | (0.39) | (0.43) |  |
| Arts and humanities | 0.23 | 0.20 | 0.58 | 0.32 | 0.32 | 1.00 |
|  | (0.42) | (0.44) |  | (0.47) | (0.44) |  |
| Engineering | 0.25 | 0.24 | 0.77 | 0.11 | 0.12 | 0.66 |
|  | $(0.43)$ 0.10 | $(0.38)$ 0.10 | 0.76 | $(0.31)$ 0.06 | (0.38) | 0.09 |
| Natural sciences | $\begin{gathered} 0.10 \\ (0.29) \end{gathered}$ | $(0.31)$ |  | $\begin{gathered} 0.06 \\ (0.23) \end{gathered}$ | $(0.31)$ |  |
| Econ. and business | 0.29 | 0.31 | 0.62 | 0.24 | 0.24 | 0.89 |
|  | (0.46) | (0.45) |  | (0.43) | (0.45) |  |
| N. of obs. | 189 | 191 | 380 | 157 | 194 | 351 |

Notes: This table reports balancing checks for stage 2 regarding the subjects' assignment to female and male potential teammates. Columns (1) and (2) show means and standard deviation for males who were assigned to male or female potential teammates, respectively. Column (3) shows $p$-values for tests of the hypothesis that the means are equal. Columns (4) to (6) report corresponding information for female subjects.

Table A.6: Descriptives on Outcomes: Individual Level

|  | Mean <br> $(1)$ | Std. Dev. <br> $(2)$ |
| :--- | :---: | :---: |
| A. First-stage outcomes: |  |  |
| Number of words | 487.00 | 361.92 |
| Number of turns | 36.94 | 23.23 |
| Own vocal semtiment: Positive | 0.39 | 0.20 |
| Own vocal semtiment: Negative | 0.26 | 0.14 |
| Perception: Positivity | 4.64 | 0.64 |
| Perception: Cooperativeness | 4.65 | 0.64 |
| Perception: Likeability | 4.01 | 0.93 |
| N. of obs. | 1368 |  |
|  |  |  |
| B. Second-stage outcomes: |  |  |
| Indicator: Subject prefers teamwork | 0.80 | 0.40 |
| Belief: Own productitivity | 10.95 | 3.32 |
| Belief: Partner's productivity | 12.09 | 3.04 |
| Belief: Team productitivity | 14.73 | 2.95 |
| Belief: Positivity | 4.51 | 0.66 |
| Belief: Cooperativeness | 4.51 | 0.64 |
| Belief: Likeability | 4.09 | 0.85 |
| N. of obs. | 731 |  |

Notes: This table shows descriptives for individual-level outcomes. In panel A, due to missing values in survey responses, the number of observations for the outcomes measuring perceptions varies between 1357 and 1362.

Table A.7: Descriptives on Outcomes: Team Level

|  | Mean <br> $(1)$ | Std. Dev. |
| :--- | :---: | :---: |
|  | $(2)$ |  |
| Number of problems solved | 4.35 | 1.69 |
| Number of words | 1947.99 | 680.32 |
| Number of turns | 147.77 | 51.91 |
| HHI words | 0.34 | 0.06 |
| HHI turns | 0.31 | 0.04 |
| Vocal semtiment: Positive | 0.39 | 0.16 |
| Vocal semtiment: Negative | 0.25 | 0.11 |
| Perception: Positivity | 4.64 | 0.39 |
| Perception: Cooperativeness | 4.65 | 0.35 |
| Perception: Likeability | 4.01 | 0.57 |
| N. of obs. | 342 |  |

Notes: This table shows descriptives for team-level outcomes.

Table A.8: Awareness of Team Gender Composition, First Stage

|  | $=1$ if aware of exact <br> team gender composition <br> $(1)$ | $=1$ if aware of whether <br> team is mixed or not <br> $(2)$ |
| :--- | :---: | :---: |
| Female $\left(\beta_{1}\right)$ | -0.016 | -0.015 |
|  | $(0.019)$ | $(0.019)$ |
| Mixed team $\left(\beta_{2}\right)$ | -0.014 | -0.014 |
|  | $(0.020)$ | $(0.020)$ |
| Female $\times$ Mixed team $\left(\beta_{3}\right)$ | $-0.106^{* * *}$ | 0.026 |
|  | $(0.031)$ | $(0.024)$ |
| N. of obs. | 1352 | 1352 |
| Mean dep. var. | 0.94 | 0.96 |
| Mean dep. var. all-male | 0.97 | 0.97 |
| Subject-level controls | Yes | Yes |
| $\beta_{1}+\beta_{3}=0(p$-value $)$ | 0.000 | 0.439 |
| $\beta_{2}+\beta_{3}=0(p$-value $)$ | 0.000 | 0.532 |

Notes: This table shows OLS regressions using as dependent variables indicators for subjects who were aware of the team gender composition. In Column (1), we use an indicator for subjects whose answer to a survey question on how many of the teammates were female indicates awareness of the exact team gender composition. Column (2) adjusts the indicator by coding females in mixed teams as aware of the gender composition if their response suggests they counted themselves in when stating the number of female team members (the question asked for the number of females among the other team members). The regressions control for A-level GPA, age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for teams where some members were silent during the team task. Standard errors (clustered at team level) in parentheses. * $p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$.

## Table A.9: Awareness of Potential Partner's Gender, Second Stage

|  | = if subject is aware of <br> potential partner's gender |  |  |
| :--- | :---: | :---: | :---: |
|  | All | Females | Males |
|  | $(1)$ | $(2)$ | $(3)$ |
| Female partner 2nd stage $(\beta)$ | 0.005 | 0.014 | -0.001 |
|  | $(0.012)$ | $(0.017)$ | $(0.014)$ |
| N. of obs. | 731 | 351 | 380 |
| Mean dependent variable | 0.98 | 0.98 | 0.98 |
| Subject-level controls | Yes | Yes | Yes |

Notes: This table shows OLS regressions using as dependent variable an indicator for subjects who answered correctly a survey question on whether the potential partner in stage 2 was female. The regressions control for A-level GPA, age, and indicators for an A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for teams where some members were silent during the team task. Column (1) also controls for gender. Standard errors (clustered at team level) in parentheses. * $p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$.

Table A.10: Balancing Checks: Subjects Working Under Individual Piece Rate

|  | Males | Females | $p$-value <br> both equal |
| :--- | :---: | :---: | :---: |
|  | $(1)$ | $(2)$ | $(3)$ |
| A-level GPA | 2.70 | 2.75 | 0.47 |
|  | $(0.62)$ | $(0.57)$ |  |
| Top-tier high school | 0.81 | 0.80 | 0.84 |
|  | $(0.39)$ | $(0.40)$ |  |
| Age | 23.32 | 22.94 | 0.27 |
|  | $(3.04)$ | $(2.90)$ |  |
| Study program: Master level | 0.30 | 0.19 | 0.03 |
|  | $(0.46)$ | $(0.39)$ |  |
| Foreign nationality | 0.05 | 0.05 | 0.81 |
|  | $(0.23)$ | $(0.21)$ |  |
| N. of obs. | 149 | 147 | 296 |

Notes: This table reports balancing checks by gender for subjects who worked on the team task individually. Columns (1) and (2) show means and standard deviation for males and females, respectively. Column (3) shows $p$-values for tests of the hypothesis that the means are equal.

Table A.11: Gender Neutrality: Subjects Working Under Individual Piece Rate

|  | Number of <br> problems solved <br> $(1)$ | Likeability <br> of the task <br> $(2)$ |
| :--- | :---: | :---: |
| Female | -0.121 | -0.152 |
| A-level GPA | $(0.211)$ | $(0.127)$ |
|  | $0.725^{* * *}$ | -0.076 |
| Study program: Arts \& humanities | $(0.168)$ | $(0.105)$ |
|  | 0.103 | 0.220 |
| Study program: Engineering | $(0.288)$ | $(0.176)$ |
|  | 0.300 | 0.300 |
| Study program: Natural sciences | $(0.334)$ | $(0.187)$ |
|  | -0.356 | 0.024 |
| Study program: Economics \& business | $(0.358)$ | $(0.234)$ |
|  | -0.208 | 0.203 |
| Mean dep. var. males | $(0.337)$ | $(0.189)$ |
| N. of obs. | 4.46 | 3.21 |
| Subject-level controls | 296 | 296 |

Notes: This table reports OLS regressions using the sample of subjects who worked on the team task under an individual piece rate (no communication with other subjects, no teamwork). Column (1) shows how the performance of subjects depends on gender, A-level GPA, and the series of study field indicators. In addition, the regressions control for A-level degree obtained from the top-tier high school type, age, study program at Master level, and foreign nationality. Column (2) reports an equivalent regression using as an outcome the subject's level of agreement with the statement "Working on the problems was fun" (5-point Likert scale, higher numbers indicating stronger agreement).

Table A.12: Beliefs About Potential Partner's Productivity

|  | Belief about partner's <br> individual productivity |  |  |
| :--- | :---: | :---: | :---: |
|  | All | Females | Males |
|  | $(1)$ | $(2)$ | $(3)$ |
| Female partner 2nd stage ( $\beta$ ) | 0.212 | 0.084 | 0.333 |
|  | $(0.262)$ | $(0.384)$ | $(0.344)$ |
| N. of obs. | 731 | 351 | 380 |
| Mean dependent variable | 12.09 | 11.85 | 12.32 |
| Subject-level controls | Yes | Yes | Yes |
| $\beta=0$ ( $p$-value MHT) |  | 0.835 | 0.579 |

Notes: This table shows OLS regressions using as dependent variable the subjects' belief about the number of problems the potential partner would solve individually in a possible further task. All regressions control for gender (Column (1) only), A-level GPA, age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. * $p<0.10$, ${ }^{* *} p<0.05,{ }^{* * *} p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT, two hypotheses included) follow Barsbai et al. (2020).

