

# Who Does the Talking Here? The Impact of Gender Composition on Team Interactions

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# Gender Diversity and Teamwork

Two long-term trends:

- ▶ Teamwork has become pervasive, workers rewarded for social skills  
[e.g., Deming, 2017; Weidmann and Deming, 2021; Edin et al., 2022]
- ▶ Workers tend to collaborate in increasingly gender-diverse environments  
[STEM jobs: Pew Research Center, 2021; company boards: Spencer Stuart, 2021; Alliance for Board Diversity and Deloitte, 2021]

As a result, gender-diverse teamwork is on the rise

**How does gender diversity affect the social interaction in teams?**

# A Timely Topic

*The New York Times Magazine*

THE WORK ISSUE

## **What Google Learned From Its Quest to Build the Perfect Team**

Feb 25, 2016

FINANCIAL TIMES

Women in meetings should be heard  
as well as seen

Mar 8, 2021

**The  
Guardian**

**Best ideas come from work teams  
mixing men and women**

Nov 1, 2007

**nature**

BOOK REVIEW

**What NASA missions can teach us  
about teamwork**

Nov 16, 2020

# This Paper

Online experiment with students at U Erlangen-Nuremberg

Randomly composed teams of four: All-male, mixed, all-female

Gender-neutral real-effort team task with audio chat

## Causal evidence on how team gender composition affects

- ▶ communication
- ▶ team performance
- ▶ preferences & beliefs

## Preview of Results

1. All-male teams communicate more than mixed and all-female teams
2. Communication gaps translate into performance gaps
3. Males dominate females quantitatively in mixed-teams conversations
4. Females less willing to engage in mixed teamwork shortly after working in a mixed team, males show opposite response

## Contribution (1)

Mixed evidence on gender composition and team performance

[e.g., Apesteguia et al., 2012; Hoogendoorn et al., 2013; Lamiraud and Vranceanu, 2018; Marx et al., 2021]

- ▶ This paper: Focus on communication, all other channels ruled out by design

Male dominance through speaking time, hostility, and interruptions

[e.g., Jacobi and Schweers, 2017; MacLaren et al., 2020; Dupas et al., 2021; Miller and Sutherland, 2022]

- ▶ This paper: First systematic analysis of style and quantity of communication in exogenously formed teams

## Contribution (2)

Speaking time predicts emerging leadership, males more willing to lead

[e.g., Schmid Mast, 2002; Alan et al., 2020; MacLaren et al., 2020; Born et al., 2022]

- ▶ This paper: Causal evidence on gender gap in mixed-team communication

Worker heterogeneity and preferences for teamwork, attitudes are malleable

[e.g., Hamilton et al., 2003; Kuhn and Villeval, 2015; Cooper et al., 2021; Dahl et al., 2021]

- ▶ This paper: First evidence on gender gap in response to mixed teamwork

## Experimental Design: Overview

Online platform at U Erlangen-Nuremberg

- ▶ ~10K registered users
- ▶ Log-in with unique student ID
- ▶ Link to registry data: Gender, A-level GPA, age, field of study, etc.

Invite random subsamples of users to online sessions

Randomly composed teams of four meet in chat room (no video)

- ▶ Stage 1: Team real-effort task, 30 minutes
- ▶ Stage 2: Choice experiment, preferences over future teamwork and beliefs



## First Stage: Team Real-Effort Task & Incentives

Business cases, adapted from recruitment task of big strategy consultancy

Info material (text, tables, charts) presented on screen

2 business cases, each consisting of 5 single-choice problems

Teams have 3 minutes for each problem

Fixed reward €10, bonus of €1 per problem if all team members individually mark correct answer

## Second Stage: Choice Experiment

Subjects meet in chat room in randomly composed pairs and talk for 1 minute

Individual choice experiment

- ▶ Possible further real effort task (5 problems)
- ▶ Incentive-compatible elicitation of preferences: Teamwork with other subject, or individual work

Elicitation mechanism

Further beliefs: Productivity (own, other, team) & team communication

# Example: Task Screen

Click here in case of technical problems (no sound, audio window not visible): [Reload page!](#)

Remaining working time: 2:57

**Task block A**


- Information Part 1
- Information Part 2
- Information Part 3

**Problem A4**

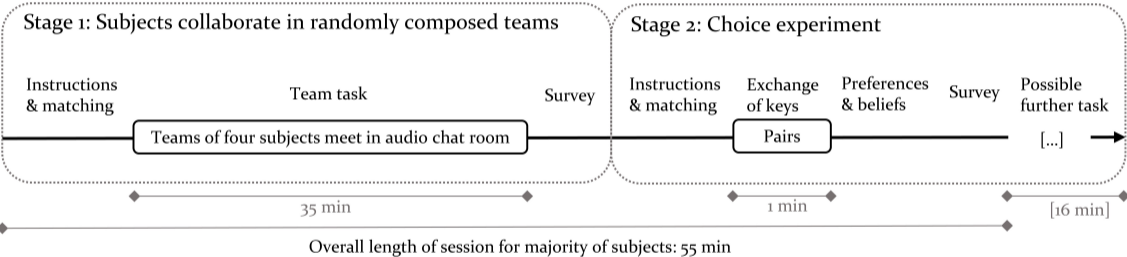
Which of the following statements does NOT help the team determine market access for MedOne in the respective market?

- a) The larger the company's market share, the more difficult it is for the company to increase sales.
- b) The higher the company's profit margin, the more difficult it is for the company to increase profits.
- c) The better the company's performance, the riskier it is for the company to change its strategy.
- d) The worse the company's performance, the more likely it is to have good opportunities to grow.

You are: 3



# Experimental Design: Timeline



# Sampling and Randomization

## First Stage:

- ▶ Random assignment to teams of four (342 teams, 1368 subjects)
- ▶ Team gender compositions: All-male, mixed (2 females, 2 males), all-female
- ▶ In each team, 2 subjects of above-median and 2 of below-median ability

Balancing checks, team level

Balancing checks, individual level

Further details

## Second Stage:

- ▶ Each subject matched randomly with another subject from a different first-stage team

Details

## Design Checks

Sample of 296 subjects, same task, but individual piece rate:

- ▶ No gender effect on performance
- ▶ No gender effect on likeability of task
- ▶ No effect of field of study
- ▶ Strong positive effect of cognitive skills

Balancing

Performance & likeability

Awareness

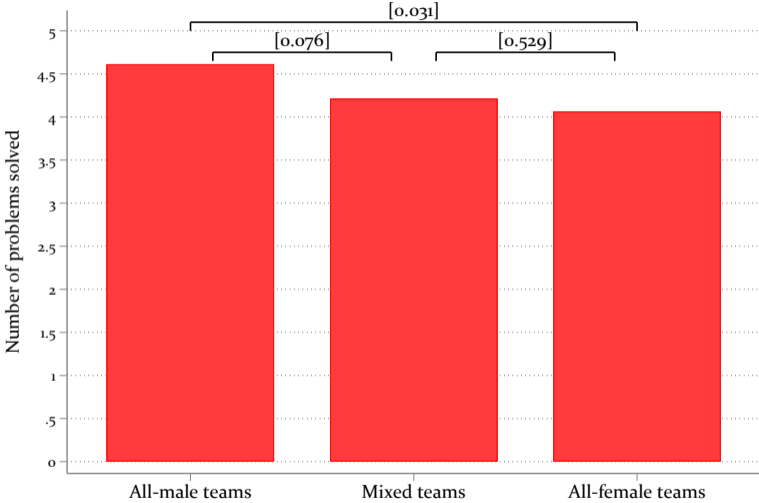
Stage 2: Belief about partner's productivity unaffected by partner's gender

Belief partner's productivity

# Treatment Effects on Team Performance

(Pre-Registered)