Table A.13: Robustness: Quantity of Communication Effects, Individual Level

|  | \#Words <br> $(1)$ | \#Words <br> $(2)$ | $\log (\# W o r d s)$ <br> $(3)$ |
| :--- | :---: | :---: | :---: |
| Female $\left(\beta_{1}\right)$ | $-73.21^{* * *}$ | $-81.18^{* * *}$ | $-0.20^{* * *}$ |
|  | $(22.57)$ | $(24.25)$ | $(0.06)$ |
| Mixed team $\left(\beta_{2}\right)$ | $97.66^{* * *}$ | $99.10^{* * *}$ | $0.19^{* * *}$ |
|  | $(29.09)$ | $(28.07)$ | $(0.07)$ |
| Female $\times$ Mixed team $\left(\beta_{3}\right)$ | $-169.41^{* * *}$ | $-182.98^{* * *}$ | $-0.41^{* * *}$ |
|  | $(38.19)$ | $(38.17)$ | $(0.13)$ |
| A-level GPA |  | $116.77^{* * *}$ | $0.30^{* * *}$ |
|  |  | $(15.04)$ | $(0.06)$ |
| Openness |  | 2.89 |  |
|  |  | $(2.53)$ |  |
| Conscientiousness |  | -1.69 |  |
|  |  | $(3.07)$ |  |
| Extraversion |  | $28.71^{* * *}$ |  |
|  |  | $(2.22)$ |  |
| Agreeableness |  | $-9.86^{* * *}$ |  |
|  |  | $7.73^{* * *}$ |  |
| Neuroticism |  | $(2.52)$ |  |
|  |  | Yes | Yes |
| Subject-level controls | No | Yes | No |
| Controls include Big 5 | No | 1281 | 1368 |
| N. of obs. | 1368 | 0.207 | 0.150 |
| Adj. R |  |  | 517.0 |
| Mean dep. var. all-male | 0.042 | 519.4 | 5.9 |
| $\beta_{1}+\beta_{3}=0(p$-value) | 0.000 | 0.000 | 0.000 |
| $\beta_{2}+\beta_{3}=0(p$-value $)$ | 0.003 | 0.001 | 0.009 |

Notes: This table shows OLS regressions at the individual level using as dependent variables the number of words and the number of words in logs, respectively. Regressions control for age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams with silent members. Standard errors (clustered at team level) in parentheses. * $p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$.

Table A.14: Effects on Total Speaking Time, Individual Level

|  | Total speaking time <br> (in minutes) |  |
| :--- | :---: | :---: |
|  | $(1)$ | $(2)$ |
| Female $\left(\beta_{1}\right)$ | -0.19 | -0.21 |
|  | $(0.14)$ | $(0.15)$ |
| Mixed team $\left(\beta_{2}\right)$ | $0.71^{* * *}$ | $0.75^{* * *}$ |
|  | $(0.17)$ | $(0.16)$ |
| Female $\times$ Mixed team $\left(\beta_{3}\right)$ | $-1.12^{* * *}$ | $-1.18^{* * *}$ |
|  | $(0.24)$ | $(0.23)$ |
| A-level GPA | $0.69^{* * *}$ | $0.70^{* * *}$ |
|  | $(0.10)$ | $(0.10)$ |
| Subject-level controls | Yes | Yes |
| Controls include Big 5 | No | Yes |
| N. of obs. | 1368 | 1281 |
| Adj. $\mathrm{R}^{2}$ | 0.086 | 0.186 |
| Mean dep. var. all-male | 3.25 | 3.24 |
| $\beta_{4}:=\beta_{1}+\beta_{3}$ | -1.31 | -1.40 |
| $\beta_{4}=0(p$-value $)$ | 0.000 | 0.000 |
| $\beta_{5}:=\beta_{2}+\beta_{3}$ | -0.41 | -0.44 |
| $\beta_{5}=0(p$-value $)$ | 0.013 | 0.008 |
| $\beta_{1}=0(p$-value MHT $)$ | 0.182 | 0.158 |
| $\beta_{2}=0(p$-value MHT) | 0.000 | 0.000 |
| $\beta_{3}=0(p$-value MHT $)$ | 0.000 | 0.000 |

Notes: This table shows OLS regressions using as dependent variable the total speaking time at individual level. Regressions control for age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for subjects from teams with silent members. Column (2) additionally controls for the Big 5 personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism). Standard errors (clustered at team level) in parentheses. ${ }^{*} p<0.10,{ }^{* *} p<0.05, * * * p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT) follow Barsbai et al. (2020). Multiple testing is done separately by column (three hypotheses in each regression).

Table A.15: List of Topic Words

| Problem set A |  |  | Problem set B |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Word | \% | Word | \% |
| 1 | D | 14.49 | B | 18.99 |
| 2 | C | 13.31 | C | 10.75 |
| 3 | B | 11.44 | D | 9.98 |
| 4 | A | 8.23 | A | 8.52 |
| 5 | market | 5.26 | invest | 4.62 |
| 6 | drug | 3.35 | investment | 4.15 |
| 7 | doctor | 2.70 | rise | 3.78 |
| 8 | market share | 2.64 | innovation capital | 3.54 |
| 9 | sales | 2.44 | country | 2.16 |
| 10 | company | 2.35 | development | 2.01 |
| 11 | emerging | 2.31 | human capital | 1.97 |
| 12 | rise | 2.27 | APPNAME | 1.84 |
| 13 | country | 2.03 | capital | 1.71 |
| 14 | prescription | 1.83 | knowledge capital | 1.51 |
| 15 | growth | 1.62 | physical | 1.43 |
| 16 | performance | 1.58 | company | 1.32 |
| 17 | market access | 1.53 | innovation | 1.22 |
| 18 | North America | 1.52 | investor | 1.02 |
| 19 | year | 1.35 | conviction | 1.02 |
| 20 | COMPANYNAME | 1.34 | price | 0.98 |
| 21 | health insurance | 1.00 | networking | 0.96 |
| 22 | tobacco | 0.94 | economic | 0.90 |
| 23 | profit margin | 0.93 | app | 0.84 |
| 24 | profit | 0.89 | awareness | 0.81 |
| 25 | growth opportunity | 0.80 | event | 0.81 |
| 26 | patent protection | 0.79 | type | 0.79 |
| 27 | bribe | 0.67 | social | 0.79 |
| 28 | invest | 0.63 | brand value | 0.78 |
| 29 | pay | 0.59 | productivity growth | 0.74 |
| 30 | vaccination campaign | 0.58 | market share | 0.71 |
| 31 | medicine | 0.58 | product | 0.71 |
| 32 | alcohol consumption | 0.54 | industry | 0.69 |
| 33 | future | 0.51 | profit margin | 0.69 |
| 34 | competitor | 0.48 | database | 0.68 |
| 35 | alcohol | 0.48 | productivity | 0.58 |
| 36 | management | 0.47 | difference | 0.51 |
| 37 | change | 0.47 | asset value | 0.46 |
| 38 | pharmaceuticals | 0.46 | design concept | 0.45 |
| 39 | traditional | 0.46 | organization | 0.42 |
| 40 | herbal | 0.42 | COMPANYNAME | 0.42 |
| 41 | self-medication | 0.42 | training programs | 0.40 |
| 42 | disease | 0.40 | military | 0.40 |
| 43 | obstacle | 0.39 | activity | 0.38 |
| 44 | female doctor | 0.39 | large enterprise | 0.38 |
| 45 | medicine | 0.39 | software | 0.38 |
| 46 | trend | 0.38 | management | 0.37 |
| 47 | income | 0.37 | authoritarian | 0.37 |
| 48 | investment | 0.35 | technology | 0.36 |
| 49 | national language | 0.33 | emigration wave | 0.35 |
| 50 | government output | 0.33 | collaboration | 0.34 |
|  | Total | 100.00 | Total | 100.00 |

Notes: This table shows all words from the team conversations (translated from German) we considered when defining the set of topic words. The inclusion of " A ", " B ", " C ", and " D " accounts for references to the four possible solutions to each problem, which were labeled from $a$ to $d$. For each problem set, we pre-selected from the information materials and problems all words that are topically related to the task and would unlikely be used in a conversation unrelated to it. The columns showing shares report how often a given word was used in relation to all listed words. The analyses reported in the paper are based on the 10 most frequently used topic words in each problem set. We use lists of topic words comprising the $20,30,40$, or 50 most frequently used words in several robustness checks.

Table A.16: Robustness: Effects on \#Topic Words, Team Level

|  | \#Topic words |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Number of topic words considered |  |  |  |  |
|  | 10 | 20 | 30 | 40 | 50 |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |
| Gender-mixed team $\left(\beta_{1}\right)$ | $-12.2^{* *}$ | $-19.3^{* * *}$ | $-21.8^{* * *}$ | $-24.2^{* * *}$ | $-26.0^{* * *}$ |
|  | $(4.7)$ | $(6.6)$ | $(7.4)$ | $(8.1)$ | $(8.7)$ |
| All-female team $\left(\beta_{2}\right)$ | $-20.2^{* * *}$ | $-29.5^{* * *}$ | $-32.3^{* * *}$ | $-35.1^{* * *}$ | $-37.1^{* * *}$ |
|  | $(5.2)$ | $(7.2)$ | $(8.0)$ | $(8.8)$ | $(9.4)$ |
| N. of obs. | 342 | 342 | 342 | 342 | 342 |
| Team-level controls | Yes | Yes | Yes | Yes | Yes |
| Mean dep. var. all-male | 127.3 | 159.3 | 174.7 | 185.3 | 192.8 |
| $\beta_{1}=\beta_{2}(p$-value) | 0.093 | 0.119 | 0.150 | 0.175 | 0.193 |

Notes: This table shows OLS regressions at team level. The regressions differ by the definition of the dependent variable, capturing the number of topic words (i.e., words that are topically related to the team task). Column (1) defines as topic words only the 10 most frequent words that are topically related to the task and thus repeats the regression shown in Table 4. Column (3). The remaining columns consider more broadly defined sets of topic words. Column (5) uses all words on the list provided in Appendix Table A.15. All regressions control for team averages of A-level GPA and age, maximum and minimum A-level GPA, maximum and minimum age, the share of team members with an A-level degree obtained from top-tier high school type, the share of team members with foreign nationality, the share of team members studying at Master level, a series of variables capturing the shares of team members studying in one of the main study fields (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$.

Table A.17: Splitting up the Mixed-Team Effect by Teams' GPA-by-Gender Composition

|  | \#Problems solved <br> $(1)$ | \#Words <br> $(2)$ |
| :--- | :---: | :---: |
| Mixed team: females below, males above median $\left(\beta_{1}\right)$ | $-0.70^{* *}$ | $-235.87^{*}$ |
|  | $(0.30)$ | $(123.37)$ |
| Mixed team: females above, males below median $\left(\beta_{2}\right)$ | 0.07 | -92.19 |
|  | $(0.30)$ | $(116.44)$ |
| Mixed team: one female and one male above median $\left(\beta_{3}\right)$ | $-0.62^{*}$ | -78.86 |
|  | $(0.33)$ | $(124.98)$ |
| All-female team $\left(\beta_{4}\right)$ | $-0.58^{* *}$ | $-297.07^{* * *}$ |
|  | $(0.25)$ | $(95.25)$ |
| N. of obs. | 342 | 342 |
| Mean dep. var. all-male | 4.6 | 2077.7 |
| Team-level controls | Yes | Yes |
| $\beta_{1}=\beta_{2}=\beta_{3}=\beta_{4}(p$-value $)$ | 0.130 | 0.202 |

Notes: This table shows OLS regressions at the team level. The dependent variables are the number of problems solved (Column 1) and the word count variable (Column 2). The regressions use three different indicator variables for mixed teams, capturing the different possible team compositions by GPA: mixed teams with both females below median GPA and both males above median GPA ( $\beta_{1}$ ), mixed teams with both females above median GPA and both males below median GPA ( $\beta_{2}$ ), and mixed teams with one female and one male below median GPA and one female and one male above median GPA ( $\beta_{3}$ ). All regressions control for team averages of A-level GPA and age, maximum and minimum A-level GPA, maximum and minimum age, the share of team members with an A-level degree obtained from top-tier high school type, the share of team members with foreign nationality, the share of team members studying at Master level, a series of variables capturing the shares of team members studying in one of the main study fields (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. ${ }^{*} p<0.10$, ${ }^{* *} p<0.05$, ${ }^{* * *} p<0.01$.

Table A.18: Performance: Teams vs. Individuals

|  | Number of |  |
| :--- | :---: | :---: |
|  | problems solved |  |
|  | $(1)$ | $(2)$ |
| Teamwork | -0.003 | $0.444^{* * *}$ |
| Constant | $(0.136)$ | $(0.154)$ |
|  | $4.351^{* * *}$ | $4.351^{* * *}$ |
|  | $(0.101)$ | $(0.101)$ |
| N. of obs. | 638 | 496 |
| Teams with imperfect coordination excluded | No | Yes |

Notes: This table shows an OLS regression that jointly uses team-level observations and observations from individuals working under an individual piece rate and regresses the number of correctly solved problems on an indicator for teams. Column (1) includes all observations ( 342 teams and 296 individuals). Column (2) includes all individuals, and in addition all teams that successfully coordinated their answers in all 10 problems (i.e., teams where all team members gave identical answers to all problems). No controls included. Robust standard errors in parentheses. ${ }^{*} p<0.10,{ }^{* *} p<0.05$, *** $p<0.01$.

Table A.19: Coordination Within Teams

|  | \#problems with <br> perfect coordination <br> $(1)$ | Teams with perfect coordination: <br> \#problems solved <br> $(2)$ |
| :--- | :---: | :---: |
| Gender-mixed team $\left(\beta_{1}\right)$ | -0.096 | -0.436 |
|  | $(0.180)$ | $(0.274)$ |
| All-female team $\left(\beta_{2}\right)$ | 0.099 | $-0.565^{*}$ |
|  | $(0.151)$ | $(0.325)$ |
| N. of obs. | 342 | 200 |
| Team-level controls | Yes | Yes |
| Mean dep. var. all-male | 9.29 | 5.04 |
| $\beta_{1}=\beta_{2}(p$-value) | 0.237 | 0.680 |

Notes: This table shows in Column (1) an OLS regression using as dependent variable the number of problems with perfect coordination among team members. Column (2) uses as dependent variable our measure of team performance (number of problems solved), but uses only teams that perfectly coordinated their answers in all 10 problems. All regressions control for team averages of A-level GPA and age, maximum and minimum A-level GPA, maximum and minimum age, the share of team members with an A-level degree obtained from top-tier high school type, the share of team members with foreign nationality, the share of team members studying at Master level, a series of variables capturing the shares of team members studying in one of the main study fields (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. ${ }^{*} p<0.10,{ }^{* *}$ $p<0.05,{ }^{* * *} p<0.01$.

Table A.20: Robustness: Quantity of Communication and Team Performance

|  | Number of problems solved |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 10 | Number of topic words considered |  |  |  |
|  | $(1)$ | 20 | 30 | 40 | 50 |
| \#all words $\left(\beta_{1}\right)$ | $-0.001^{* *}$ | $-0.001^{* *}$ | $-0.001^{* *}$ | $-0.001^{* *}$ | $-0.001^{* *}$ |
|  | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000$ | $(0.000)$ |
| \#topic words $\left(\beta_{2}\right)$ | $0.015^{* * *}$ | $0.011^{* * *}$ | $0.010^{* * *}$ | $0.010^{* * *}$ | $0.008^{* * *}$ |
|  | $(0.004)$ | $(0.003)$ | $(0.003)$ | $(0.003)$ | $(0.003)$ |
| N. of obs. | 342 | 342 | 342 | 342 | 342 |
| Mean dep. var. | 4.35 | 4.35 | 4.35 | 4.35 | 4.35 |
| Team-level controls | Yes | Yes | Yes | Yes | Yes |

Notes: This table shows OLS regressions using as dependent variable the number of problems solved at team level. The regressions do not condition on team gender composition but use as regressors of interest the overall number of words and the number of words that are topically related to the team task. The regressions differ by the definition of the latter variable. Column (1) defines as topic words only the 10 most frequent words that are topically related to the task, and thus repeats the regression shown in Table 6 The remaining columns consider more broadly defined sets of topic words. Column (5) uses all words on the list provided in Appendix Table A. 15 All regressions control for team averages of A-level GPA and age, maximum and minimum A-level GPA and age, the share of team members with an A-level degree from the top-tier high school type, the share of team members with foreign nationality, the share of team members studying at Master level, a series of variables capturing the shares of team members studying in one of the main study fields (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *}$ $p<0.01$.

Table A.21: Robustness: No Gender Gap in Share of Topic Words

|  | Share of topic words |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Number of topic words considered |  |  |  |  |
|  | 10 | 20 | 30 | 40 | 50 |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |
| Female $\left(\beta_{1}\right)$ | 0.001 | -0.002 | -0.002 | -0.002 | -0.003 |
|  | $(0.002)$ | $(0.002)$ | $(0.002)$ | $(0.002)$ | $(0.002)$ |
| Mixed team $\left(\beta_{2}\right)$ | 0.000 | -0.000 | -0.000 | -0.000 | -0.001 |
|  | $(0.002)$ | $(0.002)$ | $(0.002)$ | $(0.002)$ | $(0.002)$ |
| Female $\times$ Mixed team $\left(\beta_{3}\right)$ | 0.001 | 0.000 | -0.001 | -0.001 | -0.001 |
|  | $(0.003)$ | $(0.003)$ | $(0.003)$ | $(0.003)$ | $(0.003)$ |
| A-level GPA | -0.001 | 0.001 | 0.002 | $0.002^{*}$ | $0.003^{* *}$ |
|  | $(0.001)$ | $(0.001)$ | $(0.001)$ | $(0.001)$ | $(0.001)$ |
| N. of obs. | 1336 | 1336 | 1336 | 1336 | 1336 |
| Mean dep. var. all-male | 0.065 | 0.079 | 0.085 | 0.089 | 0.093 |
| Subject-level controls | Yes | Yes | Yes | Yes | Yes |
| $\beta_{1}+\beta_{3}=0(p$-value $)$ | 0.538 | 0.541 | 0.319 | 0.188 | 0.148 |
| $\beta_{2}+\beta_{3}=0(p$-value $)$ | 0.708 | 0.996 | 0.777 | 0.606 | 0.555 |

Notes: This table shows subject-level OLS regressions using as dependent variable the share of words in a subject's utterances that are topically related to the team task. The regressions differ by the definition of topic words. Column (1) defines as topic words only the 10 most frequent words that are topically related to the task, and thus repeats the regression shown in Table 7. The remaining columns consider more broadly defined sets of topic words. Column (5) uses all words on the list provided in Appendix Table A.15 All Regressions control for age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics/business administration) and an indicator for teams with silent members. Standard errors (clustered at team level) in parentheses. * $p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$.

Table A.22: Distributional Effects on Team Communication

|  | HHI words | HHI turns |
| :--- | :---: | :---: |
|  | $(1)$ | $(2)$ |
| Gender-mixed team $\left(\beta_{1}\right)$ | 0.013 | 0.007 |
|  | $(0.009)$ | $(0.005)$ |
| All-female team $\left(\beta_{2}\right)$ | -0.007 | -0.002 |
|  | $(0.008)$ | $(0.005)$ |
| N. of obs. | 342 | 342 |
| Mean dep. var. all-male | 0.34 | 0.31 |
| Team-level controls | Yes | Yes |
| $\beta_{1}=\beta_{2}(p$-value) | 0.017 | 0.072 |
| $\beta_{1}=0(p$-value MHT) | 0.365 | 0.351 |
| $\beta_{2}=0(p$-value MHT) | 0.547 | 0.666 |

Notes: This table shows OLS regressions using as dependent variables the HHI of the number of words and the HHI of the number of turns at the team level, respectively. All regressions control for team averages of A-level GPA and age, maximum and minimum A-level GPA, maximum and minimum age, the share of team members with an A-level degree obtained from the top-tier high school type, the share of team members with foreign nationality, the share of team members studying at Master level, a series of variables capturing the shares of team members studying in one of the main study fields (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. ${ }^{*} p<0.10, * * p<0.05, * * * p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT, four hypotheses included) follow Barsbai et al. (2020).