# All-Male Teams Outperform Mixed and All-Female Teams

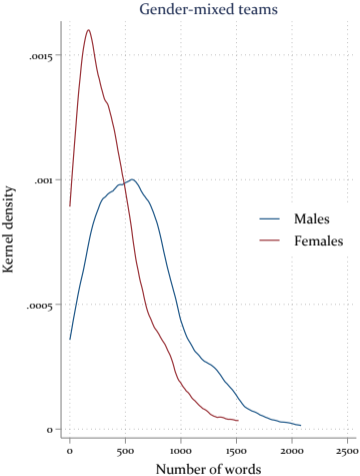
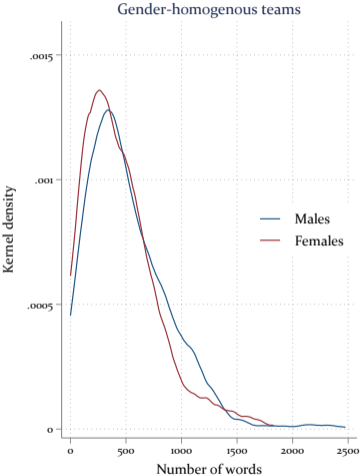




# Treatment Effects on Communication

(Pre-Registered)

# Gender Gaps: Number of Words



# Gender Gaps: Team Communication

	#Words (1)	#Topic words (2)
Female ( $\beta_1$ )	-76.34*** (23.49)	-5.41*** (1.35)
Mixed team ( $\beta_2$ )	93.03*** (28.74)	4.51*** (1.56)
Female $\times$ Mixed team ( $\beta_3$ )	-173.39*** (38.43)	-9.46*** (2.18)
A-level GPA	113.36*** (15.29)	6.90*** (0.90)
Subject-level controls	Yes	Yes
N. of obs.	1368	1368
Adj. R <sup>2</sup>	0.100	0.108
Mean dep. var. all-male	519.4	31.8
$\beta_1 + \beta_3 = 0$ ( <i>p</i> -value)	0.000	0.000
$\beta_2 + \beta_3 = 0$ ( <i>p</i> -value)	0.001	0.000

MHT

Speaking time

Team level

Words & turns

Gap over time

Distributional effects

Perceived communication

Specification

# Does the Effect of Team Gender Composition on Performance Work Through Communication?

(Exploratory)

## Communication as a Possible Channel

Recall: When working individually, females and males are equally productive

Differences in team performance can only emerge through communication

Possible channels:

- ▶ Quantity of (topical) communication: #all words, #topic words
- ▶ Quality of communication: #topic words/#all words

## Quantity Matters: #Topic Words Predicts Team Performance

	Number of problems solved (1)
#all words ( $\beta_1$ )	-0.001** (0.000)
#topic words ( $\beta_2$ )	0.015*** (0.004)
N. of obs.	342
Mean dep. var.	4.35
Team-level controls	Yes

# No Gender Gap in Quality: Females Talk Equally Topical

	Share of topic words (1)
Female ( $\beta_1$ )	0.001 (0.002)
Mixed team ( $\beta_2$ )	0.000 (0.002)
Female $\times$ Mixed team ( $\beta_3$ )	0.001 (0.003)
A-level GPA	-0.001 (0.001)
N. of obs.	1336
Mean dep. var. all-male	0.065
Subject-level controls	Yes
$\beta_1 + \beta_3 = 0$ ( $p$ -value)	0.538
$\beta_2 + \beta_3 = 0$ ( $p$ -value)	0.708

## Communication and Team Performance: Discussion

Four pieces of evidence:

- ▶ All-male teams outperform mixed and all-female teams
- ▶ Usage of topical words drives team performance
- ▶ Males talk more than females
- ▶ No gender difference in share of topical words

Evidence suggests that

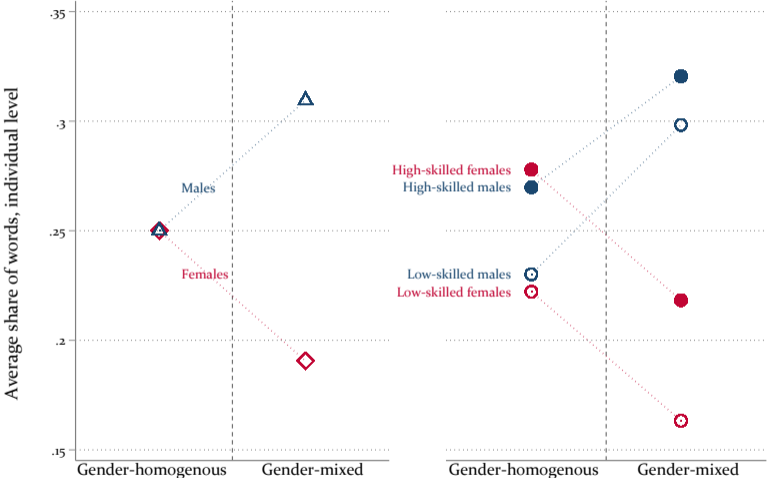
- ▶ Female and male talk is equally productive
- ▶ Differences in team performance driven by males talking more than females



# Determinants of Communication Behavior: Gender vs. Cognitive Skills

(Exploratory)

# Who Does the Talking? Gender vs. Cognitive Skills



# Origins of Male Dominance in Mixed Teams

Little evidence that males use aggressive communication style or tone

Sentiment

Interruptions

Passive interruptions

Gender roles and differences in self-confidence and social confidence

[e.g., Kling et al., 1999; Croson and Gneezy, 2009; Ludwig et al., 2017; Alan et al., 2020; Born et al, 2022]

Gender-specific communication behavior seems to be socially acquired

[e.g., Aukrust, 2008]

## Stage 2: Preferences for Further Teamwork

(Pre-Registered)

## Preferences: Past Exposure and Partner's Gender

	= 1 if subject prefers teamwork	
	Females (1)	Males (2)
Female partner 2nd stage ( $\beta_1$ )	0.031 (0.059)	-0.006 (0.046)
Mixed team 1st stage ( $\beta_2$ )	-0.111* (0.066)	-0.090 (0.065)
Female partner 2nd stage $\times$ Mixed team 1st stage ( $\beta_3$ )	0.058 (0.099)	0.210** (0.087)
N. of obs.	351	380
Mean dep. var. gender-homogenous teams	0.80	0.81
Subject-level controls	Yes	Yes
$\beta_1 + \beta_3 = 0$ ( $p$ -value)	0.250	0.005
$\beta_2 + \beta_3 = 0$ ( $p$ -value)	0.435	0.025

MHT

Exposure to mixed teamwork

Productivity beliefs

Communication beliefs

Specification

# Conclusion

## Systematic analysis of how team gender composition affects team interactions

- ▶ All-male teams communicate more than mixed and all-female teams
- ▶ Communication gaps translate into performance gaps
- ▶ Males dominate females in mixed-teams conversations
- ▶ Opposite effects on females' and males' willingness to work in mixed teams

## Implications and further questions:

- ▶ How to encourage women to speak out in work teams?
- ▶ Gender gaps in leadership experience from low-stakes environments
- ▶ Measures to prevent male dominance in mixed teams

## Backup Slides

## Empirical Setup: Team-Level Outcomes

$$Y_g = \beta_0 + \beta_1 T1_{FM,g} + \beta_2 T1_{FF,g} + X_g' \gamma + u_g$$

- ▶  $Y_g$ : Outcome of interest

[quantitative measures, distributional measures, sentiment, perceptions]

- ▶  $T1_{FM,g}$ : Indicator for gender-mixed teams

- ▶  $T1_{FF,g}$ : Indicator for all-female teams

- ▶  $X_g$ : Team-level control variables

[GPA (mean, maximum, minimum), share A-level from top-tier high school type, age (mean, maximum, minimum), share foreign nationality, shares for different fields of study, indicator for teams with silent members]