Table A.23: Effects on Sentiment, Team Level

|  | Positive <br> $(1)$ | Negative <br> $(2)$ |
| :--- | :---: | :---: |
| Gender-mixed team $\left(\beta_{1}\right)$ | $0.088^{* * *}$ | -0.008 |
|  | $(0.017)$ | $(0.015)$ |
| All-female team $\left(\beta_{2}\right)$ | $0.254^{* * *}$ | $-0.063^{* * *}$ |
|  | $(0.017)$ | $(0.015)$ |
| N. of obs. | 342 | 342 |
| Mean dep. var. all-male | 0.27 | 0.27 |
| Team-level controls | Yes | Yes |
| $\beta_{1}=\beta_{2}(p$-value $)$ | 0.000 | 0.000 |
| $\beta_{1}=0(p$-value MHT $)$ | 0.000 | 0.605 |
| $\beta_{2}=0(p$-value MHT) | 0.000 | 0.000 |

Notes: This table shows OLS regressions using as dependent variables measures of the sentiment of team communication captured through vocal features. Positive (negative) sentiment captures vocal features indicating happiness (sadness). All regressions control for team averages of A-level GPA and age, maximum and minimum A-level GPA, maximum and minimum age, the share of team members with an A-level degree obtained from top-tier high school type, the share of team members with foreign nationality, the share of team members studying at Master level, a series of variables capturing the shares of team members studying in one of the main study fields (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. ${ }^{*} p<0.10$, ${ }^{* *} p<0.05,{ }^{* * *}$ $p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT, four hypotheses included) follow Barsbai et al. (2020).

Table A.24: Effects on Perceived Team Interaction

|  | Positivity <br> $(1)$ | Cooperativeness <br> $(2)$ | Likeability <br> $(3)$ |
| :--- | :---: | :---: | :---: |
| Gender-mixed team $\left(\beta_{1}\right)$ | -0.029 | -0.017 | -0.021 |
|  | $(0.051)$ | $(0.046)$ | $(0.077)$ |
| All-female team $\left(\beta_{2}\right)$ | -0.034 | -0.004 | -0.113 |
|  | $(0.057)$ | $(0.051)$ | $(0.081)$ |
| N. of obs. | 342 | 342 | 342 |
| Mean dep. var. all-male | 4.65 | 4.66 | 4.06 |
| Team-level controls | Yes | Yes | Yes |
| $\beta_{1}=\beta_{2}(p$-value $)$ | 0.929 | 0.797 | 0.253 |
| $\beta_{1}=0(p$-value MHT $)$ | 0.952 | 0.976 | 0.958 |
| $\beta_{2}=0(p$-value MHT $)$ | 0.971 | 0.948 | 0.556 |

Notes: This table shows OLS regressions using as dependent variables measures of perceived team communication. Perceived positivity, cooperativeness, and likeability of the team task are all measured using a 5-point Likert scale. All regressions control for team averages of A-level GPA and age, maximum and minimum A-level GPA, maximum and minimum age, the share of team members with an A-level degree obtained from top-tier high school type, the share of team members with foreign nationality, the share of team members studying at Master level, a series of variables capturing the shares of team members studying in one of the main study fields (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. ${ }^{*} p<0.10$, $^{* *} p<0.05$, ${ }^{* * *} p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT, six hypotheses included) follow Barsbai et al. (2020).

Table A.25: Perceived Communication: Secondary Outcomes, Individual Level

|  | Sufficient <br> communication <br> $(1)$ | Symmetric <br> communication <br> $(2)$ | Letting others <br> finish <br> $(3)$ |
| :--- | :---: | :---: | :---: |
| Female $\left(\beta_{1}\right)$ | -0.049 | $0.171^{* *}$ | -0.029 |
| Mixed team $\left(\beta_{2}\right)$ | $(0.067)$ | $(0.085)$ | $(0.042)$ |
|  | -0.091 | -0.119 | -0.036 |
| Female $\times$ Mixed team $\left(\beta_{3}\right)$ | $(0.080)$ | $(0.100)$ | $(0.047)$ |
|  | 0.022 | -0.084 | 0.025 |
| N. of obs. | $(0.104)$ | $(0.124)$ | $(0.070)$ |
| Mean dep. var. all-male | 1357 | 1362 | 1357 |
| Subject-level controls | 4.29 | 3.31 | 4.71 |
| $\beta_{4}:=\beta_{1}+\beta_{3}$ | Yes | Yes | Yes |
| $\beta_{4}=0(p$-value $)$ | -0.027 | 0.087 | -0.003 |
| $\beta_{5}:=\beta_{2}+\beta_{3}$ | 0.737 | 0.344 | 0.950 |
| $\beta_{5}=0(p$-value $)$ | -0.069 | -0.203 | -0.011 |
| $\beta_{1}=0(p$-value MHT $)$ | 0.457 | 0.045 | 0.846 |
| $\beta_{2}=0(p$-value MHT $)$ | 0.935 | 0.296 | 0.853 |
| $\beta_{3}=0(p$-value MHT $)$ | 0.825 | 0.814 | 0.941 |

Notes: This table shows OLS regressions using as dependent variables measures of individual perceptions of team communication. Perceptions of whether the team communicated sufficiently and symmetric and whether the team members let each other finish are all measured using a 5-point Likert scale. All regressions control for A-level GPA, age, and indicators for an A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for teams where some members were silent during the team task. Standard errors (clustered at team level) in parentheses. * $p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$.

Table A.26: Perceived Communication: Secondary Outcomes, Team Level

|  | Sufficient <br> communication <br> $(1)$ | Symmetric <br> communication <br> $(2)$ | Letting others <br> finish <br> $(3)$ |
| :--- | :---: | :---: | :---: |
| Gender-mixed team $\left(\beta_{1}\right)$ | -0.126 | -0.065 | -0.038 |
|  | $(0.077)$ | $(0.094)$ | $(0.043)$ |
| All-female team $\left(\beta_{2}\right)$ | -0.078 | $0.182^{* *}$ | -0.050 |
|  | $(0.075)$ | $(0.092)$ | $(0.045)$ |
| N. of obs. | 342 | 342 | 342 |
| Mean dep. var. all-male | 4.29 | 3.31 | 4.71 |
| Team-level controls | Yes | Yes | Yes |
| $\beta_{1}=\beta_{2}(p$-value $)$ | 0.552 | 0.007 | 0.806 |
| $\beta_{1}=0(p$-value MHT) | 0.428 | 0.511 | 0.607 |
| $\beta_{2}=0(p$-value MHT) | 0.672 | 0.239 | 0.713 |

Notes: This table shows OLS regressions using as dependent variables measures of perceived team communication. All outcomes are measured using a 5-point Likert scale. All regressions control for team averages of A-level GPA and age, maximum and minimum A-level GPA, maximum and minimum age, the share of team members with an A-level degree obtained from top-tier high school type, the share of team members with foreign nationality, the share of team members studying at Master level, a series of variables capturing the shares of team members studying in one of the main study fields (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT, six hypotheses included) follow Barsbai et al. (2020).

Table A.27: Productivity Beliefs: Past Exposure to Mixed Teamwork

|  | Belief about productivity: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Own |  | Partner |  | Team |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Female ( $\beta_{1}$ ) | $\begin{gathered} -1.290^{* * *} \\ (0.270) \end{gathered}$ | $\begin{gathered} -1.348^{* * *} \\ (0.333) \end{gathered}$ | $\begin{gathered} -0.373 \\ (0.260) \end{gathered}$ | $\begin{gathered} -0.458 \\ (0.326) \end{gathered}$ | $\begin{gathered} -0.650^{* * *} \\ (0.247) \end{gathered}$ | $\begin{gathered} -0.600^{* *} \\ (0.301) \end{gathered}$ |
| Mixed team ( $\beta_{2}$ ) | $\begin{gathered} 0.322 \\ (0.262) \end{gathered}$ | $\begin{gathered} 0.239 \\ (0.400) \end{gathered}$ | $\begin{gathered} 0.321 \\ (0.264) \end{gathered}$ | $\begin{gathered} 0.199 \\ (0.381) \end{gathered}$ | $\begin{gathered} 0.250 \\ (0.239) \end{gathered}$ | $\begin{gathered} 0.322 \\ (0.379) \end{gathered}$ |
| Female $\times$ Mixed team ( $\beta_{3}$ ) |  | $\begin{gathered} 0.171 \\ (0.564) \end{gathered}$ |  | $\begin{gathered} 0.252 \\ (0.518) \end{gathered}$ |  | $\begin{array}{r} -0.150 \\ (0.528) \\ \hline \end{array}$ |
| N . of obs. | 731 | 731 | 731 | 731 | 731 | 731 |
| Mean dep. var. all-male | 11.55 | 11.55 | 12.26 | 12.26 | 15.00 | 15.00 |
| Subject-level controls | Yes | Yes | Yes | Yes | Yes | Yes |
| $\beta_{4}:=\beta_{1}+\beta_{3}$ |  | -1.176 |  | -0.206 |  | -0.750 |
| $\beta_{4}=0$ ( $p$-value) |  | 0.011 |  | 0.617 |  | 0.086 |
| $\beta_{5}:=\beta_{2}+\beta_{3}$ |  | 0.410 |  | 0.451 |  | 0.172 |
| $\beta_{5}=0$ ( $p$-value) |  | 0.269 |  | 0.211 |  | 0.604 |
| $\beta_{1}=0$ ( $p$-value MHT) | 0.000 | 0.000 | 0.388 | 0.495 | 0.045 | 0.214 |
| $\beta_{2}=0$ ( $p$-value MHT) | 0.382 | 0.917 | 0.341 | 0.933 | 0.309 | 0.807 |
| $\beta_{3}=0$ ( $p$-value MHT) |  | 0.914 |  | 0.881 |  | 0.779 |

Notes: This table shows OLS regressions using as dependent variables different measures of beliefs about productivity in a possible further task. Columns (1) and (2) analyze beliefs about a subject's own productivity if working on the task individually. Columns (3) and (4) study subjects' beliefs about the potential partner's individual productivity. Columns (5) and (6) consider beliefs about team productivity in case of joint work with the potential partner. All regressions control for A-level GPA, age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for teams where some members were silent during the team task. Standard errors (in parentheses) account for clusters comprising all subjects from first-stage teams used in the cross-wise random assignment to pairs of potential partners. ${ }^{*} p<0.10$, ${ }^{* *} p<0.05,{ }^{* * *} p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT) follow Barsbai et al. (2020). Multiple testing is done across Columns (1), (3), and (5) (six hypotheses) and across Columns (2), (4), and (6) (nine hypotheses), respectively.

Table A.28: Effects on Uncertainty in Speech

|  | Incidence of uncertainty phrases |
| :--- | :---: |
| Female $\left(\beta_{1}\right)$ | $0.219^{* * *}$ |
|  | $(0.046)$ |
| Mixed team $\left(\beta_{2}\right)$ | 0.045 |
|  | $(0.039)$ |
| Female $\times$ Mixed team $\left(\beta_{3}\right)$ | -0.031 |
|  | $(0.078)$ |
| A-level GPA | $-0.067^{*}$ |
|  | $(0.034)$ |
| N. of obs. | 1336 |
| Mean dep. var. all-male | 0.477 |
| Subject-level controls | Yes |
| $\beta_{4}:=\beta_{1}+\beta_{3}$ | 0.188 |
| $\beta_{4}=0(p$-value $)$ | 0.004 |
| $\beta_{5}:=\beta_{2}+\beta_{3}$ | 0.014 |
| $\beta_{5}=0(p$-value $)$ | 0.844 |
| $\beta_{1}=0(p$-value MHT $)$ | 0.000 |
| $\beta_{2}=0(p$-value MHT $)$ | 0.412 |
| $\beta_{3}=0(p$-value MHT $)$ | 0.702 |

Notes: This table shows an OLS regression using as dependent variable the incidence of uncertainty phrases (number of such phrases per 100 words) at individual level. Uncertainty phrases are defined by the occurrence of the following combination of words in a sentence: "I + not + sure", " $\mathrm{I}+$ uncertain", "I + waver", "I + not + know", "I + not + understand", "could + be", "no + idea", "unsettle", and "unclear". Regressions control for age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for subjects from teams with silent members. Standard errors (clustered at team level) in parentheses. ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT, three hypotheses included) follow Barsbai et al. (2020).
Table A.29: Productivity Beliefs: Past Exposure and Partner's Gender

|  | Belief about productivity: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Own |  | Partner |  | Team |  |
|  | Females <br> (1) | Males <br> (2) | Females <br> (3) | Males <br> (4) | Females <br> (5) | Males <br> (6) |
| Female partner 2nd stage ( $\beta_{1}$ ) | $\begin{gathered} 0.303 \\ (0.494) \end{gathered}$ | $\begin{gathered} 0.285 \\ (0.439) \end{gathered}$ | $\begin{aligned} & -0.238 \\ & (0.482) \end{aligned}$ | $\begin{gathered} 0.357 \\ (0.417) \end{gathered}$ | $\begin{gathered} 0.002 \\ (0.441) \end{gathered}$ | $\begin{gathered} 0.467 \\ (0.413) \end{gathered}$ |
| Mixed team 1st stage ( $\beta_{2}$ ) | $\begin{gathered} 0.504 \\ (0.546) \end{gathered}$ | $\begin{gathered} 0.149 \\ (0.553) \end{gathered}$ | $\begin{gathered} 0.141 \\ (0.561) \end{gathered}$ | $\begin{gathered} 0.259 \\ (0.478) \end{gathered}$ | $\begin{gathered} 0.318 \\ (0.472) \end{gathered}$ | $\begin{gathered} 0.383 \\ (0.523) \end{gathered}$ |
| Female partner 2nd stage $\times$ Mixed team 1st stage ( $\beta_{3}$ ) | $\begin{aligned} & -0.317 \\ & (0.712) \end{aligned}$ | $\begin{gathered} 0.326 \\ (0.790) \end{gathered}$ | $\begin{gathered} 0.713 \\ (0.736) \end{gathered}$ | $\begin{gathered} 0.020 \\ (0.751) \end{gathered}$ | $\begin{gathered} -0.194 \\ (0.645) \end{gathered}$ | $\begin{gathered} 0.016 \\ (0.720) \end{gathered}$ |
| N . of obs. | 351 | 380 | 351 | 380 | 351 | 380 |
| Mean dep. var. gender-homogenous teams | 10.07 | 11.55 | 11.69 | 12.26 | 14.27 | 15.00 |
| Subject-level controls | Yes | Yes | Yes | Yes | Yes | Yes |
| $\beta_{4}:=\beta_{1}+\beta_{3}$ | -0.014 | 0.611 | 0.474 | 0.377 | -0.192 | 0.482 |
| $\beta_{4}=0$ ( $p$-value) | 0.979 | 0.352 | 0.414 | 0.549 | 0.708 | 0.415 |
| $\beta_{5}:=\beta_{2}+\beta_{3}$ | 0.187 | 0.475 | 0.854 | 0.278 | 0.124 | 0.399 |
| $\beta_{5}=0$ ( $p$-value) | 0.693 | 0.424 | 0.077 | 0.644 | 0.785 | 0.461 |
| $\beta_{1}=0$ ( $p$-value MHT) | 0.999 | 0.998 | 1.000 | 0.994 | 0.996 | 0.956 |
| $\beta_{2}=0$ ( $p$-value MHT) | 0.980 | 1.000 | 0.997 | 1.000 | 0.998 | 0.996 |
| $\beta_{3}=0$ ( $p$-value MHT) | 1.000 | 0.999 | 0.974 | 1.000 | 1.000 | 1.000 |

Notes: This table shows OLS regressions using as dependent variables different measures of beliefs about productivity in a possible further task. Columns (1) and (2) analyze beliefs about a subject's own productivity if working on the task individually. Columns (3) and (4) study subjects' beliefs about the potential partner's individual productivity. Columns (5) and (6) consider beliefs about team productivity in case of joint work with the potential partner. All regressions control for A-level GPA, age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for teams where some members were silent during the team task. Standard errors (in parentheses) account for clusters comprising all subjects from first-stage teams used in the cross-wise random assignment to pairs of potential partners. ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT, 18 hypotheses included) follow Barsbai et al. (2020).
Table A.30: Communication-Related Beliefs: Past Exposure

|  | Belief about: |  |  |  |  |  | Belief index |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Positivity |  | Cooperativeness |  | Likeability |  |  |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Female ( $\beta_{1}$ ) | $\begin{gathered} 0.059 \\ (0.051) \end{gathered}$ | $\begin{gathered} 0.051 \\ (0.067) \end{gathered}$ | $\begin{gathered} -0.060 \\ (0.050) \end{gathered}$ | $\begin{gathered} -0.000 \\ (0.060) \end{gathered}$ | $\begin{gathered} 0.057 \\ (0.067) \end{gathered}$ | $\begin{gathered} 0.059 \\ (0.089) \end{gathered}$ | $\begin{gathered} 0.022 \\ (0.078) \end{gathered}$ | $\begin{gathered} 0.054 \\ (0.102) \end{gathered}$ |
| Mixed team ( $\beta_{2}$ ) | $\begin{gathered} 0.132^{* * *} \\ (0.044) \end{gathered}$ | $\begin{aligned} & 0.121^{*} \\ & (0.064) \end{aligned}$ | $\begin{aligned} & 0.090^{*} \\ & (0.053) \end{aligned}$ | $\begin{aligned} & 0.177^{* *} \\ & (0.070) \end{aligned}$ | $\begin{gathered} 0.052 \\ (0.070) \end{gathered}$ | $\begin{gathered} 0.054 \\ (0.105) \end{gathered}$ | $\begin{aligned} & 0.151^{*} \\ & (0.077) \end{aligned}$ | $\begin{aligned} & 0.199^{*} \\ & (0.108) \end{aligned}$ |
| Female $\times$ Mixed team ( $\beta_{3}$ ) |  | $\begin{gathered} 0.022 \\ (0.108) \end{gathered}$ |  | $\begin{aligned} & -0.179^{*} \\ & (0.100) \end{aligned}$ |  | $\begin{aligned} & -0.005 \\ & (0.155) \end{aligned}$ |  | $\begin{aligned} & -0.098 \\ & (0.168) \end{aligned}$ |
| N . of obs. | 731 | 731 | 731 | 731 | 731 | 731 | 731 | 731 |
| Mean dep. var. all-male | 4.45 | 4.45 | 4.49 | 4.49 | 4.07 | 4.07 | -0.00 | -0.00 |
| Subject-level controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| $\beta_{4}:=\beta_{1}+\beta_{3}$ |  | 0.073 |  | -0.179 |  | 0.054 |  | -0.044 |
| $\beta_{4}=0$ (p-value) |  | 0.371 |  | 0.033 |  | 0.642 |  | 0.732 |
| $\beta_{5}:=\beta_{2}+\beta_{3}$ |  | 0.144 |  | -0.002 |  | 0.049 |  | 0.100 |
| $\beta_{5}=0$ (p-value) |  | 0.057 |  | 0.975 |  | 0.634 |  | 0.402 |
| $\beta_{1}=0$ ( $p$-value MHT) | 0.523 | 0.909 | 0.582 | 0.996 | 0.635 | 0.927 | 0.785 | 0.587 |
| $\beta_{2}=0(p$-value MHT) | 0.016 | 0.285 | 0.320 | 0.073 | 0.471 | 0.960 | 0.110 | 0.149 |
| $\beta_{3}=0$ ( $p$-value MHT) |  | 0.995 |  | 0.294 |  | 1.000 |  | 0.759 |