- ▶ Robust SEs, extra tables with  $p$ -values adjusted for FWER

[Barsbai et al., 2020]



## Empirical Setup: Individual-Level Outcomes, First Stage

$$Y_i = \beta_0 + \beta_1 F_i + \beta_2 T1_{FM,i} + \beta_3 F_i \times T1_{FM,i} + X_i' \gamma + u_i$$

- ▶  $Y_i$ : Outcome of interest  
[quantitative measures and perceptions]
- ▶  $F_i$ : Indicator for female subjects
- ▶  $T1_{FM,i}$ : Indicator for gender-mixed teams
- ▶  $X_i$ : Individual-level control variables  
[GPA, age, indicators for A-level from top-tier high school type, foreign nationality, field of study, indicator for teams with silent members]
- ▶ SEs clustered at team level, extra tables with  $p$ -values adjusted for FWER  
[Barsbai et al., 2020]

## Empirical Setup: Subject-by-Problem Panel

$$Y_{i,p} = \alpha + \sum_{p=2}^{10} \beta_p P_p + \sum_{p=1}^{10} \delta_p F_i \times P_p + \sum_{p=1}^{10} \eta_p T1_{FM,i} \times P_p + \sum_{p=1}^{10} \theta_p F_i \times T1_{FM,i} \times P_p + X_i' \gamma + u_{i,p}$$

- ▶  $P_p$ : Indicator for problem  $p = 1, \dots, 10$
- ▶ SEs clustered at team level

Back

## Empirical Setup: Second Stage

$$Y_i = \beta_0 + \beta_1 T2_{F,i} + \beta_2 T1_{FM,i} + \beta_3 T2_{F,i} \times T1_{FM,i} + X_i' \gamma + u_i$$

- ▶ Separate regressions for females and males
- ▶  $Y_i$ : Outcome of interest  
[preferences for teamwork, productivity beliefs, communication-related beliefs]
- ▶  $T2_{F,i}$ : Indicator for female potential partner in stage 2
- ▶  $T1_{FM,i}$ : Indicator for gender-mixed team in stage 1
- ▶ SEs clusters account for own and potential partner's first-stage team assignment, extra tables with  $p$ -values adjusted for FWER

[Barsbai et al., 2020]

## Stage 2: Awareness of Potential Partner's Gender

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

Balancing checks, origin stage 1 team composition

Balancing checks, assignment of teammates

Stage 1

# Productivity Beliefs: Past Exposure and Partner's Gender

	Belief about productivity:					
	Own		Partner		Team	
	Females (1)	Males (2)	Females (3)	Males (4)	Females (5)	Males (6)
Female partner 2nd stage ( $\beta_1$ )	0.303 (0.494)	0.285 (0.439)	-0.238 (0.482)	0.357 (0.417)	0.002 (0.441)	0.467 (0.413)
Mixed team 1st stage ( $\beta_2$ )	0.504 (0.546)	0.149 (0.553)	0.141 (0.561)	0.259 (0.478)	0.318 (0.472)	0.383 (0.523)
Female partner 2nd stage $\times$ Mixed team 1st stage ( $\beta_3$ )	-0.317 (0.712)	0.326 (0.790)	0.713 (0.736)	0.020 (0.751)	-0.194 (0.645)	0.016 (0.720)
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
$\beta_1 + \beta_3 = 0$ ( $p$ -value)	0.979	0.352	0.414	0.549	0.708	0.415
$\beta_2 + \beta_3 = 0$ ( $p$ -value)	0.693	0.424	0.077	0.644	0.785	0.461

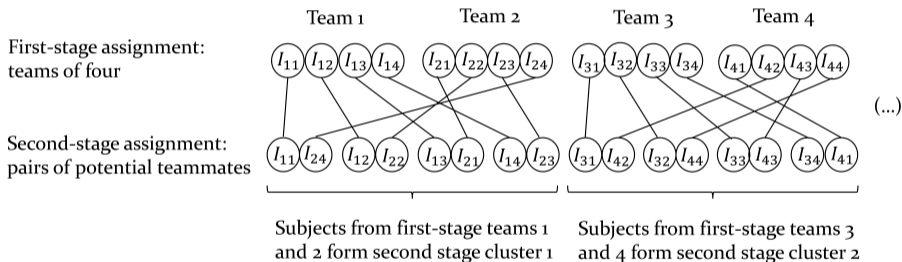
# Communication Beliefs: Past Exposure and Partner's Gender

	Belief about:							
	Positivity		Cooperativeness		Likeability		Belief index	
	Females (1)	Males (2)	Females (3)	Males (4)	Females (5)	Males (6)	Females (7)	Males (8)
Female partner 2nd stage ( $\beta_1$ )	0.315*** (0.081)	0.153 (0.093)	0.355*** (0.074)	0.033 (0.089)	0.346*** (0.126)	0.154 (0.124)	0.544*** (0.128)	0.173 (0.144)
Mixed team 1st stage ( $\beta_2$ )	0.218* (0.113)	0.187* (0.099)	0.179 (0.116)	0.188* (0.104)	0.006 (0.136)	0.043 (0.143)	0.232 (0.176)	0.237 (0.158)
Female partner 2nd stage $\times$ Mixed team 1st stage ( $\beta_3$ )	-0.227 (0.141)	-0.104 (0.146)	-0.435*** (0.154)	0.002 (0.153)	-0.034 (0.192)	0.093 (0.200)	-0.404* (0.229)	-0.015 (0.227)
N. 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
$\beta_1 + \beta_3 = 0$ ( $p$ -value)	0.437	0.671	0.556	0.772	0.025	0.126	0.452	0.374
$\beta_2 + \beta_3 = 0$ ( $p$ -value)	0.919	0.385	0.009	0.068	0.853	0.342	0.267	0.150

[Back](#)
[MHT](#)
[Exposure to mixed teamwork](#)

# Second-Stage Randomization

## Second-stage clusters based on first-stage team pairs



## Further Details

First stage: Teams dropped if any subject left session for  $> 90$  seconds

For most subjects, experiment took  $\sim 55$  minutes

Total payoff: fixed reward 1st stage 10€

+ bonus  $\in \{0, 1, 2, \dots, 10\}$ €

+ fixed reward 2nd stage 2€

+ bonus  $\in \{0, 1, 2, \dots, 5\}$ € if drawn for 2nd stage task

Data from pilot sessions (only 1st stage) included



## Second Stage: Mechanism to Elicit Preferences for Teamwork

Individual choice experiment

- ▶ Possible further real effort task (5 problems)
- ▶ Elicitation of preferences: Teamwork with other subject, or individual work

Mechanism: Random draw at pair level, three possible outcomes

- ▶ Case A: Individual work, irrespective of stated preferences
- ▶ Case B: Teamwork if preferred by both, individual work otherwise
- ▶ Case C: No task at all

# Balancing, Team Level

	All-male teams (1)	Mixed teams (2)	All-female teams (3)	<i>p</i> -value all equal (4)
Mean A-level GPA	2.73 (0.17)	2.74 (0.16)	2.76 (0.17)	0.30
Maximum A-level GPA	3.45 (0.30)	3.47 (0.26)	3.43 (0.31)	0.59
Minimum A-level GPA	2.00 (0.31)	2.03 (0.30)	2.06 (0.30)	0.37
Share top-tier high school	0.83 (0.19)	0.81 (0.19)	0.84 (0.19)	0.51
Mean age	22.71 (1.60)	22.79 (1.41)	22.56 (1.49)	0.49
Maximum age	26.32 (2.90)	26.50 (2.55)	25.76 (2.44)	0.08
Minimum age	19.71 (1.56)	19.67 (1.54)	19.77 (1.47)	0.88
Share foreign nationality	0.04 (0.10)	0.03 (0.08)	0.04 (0.09)	0.42
N. of obs.	114	113	115	342

[Back](#)[Attrition](#)[Descriptives](#)

# Balancing, Individual Level

	Males assigned to			Females assigned to		
	All-male teams (1)	Mixed teams (2)	<i>p</i> -value both equal (3)	All-female teams (4)	Mixed teams (5)	<i>p</i> -value both equal (6)
A-level GPA	2.73 (0.63)	2.75 (0.62)	0.71	2.76 (0.60)	2.73 (0.62)	0.52
Top-tier high school	0.83 (0.38)	0.82 (0.39)	0.79	0.84 (0.36)	0.81 (0.39)	0.27
Age	22.71 (3.28)	22.62 (3.20)	0.74	22.56 (2.94)	22.97 (3.20)	0.10
Foreign nationality	0.04 (0.19)	0.03 (0.16)	0.58	0.04 (0.20)	0.02 (0.16)	0.20
Study program: Master level	0.28 (0.45)	0.24 (0.43)	0.27	0.21 (0.41)	0.24 (0.43)	0.44
Study program: Arts and humanities	0.19 (0.39)	0.21 (0.43)	0.51	0.29 (0.45)	0.27 (0.43)	0.69
Study program: Engineering	0.28 (0.45)	0.19 (0.37)	0.01	0.13 (0.34)	0.14 (0.37)	0.81
Study program: Natural sciences	0.10 (0.30)	0.12 (0.31)	0.46	0.10 (0.29)	0.10 (0.31)	0.80
Study program: Economics and business	0.30 (0.46)	0.32 (0.45)	0.55	0.28 (0.45)	0.26 (0.45)	0.55
N. of obs.	456	226	682	460	226	686

# Attrition, Team Level

	Non-attrited (1)	Attrited (2)	Diff. (3)	Std. Diff. (4)
Gender-mixed team	0.330 (0.471)	0.362 (0.484)	0.032 (0.062)	0.047
All-female team	0.336 (0.473)	0.304 (0.464)	-0.032 (0.062)	-0.048
Mean A-level GPA	2.741 (0.165)	2.724 (0.150)	-0.017 (0.021)	-0.074
Share top-tier high school	0.828 (0.191)	0.815 (0.190)	-0.013 (0.025)	-0.048
Mean age	22.687 (1.500)	22.525 (1.369)	-0.162 (0.195)	-0.080
Share foreign nationality	0.036 (0.092)	0.065 (0.111)	0.029 (0.013)	0.205
Share study program Master level	0.243 (0.203)	0.214 (0.224)	-0.030 (0.027)	-0.098
Share study program arts and humanities	0.241 (0.210)	0.283 (0.227)	0.041 (0.028)	0.134
Share study program engineering	0.192 (0.214)	0.188 (0.194)	-0.004 (0.028)	-0.013
Share study program natural sciences	0.102 (0.147)	0.069 (0.112)	-0.033 (0.019)	-0.181
Share study program economics and business	0.289 (0.240)	0.272 (0.222)	-0.018 (0.031)	-0.054
N. of obs.	342	69	411	411

## Attrition in Stage 1, Individual Level

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

## Descriptives on Primary Outcomes: Team Level

	Mean (1)	Stand. 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 sentiment: Positive	0.39	0.16
Vocal sentiment: 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

# Descriptives on Primary Outcomes: Individual Level

	Mean (1)	Stand. Dev. (2)
A. First-stage outcomes:		
Number of words	487.00	361.92
Number of turns	36.94	23.23
Own vocal sentiment: Positive	0.39	0.20
Own vocal sentiment: 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 productivity	10.95	3.32
Belief: Partner's productivity	12.09	3.04
Belief: Team productivity	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

## Awareness of Team Gender Composition, First Stage

	= 1 if aware of exact team gender composition (1)	= 1 if aware of whether team is mixed or not (2)
Female ( $\beta_1$ )	-0.016 (0.019)	-0.015 (0.019)
Mixed team ( $\beta_2$ )	-0.014 (0.020)	-0.014 (0.020)
Female $\times$ Mixed team ( $\beta_3$ )	-0.106*** (0.031)	0.026 (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



## Balancing Checks: Subjects Working Individually

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

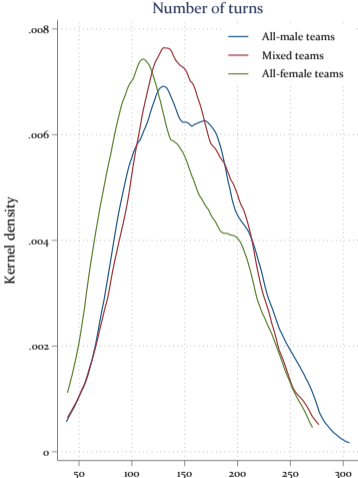
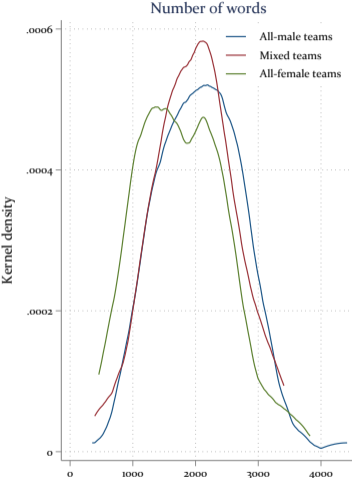
## Performance & Likeability Under Individual Piece Rate

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

## Stage 2: Beliefs About Potential Partner's Productivity

	Belief about partner's individual productivity		
	All (1)	Females (2)	Males (3)
Female partner 2nd stage ( $\beta$ )	0.212 (0.262)	0.084 (0.384)	0.333 (0.344)
N. of obs.	731	351	380
Mean dependent variable	12.09	11.85	12.32
Subject-level controls	Yes	Yes	Yes

# Quantitative Measures of Communication, Team Level



## Quantitative Effects on Communication: Team Level

	#Words (1)	#Topic words (2)
Gender-mixed team ( $\beta_1$ )	-134.68 (86.36)	-12.15** (4.70)
All-female team ( $\beta_2$ )	-297.51*** (94.63)	-20.24*** (5.16)
N. of obs.	342	342
Mean dep. var. all-male	2077.73	127.25
Team-level controls	Yes	Yes
$\beta_1 = \beta_2$ ( <i>p</i> -value)	0.079	0.093
$\beta_1 = 0$ ( <i>p</i> -value MHT)	0.121	0.013
$\beta_2 = 0$ ( <i>p</i> -value MHT)	0.006	0.000

## Quantitative Effects on Topic Words

	Dependent variable: Number of topic words				
	#topic words considered				
	10 (1)	20 (2)	30 (3)	40 (4)	50 (5)
Gender-mixed team ( $\beta_1$ )	-12.2** (4.7)	-19.3*** (6.6)	-21.8*** (7.4)	-24.2*** (8.1)	-26.0*** (8.7)
All-female team ( $\beta_2$ )	-20.2*** (5.2)	-29.5*** (7.2)	-32.3*** (8.0)	-35.1*** (8.8)	-37.1*** (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

## Perceived Communication: Team Level, Secondary Outcomes

	Sufficient communication (1)	Symmetric communication (2)	Letting others finish (3)
Gender-mixed team ( $\beta_1$ )	-0.126 (0.077)	-0.065 (0.094)	-0.038 (0.043)
All-female team ( $\beta_2$ )	-0.078 (0.075)	0.182** (0.092)	-0.050 (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

## Distributional Effects on Team Communication

	HHI words	HHI turns
	(1)	(2)
Gender-mixed team ( $\beta_1$ )	0.013 (0.009)	0.007 (0.005)
All-female team ( $\beta_2$ )	-0.007 (0.008)	-0.002 (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