Notes: This table shows OLS regressions using as dependent variables beliefs about team communication team in a possible further team interaction with the potential partner. Beliefs about positivity, cooperativeness, and likeability of the team task are all measured using a 5-point Likert scale. The belief index is constructed by aggregating standardized beliefs in all three dimensions (Kling et al., 2007). All regressions control for A-level GPA, age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for teams where some members were silent during the team task. Standard errors (in parentheses) account for clusters comprising all subjects from first-stage teams used in the cross-wise random assignment to pairs of potential partners. ${ }^{*} p<0.10$, $p<0.05$, *** $p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT) follow Barsbai et al. (2020). Multiple testing is done across Columns (1), (3), and (5) (six hypotheses), across Columns (2), (4), and (6) (nine hypotheses), and separately for Columns (7) (two hypotheses) and (8) (three hypotheses).
Table A.31: Communication-Related Beliefs: Past Exposure and Partner's Gender

|  | Belief about: |  |  |  |  |  | Belief index |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Positivity |  | Cooperativeness |  | Likeability |  |  |  |
|  | Females <br> (1) | Males <br> (2) | Females <br> (3) | Males <br> (4) | Females <br> (5) | Males <br> (6) | Females <br> (7) | Males <br> (8) |
| Female partner 2nd stage ( $\beta_{1}$ ) | $\begin{gathered} \hline 0.315^{* * *} \\ (0.081) \end{gathered}$ | $\begin{gathered} 0.153 \\ (0.093) \end{gathered}$ | $\begin{gathered} 0.355^{* * *} \\ (0.074) \end{gathered}$ | $\begin{gathered} 0.033 \\ (0.089) \end{gathered}$ | $\begin{gathered} 0.346^{* * *} \\ (0.126) \end{gathered}$ | $\begin{gathered} 0.154 \\ (0.124) \end{gathered}$ | $\begin{gathered} 0.544^{* * *} \\ (0.128) \end{gathered}$ | $\begin{gathered} 0.173 \\ (0.144) \end{gathered}$ |
| Mixed team 1st stage ( $\beta_{2}$ ) | $\begin{aligned} & 0.218^{*} \\ & (0.113) \end{aligned}$ | $\begin{aligned} & 0.187^{*} \\ & (0.099) \end{aligned}$ | $\begin{gathered} 0.179 \\ (0.116) \end{gathered}$ | $\begin{aligned} & 0.188^{*} \\ & (0.104) \end{aligned}$ | $\begin{gathered} 0.006 \\ (0.136) \end{gathered}$ | $\begin{gathered} 0.043 \\ (0.143) \end{gathered}$ | $\begin{gathered} 0.232 \\ (0.176) \end{gathered}$ | $\begin{gathered} 0.237 \\ (0.158) \end{gathered}$ |
| Female partner 2nd stage $\times$ Mixed team 1st stage ( $\beta_{3}$ ) | $\begin{aligned} & -0.227 \\ & (0.141) \\ & \hline \end{aligned}$ | $\begin{gathered} -0.104 \\ (0.146) \end{gathered}$ | $\begin{gathered} -0.435^{* * *} \\ (0.154) \\ \hline \end{gathered}$ | $\begin{gathered} 0.002 \\ (0.153) \end{gathered}$ | $\begin{aligned} & -0.034 \\ & (0.192) \end{aligned}$ | $\begin{gathered} 0.093 \\ (0.200) \\ \hline \end{gathered}$ | $\begin{gathered} -0.404^{*} \\ (0.229) \end{gathered}$ | $\begin{array}{r} -0.015 \\ (0.227) \\ \hline \end{array}$ |
| N .0 of obs. | 351 | 380 | 351 | 380 | 351 | 380 | 351 | 380 |
| Mean dep. var. gender-homogenous teams | 4.48 | 4.45 | 4.48 | 4.49 | 4.09 | 4.07 | 0.02 | -0.00 |
| Subject-level controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| $\beta_{4}:=\beta_{1}+\beta_{3}$ | 0.089 | 0.049 | -0.079 | 0.034 | 0.312 | 0.248 | 0.140 | 0.158 |
| $\beta_{4}=0$ ( $p$-value) | 0.437 | 0.671 | 0.556 | 0.772 | 0.025 | 0.126 | 0.452 | 0.374 |
| $\beta_{5}:=\beta_{2}+\beta_{3}$ | -0.009 | 0.083 | -0.256 | 0.190 | -0.028 | 0.137 | -0.172 | 0.222 |
| $\beta_{5}=0$ ( $p$-value) | 0.919 | 0.385 | 0.009 | 0.068 | 0.853 | 0.342 | 0.267 | 0.150 |
| $\beta_{1}=0$ ( $p$-value MHT) | 0.011 | 0.567 | 0.000 | 0.995 | 0.139 | 0.774 | 0.000 | 0.369 |
| $\beta_{2}=0$ ( $p$-value MHT) | 0.447 | 0.453 | 0.588 | 0.481 | 0.999 | 0.996 | 0.445 | 0.398 |
| $\beta_{3}=0$ ( $p$-value MHT) | 0.563 | 0.973 | 0.086 | 0.988 | 0.998 | 0.996 | 0.296 | 0.953 |

Notes: This table shows OLS regressions using as dependent variables beliefs about team communication team in a possible further team interaction with the potential partner. Beliefs about positivity, cooperativeness, and likeability of the team task are all measured using a 5-point Likert scale. The belief index is constructed by aggregating standardized beliefs in all three dimensions (Kling et al., 2007). All regressions control for A-level GPA, age, A-level degree obtained from top-tier high school type, foreign nationality, study program at Master level, study field (arts and humanities, engineering, natural sciences, economics and business administration), and an indicator for teams where some members were silent during the team task. Standard errors (in parentheses) account for clusters comprising all subjects from first-stage teams used in the cross-wise random assignment to pairs of potential partners. ${ }^{*} p<0.10,{ }^{* *}$ $p<0.05,^{* * *} p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT) follow Barsbai et al. 2020). Multiple testing is done across Columns (1) to (6) (18 hypotheses), and across Columns (7) and (8) (six hypotheses).

## B Appendix Figures

Figure B.1: Timeline of Experimental Design


## Figure B.2: Graphical Illustration of Second-Stage Matching



Notes: This figure illustrates the matching of subjects in stage 2 of the experimental design. The matching was based on a random formation of first-stage team pairs. In each pair of first-stage teams, subjects were randomly matched with a subject from the other team. As a result, all subjects were matched with a randomly selected stranger. Second-stage clusters comprise all subjects from the respective first-stage team pairs. In the case of an odd number of first-stage teams, one second-stage cluster comprised the subjects from three first-stage teams.

Figure B.3: Histogram of Number of Problems Solved


Notes: This figure shows a histogram of number of problems solved. The sample consists of all teams ( $N=342$ ).

Figure B.4: Number of Words vs. Total Speaking Time


Notes: This figure shows plots of total speaking time against number of words, separately for team and individual level. Since we measure speaking time based on an algorithm that removes periods of silence from the audio recordings, speaking time tends to be overstated in case of background noise, leading to outliers. The team-level plot is based on all 342 teams. The individual-level plot uses the data from all 1386 subjects in these teams.

Figure B.5: Total Number of Turns, Individual Level


Notes: This figure shows kernel density plots for the number of turns at individual level, for subjects assigned to gender-homogenous $(N=916)$ and mixed teams $(N=452)$.

Figure B.6: Mixed Teams: Gender Composition of Subjects Ranking First and Second in Number of Words


Notes: This figure displays the gender composition of subjects who rank first and second in mixed teams in terms of the number of words. The sample consists of all gender-mixed teams. The leftmost bar shows the percentage of all such teams where the females rank first and second in terms of the number of words contributed to the team's conversation. The other bars display corresponding percentages for the remaining cases: a female ranks first, a male second; a male ranks first, a female second; and males rank first and second. The sample consists of all 452 subjects assigned to gender-mixed teams.

Figure B.7: Gender Gap in Number of Turns by Problem, Individual Level


Notes: This figure is derived from an OLS regression of equation (3). The figure displays problem-specific gender gaps $\hat{\theta}_{p}$ for $p=1, \ldots, 10$ (blue dots), together with $95 \%$ confidence intervals. For comparison, the figure also displays $\hat{\beta}_{p}$ for $p=2, \ldots, 10$ (problem fixed effects for males in all-male teams, red dots). The problem fixed effects for females in all-female teams (green dots) are derived from an equivalent regression that uses an indicator for males (plus corresponding interactions) instead of an indicator for females. The estimations use all $1386 \times 10=13860$ observations.

Figure B.8: Quantity of Communication, Team Level


Notes: This figure shows team-level kernel density plots for the number of words and the number of turns, respectively. The sample consists of 114 all-male, 113 mixed, and 115 all-female teams.

## Figure B.9: Gender Gap in Team Communication: Share of Turns



Notes: This figure displays gender gaps in team communication by team gender composition and cognitive skills. The left panel shows shares in the total number of turns at the team level spoken by female and male subjects, separately for gender-homogenous and gender-mixed teams. The right panel differentiates between subjects of above-median ("high-skilled") and below-median ("low-skilled") cognitive skills in terms of A-level GPA. The sample consists of all 1386 subjects.

Figure B.10: Active and Passive Interruptions


Notes: This figure shows the frequencies of active and passive interruptions. The sample consists of all 1386 subjects.