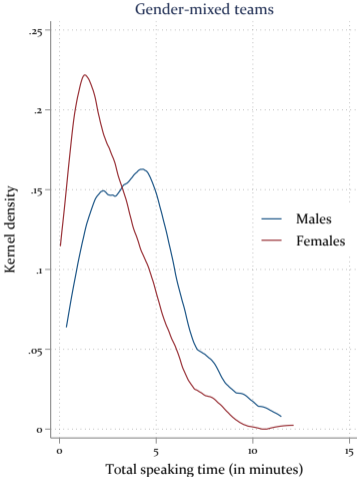
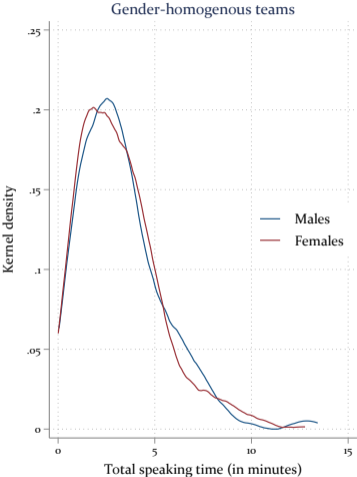
## Effects on Sentiment: Team Level Communication

	Positive (1)	Negative (2)
Gender-mixed team ( $\beta_1$ )	0.088*** (0.017)	-0.008 (0.015)
All-female team ( $\beta_2$ )	0.254*** (0.017)	-0.063*** (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

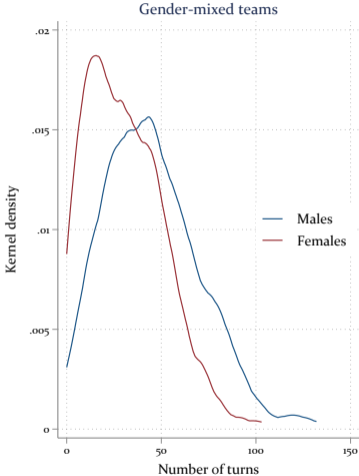
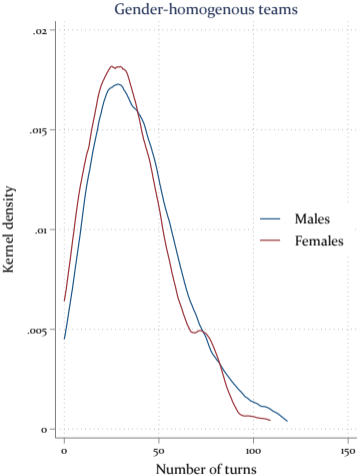
## Effects on Perceived Communication: Team Level

	Positivity (1)	Cooperativeness (2)	Likeability (3)
Gender-mixed team ( $\beta_1$ )	-0.029 (0.051)	-0.017 (0.046)	-0.021 (0.077)
All-female team ( $\beta_2$ )	-0.034 (0.057)	-0.004 (0.051)	-0.113 (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

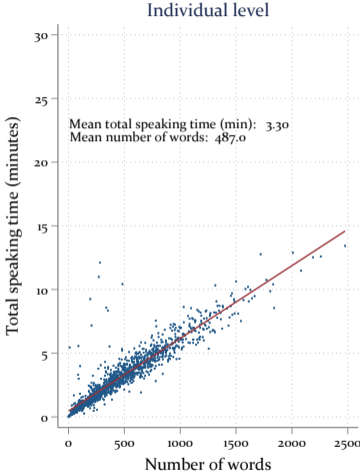
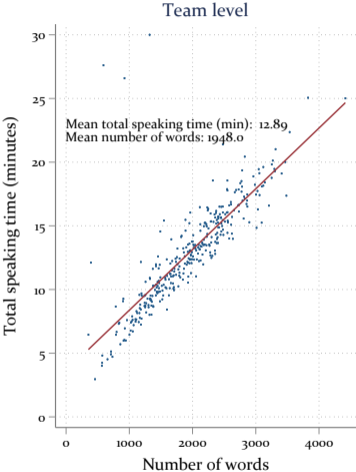
# Gender Gap in Total Speaking Time



# Gender Gap in Number of Turns



# Illustration: Number of Words vs. Total Speaking Time



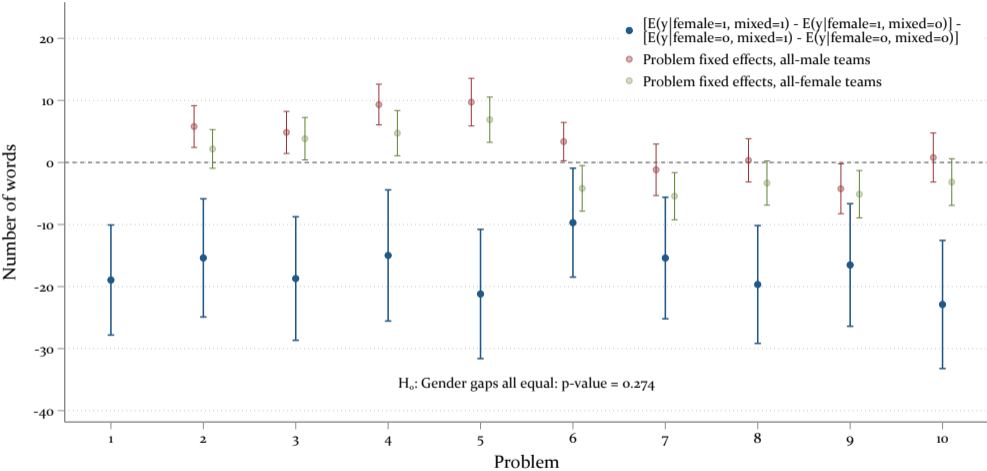
# Effects on Communication: Individual Level

	#Words (1)	#Topical words (2)
Female ( $\beta_1$ )	-76.34*** (23.49)	-5.41*** (1.35)
Mixed team ( $\beta_2$ )	93.03*** (28.74)	4.51*** (1.56)
Female $\times$ Mixed team ( $\beta_3$ )	-173.39*** (38.43)	-9.46*** (2.18)
A-level GPA	113.36*** (15.29)	6.90*** (0.90)
Subject-level controls	Yes	Yes
N. of obs.	1368	1368
Adj. R <sup>2</sup>	0.100	0.108
Mean dep. var. all-male	519.4	31.8
$\beta_4 := \beta_1 + \beta_3$	-249.7	-14.9
$\beta_4 = 0$ ( <i>p</i> -value)	0.000	0.000
$\beta_5 := \beta_2 + \beta_3$	-80.4	-5.0
$\beta_5 = 0$ ( <i>p</i> -value)	0.001	0.000
$\beta_1 = 0$ ( <i>p</i> -value MHT)	0.003	0.000
$\beta_2 = 0$ ( <i>p</i> -value MHT)	0.003	0.004
$\beta_3 = 0$ ( <i>p</i> -value MHT)	0.000	0.000

## Effects on Communication: Individual Level

	#Words (1)	#Words (2)	#Turns (3)	#Turns (4)
Female ( $\beta_1$ )	-76.34*** (23.49)	-81.18*** (24.25)	-4.02** (1.77)	-4.18** (1.76)
Mixed team ( $\beta_2$ )	93.03*** (28.74)	99.10*** (28.07)	6.16*** (2.12)	6.61*** (2.01)
Female $\times$ Mixed team ( $\beta_3$ )	-173.39*** (38.43)	-182.98*** (38.17)	-10.87*** (2.66)	-11.31*** (2.61)
A-level GPA	113.36*** (15.29)	116.77*** (15.04)	5.87*** (0.96)	6.46*** (0.95)
Subject-level controls	Yes	Yes	Yes	Yes
Controls include Big 5	No	Yes	No	Yes
N. of obs.	1368	1281	1368	1281
Adj. R <sup>2</sup>	0.100	0.207	0.085	0.204
Mean dep. var. all-male	519.4	517.0	38.6	38.3
$\beta_4 := \beta_1 + \beta_3$	-249.7	-264.2	-14.9	-15.5
$\beta_4 = 0$ ( <i>p</i> -value)	0.000	0.000	0.000	0.000
$\beta_5 := \beta_2 + \beta_3$	-80.4	-83.9	-4.7	-4.7
$\beta_5 = 0$ ( <i>p</i> -value)	0.001	0.001	0.009	0.008
$\beta_1 = 0$ ( <i>p</i> -value MHT)	0.003	0.002	0.025	0.021
$\beta_2 = 0$ ( <i>p</i> -value MHT)	0.005	0.002	0.006	0.003
$\beta_3 = 0$ ( <i>p</i> -value MHT)	0.000	0.000	0.000	0.000