Figure B.11: Passive Interruptions in Mixed Teams


Notes: This figure shows the frequencies of passive interruptions in mixed teams by the subject's gender and the gender of the interrupting subject. The sample consists of all 452 subjects assigned to mixed teams.

## C Communication Measures in Python

We extract various communication measures from both audio files and written transcripts. The transcripts include information on the speaker and timestamps for the beginning of each turn. Additionally, the transcripts also mark interruptions. We transcribed the audio files separately by team and problem. When lemmatizing the transcripts, $\sqrt{48}^{48}$ we manually added lemmas for German words that were missing in the respective database. Each lemma was assigned a team, a problem, a speaker, and a turn. For the lexical sentiment analysis, we also assigned it to a sentence.

To derive the number of words, we counted all words in the transcripts except for filler words such as "oh" or "hm". For the number of turns, we counted all turns consisting of at least 3 words. To measure interruptions, we counted the coded interruptions if a turn of at least 3 words interrupted another turn of at least 3 words. For topic words, we counted the words defined as topic words among all lemmatized words. For the lexical sentiment analysis, we counted sentiment words in the non-lemmatized words, and if a sentiment word was part of a negated sentence, its value was multiplied by -1 .

To derive measures of speaking time and sentiment from the audio files, we used the transcripts' timestamps indicating the beginning of each turn for dividing the audio into snippets. We then removed from the snippets periods of silence exceeding a length of two seconds ${ }^{49}$ We then transferred the snippets to 16 kHz . To calculate total speaking time, we aggregated the lengths of the silence-reduced snippets at the speaker and team level.

For the analysis of sentiment, we trained our models on the emoDB database (Burkhardt et al., 2005), which includes German-spoken sentences in different emotions, all reduced to 16 kHz . We consider the emotions "happy", "sad", and "neutral", and further divided the data by gender to generate two distinct models. Before training the models, we reduced the dimensions of the audio files by computing the Mel-Frequency Cepstral Coefficients (MFCCs) and keeping 13 coefficients for the further steps ${ }^{50}$ We then created an LSTM model with two additional layers and a softmax layer ${ }^{51}$ We allocated $70 \%$ of the selected data for training and $30 \%$ for testing, resulting in a male model with an overall accuracy of $92.59 \%$. It achieved $100 \%$ accuracy in recognizing the emotions "happy" and "neutral", and 75\% accuracy in identifying the emotion "sad". The female model achieved an overall accuracy of $97.22 \%$ ( $100 \%$ accuracy in

[^0]recognizing "sad" and "neutral", and 92\% accuracy in identifying "happy"). Our model was run on a system equipped with 8 Premium Intel CPUs.

Our trained model was then used to predict the emotions in the snippets, which were also transformed into the MFCCs representation. At the snippet level, the output consists of a weight for each of the three emotions, with the weights for each snippet adding up to 1 . We then derive our sentiment measures by averaging the weights over a speaker's turns, weighted by the turns' length.

## D Lexical Sentiment Score

In the pre-analysis plan, we committed to running regressions at the team level using a lexical sentiment score following Remus et al. (2010). This regression was meant to capture differences in the sentiment of the team conversation between teams of different gender compositions. The lexical approach rests on the idea of comparing the individual words that subjects used in the team conversation with predefined lists of words, $w$, bearing negative and positive sentiment weights $s_{w} \in[-1 ; 1]$. When a sentence was negated (or a part of it), we used the additive inverse of the original weight of the negated part. The sentiment score at the team level is then derived by summing up the weights of all words spoken by a team and dividing by the number of sentiment words.

When analyzing the transcriptions of the audio files capturing the teams' conversations during the team task, we became aware that the usage of a sizeable share of the words carrying a sentiment weight seemed to be triggered by the fact that the team task was designed as a single-choice decision problem. To demonstrate this issue that was unforeseen by us when pre-specifying the data analysis, Table D. 1 reports the 15 words carrying the highest polarity weights, separately for positive and negative sentiment words. The analysis is based on all appearances of sentiment words across the conversations of all 342 teams. A word's polarity weight measures the share of the overall (positive or negative) polarity of verbal communication across all teams determined by the usage of this word and is derived by first calculating a word's aggregate polarity by multiplying the overall number of appearances of the word in the data with the absolute value of its polarity and then dividing this aggregate polarity by the sum of aggregate polarities over all the positive (negative) sentiment words.

The left panel of the table shows that, out of 1165 different positive sentiment words used by all teams, the 15 most influential words determine 69.4 percent of the aggregate positive polarity of team conversation. Similarly, the right panel of the table demonstrates that, out of the 1050 different negative sentiment words, the 15 most influential words determine 73.5 percent of the aggregate negative polarity. The frequent usage of several of the listed words is likely triggered by the fact that the team task was a single-choice task. For instance, the teams often used the word "exclude" (or versions thereof) when discussing the likelihood of certain statements being true. Similarly, the subjects often used "good", "better", "bad", "wrong", "sure", "NOT sure", and "unsure" when assessing their options to answer a single-choice problem. The usage of "illness" was likely triggered by the fact that one of the blocks of single-choice problems referred to a business case featuring a pharmaceutical company.

Table D. 1 suggests that both the positive and the negative lexical sentiment scores are largely determined by the usage of words that reflect the type of the team task rather than the true sentiment of the team conversation. We, therefore, decided to deviate from the pre-analysis plan in terms of the measurement of team sentiment and use vocal features following Hu and Ma (2021) instead of lexical sentiment scores.

For completeness, Table D. 2 reports the pre-specified regression based on the lexical sentiment score. In line with the notion that the lexical score is dominated by words triggered by our design, the team gender composition does not affect the lexical score.

Tables 8 in the paper and A. 23 in this Online Appendix report the results for sentiment based on vocal features. Online Appendix Section $C$ provides further details.

Table D.1: Composition of Lexical Sentiment Score

| Aggregate weight of words <br> with positive polarity | Aggregate weight of words <br> with negative polarity |  |  |
| :--- | :---: | :--- | :---: |
| good | 0.306 | excluded | 0.220 |
| better | 0.077 | bad | 0.139 |
| big | 0.060 | wrong | 0.122 |
| NOT bad | 0.034 | slight | 0.050 |
| important | 0.031 | NOT sure | 0.042 |
| NOT excluded | 0.025 | NOT helping | 0.028 |
| perfect | 0.024 | illness | 0.021 |
| sure | 0.021 | little | 0.018 |
| like | 0.021 | unsure | 0.018 |
| super | 0.018 | NOT good | 0.018 |
| helping | 0.019 | end | 0.014 |
| fast | 0.015 | dependence | 0.015 |
| growing | 0.015 | stupid | 0.011 |
| convinced | 0.015 | problem | 0.011 |
| next | 0.015 | falling | 0.009 |
| Total | 0.695 | Total | 0.736 |

Notes: This table is based on all sentiment words spoken across all 342 teams and shows the words carrying the largest polarity weights, separately for words with positive and negative polarity. A word's polarity weight measures the share of the overall (positive or negative) polarity of verbal communication across all teams determined by the usage of this word and is calculated as follows. We first calculate a word's aggregate polarity by multiplying the overall number of appearances of the word in the data with the absolute value of its polarity. We then derive a word's polarity weight in the positive (negative) sentiment score by dividing its aggregate polarity by the sum of aggregate polarities over all the positive (negative) sentiment words.

Table D.2: Effects on Lexical Sentiment Score

|  | Lexical sentiment score |
| :--- | :---: |
| Gender-mixed team $\left(\beta_{1}\right)$ | -0.006 |
|  | $(0.004)$ |
| All-female team $\left(\beta_{2}\right)$ | -0.008 |
|  | $(0.005)$ |
| N. of obs. | 342 |
| Mean dep. var. all-male | -0.01 |
| Team-level controls | Yes |
| $\beta_{1}=\beta_{2}(p$-value | 0.626 |
| $\beta_{1}=0(p$-value MHT $)$ | 0.180 |
| $\beta_{2}=0(p$-value MHT $)$ | 0.199 |

Notes: This table shows a team-level OLS regression using a lexical sentiment score as dependent variable (the sentiment-related outcome we committed to use in the pre-analysis plan). The regression controls for team averages of A-level GPA and age, maximum and minimum A-level GPA, maximum and minimum age, the share of team members with an A-level degree obtained from top-tier high school type, the share of team members with foreign nationality, the share of team members studying at Master level, a series of variables capturing the shares of team members studying in one of the main study fields (arts and humanities, engineering, natural sciences, economics/business administration), and an indicator for teams where some members were silent during the team task. Robust standard errors in parentheses. ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$. $p$-values adjusted for multiple hypothesis testing (MHT, two hypotheses included) follow Barsbai et al. (2020).

## E Experimental Instructions

This section shows screenshots of stage 1 and stage 2 of the experiment (translated from German). Screenshots are in chronological order. Headings refer to Appendix Figure B. 1 showing the timeline of the design.

## Stage 1: Instructions and Matching

## Time until start: 0:11

## Welcome!

The task will start immediately after the waiting time has expired. Please be here when the task starts and follow the instructions. Make sure you do not miss the start, as joining later is not possible!

```
Time until deactivation: 1:49
```

Welcome to today's session!

Please read carefully the following information. If you want to participate, please start the task before the countdown has expired. After the countdown has expired, the task will be deactivated and you will not be able to participate any more.

Data collection for today's session is being conducted as part of a research project on human interaction in groups. An audio chats with other participants will be active during the session. By clicking "Start now!" you agree that the audio chat will be recorded for research purposes. In addition, the data collected during this task will be linked with administrative data available at the university regarding your enrollment and your university entrance qualification. All data will be processed in accordance with existing data protection regulations, will not be shared with any third party, and will only be evaluated in anonymized form. If you do not agree with the collection and processing of this data, we ask you to terminate your participation. To do so, simply close the browser window. Supplementary notes on data privacy

O I have read the above information.
Start now!

## Microphone test

You will need a microphone to participate in this session.
You can only participate if you perform the microphone test now.
Please click on "Start microphone test" to test your microphone.