# Gender Gap Is Stable Over Time





# Gender Gaps in Total Speaking Time

	Total speaking time (in minutes)	
	(1)	(2)
Female ( $\beta_1$ )	-0.18 (0.14)	-0.19 (0.15)
Mixed team ( $\beta_2$ )	0.76*** (0.17)	0.82*** (0.17)
Female $\times$ Mixed team ( $\beta_3$ )	-1.20*** (0.24)	-1.29*** (0.23)
A-level GPA	0.69*** (0.10)	0.67*** (0.10)
Subject-level controls	Yes	Yes
Controls include Big 5	No	Yes
N. of obs.	1336	1254
Adj. R <sup>2</sup>	0.090	0.191
Mean dep. var. all-male	3.29	3.27
$\beta_4 := \beta_1 + \beta_3$	-1.38	-1.48
$\beta_4 = 0$ ( <i>p</i> -value)	0.000	0.000
$\beta_5 := \beta_2 + \beta_3$	-0.43	-0.47
$\beta_5 = 0$ ( <i>p</i> -value)	0.008	0.004
$\beta_1 = 0$ ( <i>p</i> -value MHT)	0.220	0.198
$\beta_2 = 0$ ( <i>p</i> -value MHT)	0.000	0.000
$\beta_3 = 0$ ( <i>p</i> -value MHT)	0.000	0.000

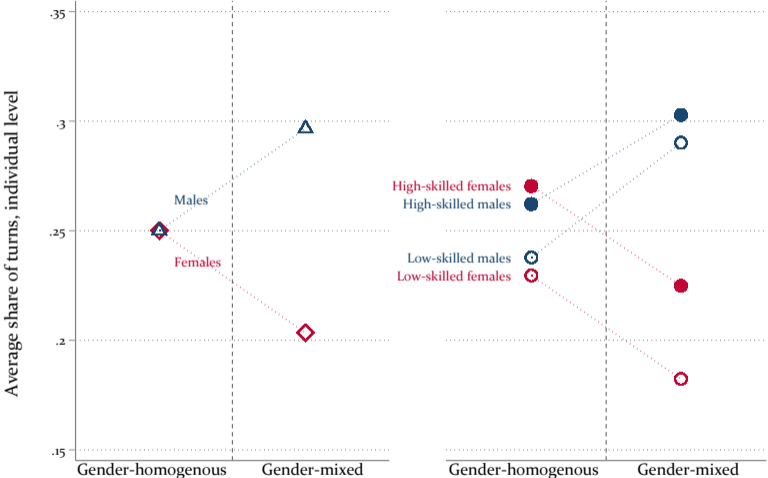
## Effects on Perceived Communication: Individual Level

	Positivity (1)	Cooperativeness (2)	Likeability (3)	Perception index (4)
Female ( $\beta_1$ )	0.001 (0.049)	-0.007 (0.045)	-0.082 (0.074)	-0.042 (0.082)
Mixed team ( $\beta_2$ )	0.033 (0.053)	-0.001 (0.050)	0.133* (0.078)	0.081 (0.078)
Female $\times$ Mixed team ( $\beta_3$ )	-0.100 (0.080)	-0.032 (0.082)	-0.177* (0.103)	-0.166 (0.129)
N. of obs.	1358	1357	1362	1356
Mean dep. var. all-male	4.66	4.66	4.06	0.03
Subject-level controls	Yes	Yes	Yes	Yes
$\beta_4 := \beta_1 + \beta_3$	-0.099	-0.038	-0.259	-0.208
$\beta_4 = 0$ ( $p$ -value)	0.123	0.578	0.000	0.036
$\beta_5 := \beta_2 + \beta_3$	-0.068	-0.033	-0.044	-0.085
$\beta_5 = 0$ ( $p$ -value)	0.325	0.615	0.623	0.451
$\beta_1 = 0$ ( $p$ -value MHT)	0.984	0.998	0.785	0.625
$\beta_2 = 0$ ( $p$ -value MHT)	0.959	0.999	0.431	0.494
$\beta_3 = 0$ ( $p$ -value MHT)	0.727	0.990	0.436	0.430

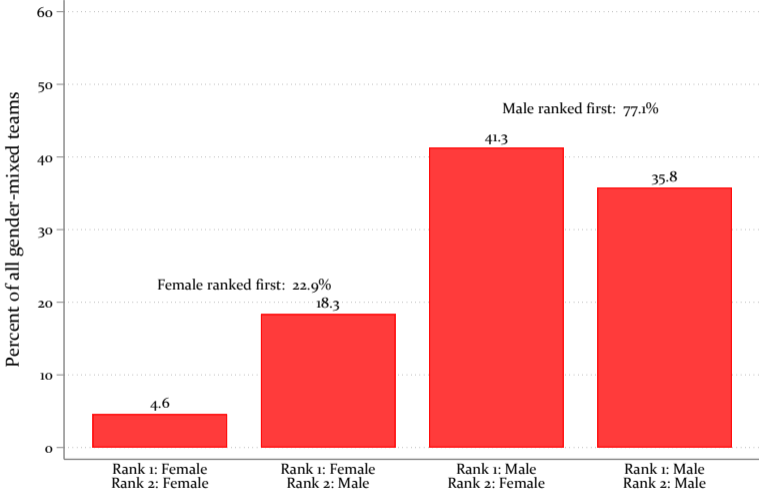
## Lexical Sentiment Score

	Lexical sentiment score
Gender-mixed team ( $\beta_1$ )	-0.006 (0.004)
All-female team ( $\beta_2$ )	-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

# Gender Gap in Team Communication: Share of Turns



# Gender Gap in Mixed-Team Communication: Rank by #Turns



# Who Dominates a Team's Communication?

	= 1 if subject ranked first in #words		
	Mixed teams (1)	All-male teams (2)	All-female teams (3)
Female	-0.329*** (0.044)		
A-level GPA	0.105*** (0.037)	0.092** (0.038)	0.135*** (0.038)
Openness	0.010* (0.006)	-0.003 (0.006)	0.003 (0.006)
Conscientiousness	-0.002 (0.008)	-0.003 (0.007)	0.010 (0.006)
Extraversion	0.018*** (0.005)	0.019*** (0.005)	0.018*** (0.004)
Agreeableness	-0.006 (0.007)	-0.016** (0.007)	-0.020** (0.008)
Neuroticism	0.007 (0.005)	0.004 (0.006)	0.009* (0.005)
N. of obs.	417	430	434
Mean dep. var.	0.25	0.25	0.25
Subject-level controls	Yes	Yes	Yes

# Does Usage of Topic Words Correlate With Team Performance?

	Number of problems solved				
	#topic words considered				
	10 (1)	20 (2)	30 (3)	40 (4)	50 (5)
#all words ( $\beta_1$ )	-0.001** (0.000)	-0.001** (0.000)	-0.001** (0.000)	-0.001** (0.000)	-0.001** (0.000)
#topic words ( $\beta_2$ )	0.015*** (0.004)	0.011*** (0.003)	0.010*** (0.003)	0.010*** (0.003)	0.008*** (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