Start microphone test

Do you allow Websitename.net to use your microphone?
$\xlongequal{9}$ Mikrofonarray (Realtek High Definition Audio)
$\square$ Remember Decision
You still have 1
Please follow the instructions:
Allow Block
to successfully complete the microphone test.

1. Enable microphone use

Click "Allow" or "Permit" when you receive one of the following messages,

2. Unmute

Your microphone is muted when the following icon is displayed in the audio chat window
on the right edge of your screen: Click on the icon to unmute.
You have been successfully unmuted when the following icon is displayed:


Remaining time on this page: 0:10

You successfully passed the microphone test.
Pease make sure that your speakers are activated and the volume is set sufficiently high to understand the other participants.

## Please wait

Please wait until the other participants are ready. You will be redirected in: 1:22
Please do not close this page!
Please make sure that your speakers are activated and the volume is set sufficiently high to understand the other participants!

## Time remaining until automatic redirecting: 0:30

## Instructions Part 1

- Today's session is divided into two parts. For participation in the first part of the session you will receive a fixed paymen of $€ 10$. In addition, you can earn additional money in the first and second part of the session. However, you will receive these variable payoffs only if you provide complete information in the corresponding sections. The first part of the session starts after the automatic redirection.
- You will be matched with 3 other randomly selected participants.
- You can communicate with the other participants via an audio chat
- You will work with your group on a total of 10 multiple-choice questions. Each question has exactly one correct answer
- Only if all 4 group members choose the correct answer, you (and every other member of your group) will receive a bonus of $€ 1$ for this question. If someone in your group does not choose the correct answer, no one in the group will receive a bonus.
With 10 questions in total, you can earn a bonus of up to $€ 10$.


## Conference starts in: 0:16

## Instructions Part 1 (continued)

After redirecting, you will be connected to the other group members.

- All members remain anonymous. You can address each other with the numbers visible in the audio chat window.
- First check if you can communicate with the other group members
- Then go through the points displayed on the page together

| Click here in case of technical problems (no sound, audio window not visible): |
| :--- |
| Remaining time: $0: 11$ |
| The audio chat is now open. In the chat window, you can see a marker indicating who is currently speaking. <br> You can now briefly introduce yourselves to each other. The person with the number 1 starts! |

$\quad$ Click here in case of technical problems (no sound, audio window not visible):
Remaining time: $0: 15$
Now talk through the following points together:

- If you can no longer hear the chat or see the chat window, this means your internet connection is down. Should this
happen, please click the red button at the top of the screen.

| If someone leaves the session for more than 90 seconds, the session will be closed for everyone. You (and all others in |
| :--- |
| your group) will then receive only the participation fee of $€ 10$ (no bonus). |
| For each question you have 3 minutes. To receive the bonus for each question, all group members must select the |
| correct answer before the end of the countdown. You will not be able to change your answer after the countdown has |
| expired. |

## Click here in case of technical problems (no sound, audio window not visible):

Reload page!
$\quad$ Click here in case of technical problems (no sound, audio window not visible): Reload page!
Remaining time: $0: 11$
You will now start working on the task. You will be shown material to which the subsequent questions refer. Read the
material carefully. You can reread the material at any time later.

## Stage 1: Team Task

At this point, the subjects started working on the real effort task ( 30 minutes plus reading time). While working on the 10 different problems, the subjects could study instructions and information material by opening and closing tabs. Here, we show only the stage-1 farewell screen. Appendix Section F displays two sample screenshots of the team task.


## Stage 1: Survey



```
Remaining working time: 1:23
Please answer all questions!
Please make sure that you answer all questions before being redirected to the next page!
There were 10 problems in total. Please indicate how many problems you believe your group answered correctly.
How much do you think you contributed to your group's performance? Please indicate your contribution in percent
(choose a value between 0 and 100).
How many of the other members of your group do you believe are enrolled in a study program related to business administration/economics or engineering?
In your perception, how many of the other members of your group were females?
How many of the other members of your group do you believe have been enrolled at university for at least \(\mathbf{2}\) terms?
\(\square\)
```


## Stage 2: Instructions and Matching

```
Time remaining until redirecting: 0:16
```


## Instructions Part 2

The first part of today's session is over, and the second part begins. For the second part you will receive an additional payof of $€ 2$. You may be able to earn additional money. However, you will receive these payouts only if you provide complete information in the appropriate sections.

After being redirected, you will be briefly connected to another participant via audio chat


## Stage 2: Exchange of Keys

Click here in case of technical problems (no sound, audio window not visible): Reload page!
Time remaining: 0:59
The audio chat with the other participant is now open. Please check whether you can understand it other!
On your screens, both of you now see a five-digit number. Please exchange the numbers shown between the two of you
and enter the other participant' number in the input field below. Please make sure that you have both entered the other
participant's number correctly before the countdown expires.
Your number
Other participant's number
Click here in case of technical problems (no sound, audio window not visible): Reload page!
Time remaining: 0:59
The audio chat with the other participant is now open. Please check whether you can understand it other!
On your screens, both of you now see a five-digit number. Please exchange the numbers shown between the two of you
and enter the other participant's number in the input field below. Please make sure that you have both entered the other
participant's number correctly before the countdown expires.
Your number
Other participant's number

## Stage 2: Elicitation of Preferences and Beliefs

## Remaining time: 1:4

It is possible that later in today's session, you will work again for 15 minutes on a task similar to the one in the first part of the session. You now indicate whether you would prefer to work alone or in a team with the other participant you just met in the audio chat.

A random process with three possible outcomes decides on what will happen next:
Case A: You and the other participant do NOT work on any additional task.
Case B: You work on the task alone for 15 minutes, regardless of what you indicate below. The other participant also works alone.

Case C: You work on the task for 15 minutes. What you indicate below affects whether you work alone or in a team with the other participant

- If you both choose "Team", then you work as a team. You meet in the audio chat, work on the task together and receive an additional bonus for each problem you jointly answer correctly.
- If one (or both) of you chooses "Alone", then you both work on the task alone. You will NOT meet in the audio chat. You will receive an individual bonus for each correct answer. How the other participant performs on the task does not matter for your payoff.

Hence, it is possible that you both work alone regardless of what you indicate (case B). Even if you do not end up working in a team, this does not reveal to the other person how you decided. At the same time, if you do not end up working in a team, this does not reveal the other participant's decision to you. Still, it may be that the preference you indicate below determines whether you work alone or in a team (case C).

Please indicate now whether you would prefer to work in a team with the other participant or alone:
○ Team
O Alone

```
Remaining time: 1:05
```


## Please answer all questions

Please make sure that you answer all questions before being redirected to the next page!
In case you will work on another task later on, this task will take 15 minutes. Now, first imagine a longer task similar to the one you worked on in the first part of the session. Think of a task consisting of 4 blocks of 5 problems each. Hence, there are 20 problems in total. Imagine that the conditions (time per task, bonus for correct answer, etc.) are the same as in the first part of the session.

What do you think: If you were working on the task alone, how many of the $\mathbf{2 0}$ problems would you answer correctly?

$\begin{array}{lllllllllllllllllllll}0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20\end{array}$

What do you think: If the person you just met in the audio chat were working the task alone, how many of the 20 problems would the person answer correctly?
$\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{O}-\mathrm{C}$
$\begin{array}{lllllllllllllllllllll}0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20\end{array}$

What do you think: If you were working on the task in a team with the person you just met in the audio chat, how many of the $\mathbf{2 0}$ problems would you answer correctly together?

```
0
```


## Remaining time: 0:4 <br> Please answer all questions!

Please make sure that you answer all questions before being redirected to the next page!
Imagine you were working on the task in a team with the other person you just met in the audio chat. How much do you agree with the following statements? Please use values from 1 (strongly disagree) to 5 (strongly agree) for your answer.

The communication with the other person would be characterized by a positive tone.


The communication with the other person would be cooperative.


Working on the task together with the other person would be fun.
strongly disagree strongly agree


## Stage 2: Survey

Remaining time: 0:30
Please make sure that you answer all questions before being redirected to the next page!
Think about the person you met in the audio chat at the beginning of the second part of the session.
Do you think the person is enrolled in a study program related to business administration/economics or engineering?
Y Yes
No
In your perception, was the person female?
Y Yes
No
Do you think the person has been enrolled at university for at least 2 terms?
O Yes
O No


Thank you for your participation in today's session!
Please indicate now how you want to receive your payoff of $€[10,00+$ bonus $]$. If you choose the Amazon voucher option, we will not
share any data with Amazon. You will receive your voucher directly from us. If you choose bank transfer, you will have to enter your
bank account details on the next page.
O Amazon voucher (sent by email within 3 business days)
Bank transfer (processing time 2 to 4 weeks)

```
Continue
```


## F Team Task

The task consisted of a series of 10 single-choice problems, grouped into two problem sets. Each set of problems referred to a business case that was described using extensive information material. The first business case was concerned with a hypothetical firm. The problems referred to issues related to the firm's sales and profits, as well as investments and market access in different world regions. The second business case dealt with economic development in Africa, with a focus on different forms of capital, investment and innovation.

Whenever new information material was introduced, teams were given extra time for studying the material. When working on the problems, the team members could go back to this material at all times by opening and closing tabs. Once the three minutes for a given problem had elapsed, the subjects could no longer access this problem, and answers to this problem could no longer be changed. In order to earn a bonus for a given problem, all four members of a given team had to mark the correct statement on their screen. Coordination among team members was only possible via the audio chat, which was open throughout the team task.

In the following, we document two sample screenshots of the team task.




[^0]:    ${ }^{48}$ See the package SpaCy, https://spacy.io/.
    ${ }^{49}$ For this step, we used the package pydub, https://github.com/jiaaro/pydub/.
    ${ }^{50}$ We reduced the audio files using the package tensorflow, https://www.tensorflow.org/
    ${ }^{51}$ We used the package Keras, https://keras.io/.