# No Gender Gap in Usage of Topic Words

	Share of topic words				
	#topic words considered				
	10	20	30	40	50
	(1)	(2)	(3)	(4)	(5)
Female ( $\beta_1$ )	0.001 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.003 (0.002)
Mixed team ( $\beta_2$ )	0.000 (0.002)	-0.000 (0.002)	-0.000 (0.002)	-0.000 (0.002)	-0.001 (0.002)
Female $\times$ Mixed team ( $\beta_3$ )	0.001 (0.003)	0.000 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)
A-level GPA	-0.001 (0.001)	0.001 (0.001)	0.002 (0.001)	0.002* (0.001)	0.003** (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

Back

Team level



# No Gender Gap in Usage of Topic Words - Team Level

	Number of problems solved				
	#topic words considered				
	10 (1)	20 (2)	30 (3)	40 (4)	50 (5)
Gender-mixed team ( $\beta_1$ )	-0.000 (0.002)	-0.002 (0.002)	-0.003 (0.002)	-0.004* (0.002)	-0.004** (0.002)
All-female team ( $\beta_2$ )	0.000 (0.002)	-0.003 (0.002)	-0.003 (0.002)	-0.004* (0.002)	-0.004** (0.002)
N. of obs.	342	342	342	342	342
Team-level controls	Yes	Yes	Yes	Yes	Yes
Mean dep. var. all-male	0.062	0.077	0.085	0.089	0.093
$\beta_1 = \beta_2$ ( $p$ -value)	0.813	0.974	0.926	0.964	0.951

## Effects on Sentiment: Vocal Features, Individual Level

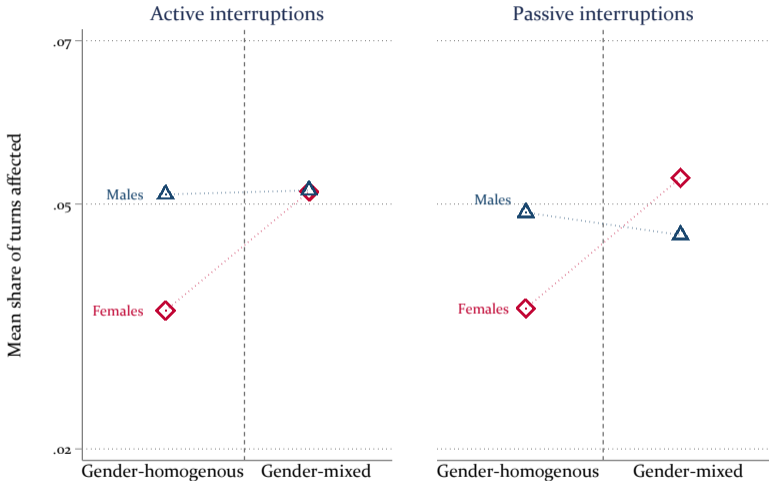
	Positive (1)	Negative (2)
Female ( $\beta_1$ )	0.260*** (0.014)	-0.064*** (0.013)
Mixed team ( $\beta_2$ )	-0.002 (0.017)	-0.000 (0.015)
Female $\times$ Mixed team ( $\beta_3$ )	-0.035* (0.021)	0.037** (0.018)
N. of obs.	1336	1336
Mean dep. var. all-male	0.26	0.28
Subject-level controls	Yes	Yes
$\beta_1 + \beta_3 = 0$ ( $p$ -value)	0.000	0.021
$\beta_2 + \beta_3 = 0$ ( $p$ -value)	0.008	0.009

[Back](#)[Team](#)[Lexical](#)

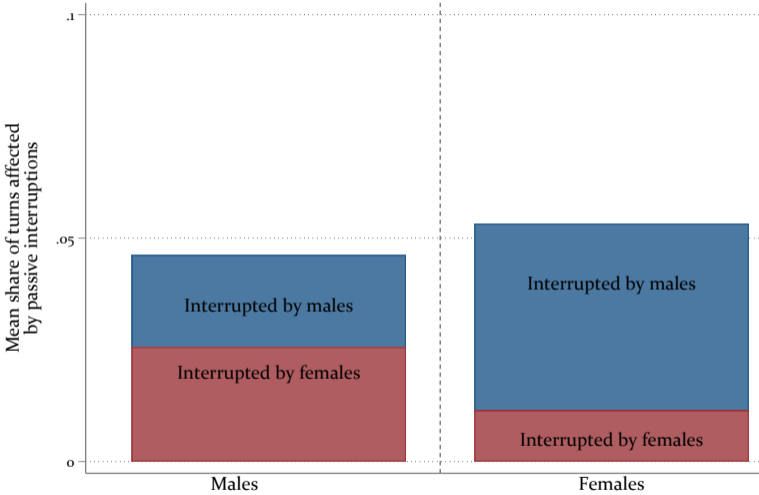
## Perceptions: Individual Level, Secondary Outcomes

	Sufficient communication (1)	Symmetric communication (2)	Letting others finish (3)
Female ( $\beta_1$ )	-0.049 (0.067)	0.171** (0.085)	-0.029 (0.042)
Mixed team ( $\beta_2$ )	-0.091 (0.080)	-0.119 (0.100)	-0.036 (0.047)
Female $\times$ Mixed team ( $\beta_3$ )	0.022 (0.104)	-0.084 (0.124)	0.025 (0.070)
N. of obs.	1357	1362	1357
Mean dep. var. all-male	4.29	3.31	4.71
Subject-level controls	Yes	Yes	Yes
$\beta_4 := \beta_1 + \beta_3$	-0.027	0.087	-0.003
$\beta_4 = 0$ ( $p$ -value)	0.737	0.344	0.950
$\beta_5 := \beta_2 + \beta_3$	-0.069	-0.203	-0.011
$\beta_5 = 0$ ( $p$ -value)	0.457	0.045	0.846
$\beta_1 = 0$ ( $p$ -value MHT)	0.935	0.296	0.853
$\beta_2 = 0$ ( $p$ -value MHT)	0.825	0.814	0.941
$\beta_3 = 0$ ( $p$ -value MHT)	0.828	0.916	0.921

# Active and Passive Interruptions



# Passive Interruptions in Mixed Teams



## Effects on Team Performance

	Number of problems solved
Gender-mixed team ( $\beta_1$ )	-0.402* (0.225)
All-female team ( $\beta_2$ )	-0.550** (0.254)
N. of obs.	342
Mean dep. var. all-male	4.61
Team-level controls	Yes
$\beta_1 = \beta_2$ ( $p$ -value)	0.529
$\beta_1 = 0$ ( $p$ -value MHT)	0.083
$\beta_2 = 0$ ( $p$ -value MHT)	0.062

## Coordination Within Teams

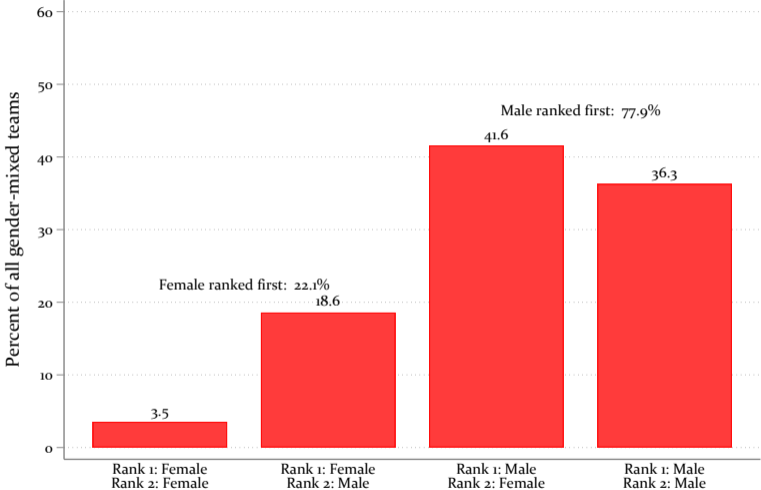
	#problems with perfect coordination (1)	Teams with perfect coordination: #problems solved (2)
Gender-mixed team ( $\beta_1$ )	-0.096 (0.180)	-0.436 (0.274)
All-female team ( $\beta_2$ )	0.099 (0.151)	-0.565* (0.325)
N. of obs.	342	200
Team-level controls	Yes	Yes
Mean dep. var. all-male	9.29	5.04
$\beta_1 = \beta_2$ ( $p$ -value)	0.237	0.680

## Robustness Check: Exclude Teams with Silent Members

	Number of problems solved (1)
Gender-mixed team ( $\beta_1$ )	-0.419* (0.236)
All-female team ( $\beta_2$ )	-0.580** (0.266)
N. of obs.	311
$\beta_1 = \beta_2$ ( $p$ -value)	0.516



# Mixed Teams: Gender Gap in Who Ranks First or Second



## Attrition, Stage 2

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

## Preferences: Past Exposure to Mixed Teamwork

	= 1 if subject prefers teamwork	
	(1)	(2)
Female ( $\beta_1$ )	-0.027 (0.031)	-0.002 (0.036)
Mixed team ( $\beta_2$ )	-0.037 (0.031)	-0.000 (0.043)
Female $\times$ Mixed team ( $\beta_3$ )		-0.076 (0.062)
N. of obs.	731	731
Mean dep. var. all-male	0.81	0.81
Subject-level controls	Yes	Yes
$\beta_1 + \beta_3 = 0$ ( $p$ -value)		0.149
$\beta_2 + \beta_3 = 0$ ( $p$ -value)		0.089

# Productivity Beliefs: Past Exposure to Mixed Teamwork

	Belief about productivity:					
	Own		Partner		Team	
	(1)	(2)	(3)	(4)	(5)	(6)
Female ( $\beta_1$ )	-1.290*** (0.270)	-1.348*** (0.333)	-0.373 (0.260)	-0.458 (0.326)	-0.650*** (0.247)	-0.600** (0.301)
Mixed team ( $\beta_2$ )	0.322 (0.262)	0.239 (0.400)	0.321 (0.264)	0.199 (0.381)	0.250 (0.239)	0.322 (0.379)
Female $\times$ Mixed team ( $\beta_3$ )		0.171 (0.564)		0.252 (0.518)		-0.150 (0.528)
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
$\beta_1 + \beta_3 = 0$ ( $p$ -value)		0.011		0.617		0.086
$\beta_2 + \beta_3 = 0$ ( $p$ -value)		0.269		0.211		0.604

# Communication Beliefs: Past Exposure to Mixed Teamwork

	Belief about:							
	Positivity		Cooperativeness		Likeability		Belief index	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female ( $\beta_1$ )	0.059 (0.051)	0.051 (0.067)	-0.060 (0.050)	-0.000 (0.060)	0.057 (0.067)	0.059 (0.089)	0.022 (0.078)	0.054 (0.102)
Mixed team ( $\beta_2$ )	0.132*** (0.044)	0.121* (0.064)	0.090* (0.053)	0.177** (0.070)	0.052 (0.070)	0.054 (0.105)	0.151* (0.077)	0.199* (0.108)
Female $\times$ Mixed team ( $\beta_3$ )		0.022 (0.108)		-0.179* (0.100)		-0.005 (0.155)		-0.098 (0.168)
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
$\beta_1 + \beta_3 = 0$ ( $p$ -value)		0.371		0.033		0.642		0.732
$\beta_2 + \beta_3 = 0$ ( $p$ -value)		0.057		0.975		0.634		0.402

## Preferences: Past Exposure

	= 1 if subject prefers teamwork	
	(1)	(2)
Female ( $\beta_1$ )	-0.027 (0.031)	-0.002 (0.036)
Mixed team ( $\beta_2$ )	-0.037 (0.031)	-0.000 (0.043)
Female $\times$ Mixed team ( $\beta_3$ )		-0.076 (0.062)
N. of obs.	731	731
Mean dep. var. all-male	0.81	0.81
Subject-level controls	Yes	Yes
$\beta_4 := \beta_1 + \beta_3$		-0.077
$\beta_4 = 0$ ( <i>p</i> -value)		0.149
$\beta_5 := \beta_2 + \beta_3$		-0.076
$\beta_5 = 0$ ( <i>p</i> -value)		0.089
$\beta_1 = 0$ ( <i>p</i> -value MHT)	0.398	0.999
$\beta_2 = 0$ ( <i>p</i> -value MHT)	0.407	0.999
$\beta_3 = 0$ ( <i>p</i> -value MHT)		0.494

# Preferences: Past Exposure and Partner's Gender

	= 1 if subject prefers teamwork	
	Females (1)	Males (2)
Female partner 2nd stage ( $\beta_1$ )	0.031 (0.059)	-0.006 (0.046)
Mixed team 1st stage ( $\beta_2$ )	-0.111* (0.066)	-0.090 (0.065)
Female partner 2nd stage $\times$ Mixed team 1st stage ( $\beta_3$ )	0.058 (0.099)	0.210** (0.087)
N. of obs.	351	380
Mean dep. var. gender-homogenous teams	0.80	0.81
Subject-level controls	Yes	Yes
$\beta_4 := \beta_1 + \beta_3$	0.089	0.204
$\beta_4 = 0$ ( <i>p</i> -value)	0.250	0.005
$\beta_5 := \beta_2 + \beta_3$	-0.053	0.120
$\beta_5 = 0$ ( <i>p</i> -value)	0.435	0.025
$\beta_1 = 0$ ( <i>p</i> -value MHT)	0.846	0.898
$\beta_2 = 0$ ( <i>p</i> -value MHT)	0.367	0.497
$\beta_3 = 0$ ( <i>p</i> -value MHT)	0.899	0.087

# Productivity Beliefs: Past Exposure

	Belief about productivity:					
	Own		Partner		Team	
	(1)	(2)	(3)	(4)	(5)	(6)
Female ( $\beta_1$ )	-1.290*** (0.270)	-1.348*** (0.333)	-0.373 (0.260)	-0.458 (0.326)	-0.650*** (0.247)	-0.600** (0.301)
Mixed team ( $\beta_2$ )	0.322 (0.262)	0.239 (0.400)	0.321 (0.264)	0.199 (0.381)	0.250 (0.239)	0.322 (0.379)
Female $\times$ Mixed team ( $\beta_3$ )		0.171 (0.564)		0.252 (0.518)		-0.150 (0.528)
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



# Productivity Beliefs: Past Exposure and Partner's Gender

	Belief about productivity:					
	Own		Partner		Team	
	Females (1)	Males (2)	Females (3)	Males (4)	Females (5)	Males (6)
Female partner 2nd stage ( $\beta_1$ )	0.303 (0.494)	0.285 (0.439)	-0.238 (0.482)	0.357 (0.417)	0.002 (0.441)	0.467 (0.413)
Mixed team 1st stage ( $\beta_2$ )	0.504 (0.546)	0.149 (0.553)	0.141 (0.561)	0.259 (0.478)	0.318 (0.472)	0.383 (0.523)
Female partner 2nd stage $\times$ Mixed team 1st stage ( $\beta_3$ )	-0.317 (0.712)	0.326 (0.790)	0.713 (0.736)	0.020 (0.751)	-0.194 (0.645)	0.016 (0.720)
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

## Balancing Stage 2: Origin from Homogenous vs. Mixed Teams

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

## Balancing Stage 2: Assignment to Potential Teammates

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

# Communication Beliefs: Past Exposure

	Belief about:							
	Positivity		Cooperativeness		Likeability		Belief index	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female ( $\beta_1$ )	0.059 (0.051)	0.051 (0.067)	-0.060 (0.050)	-0.000 (0.060)	0.057 (0.067)	0.059 (0.089)	0.022 (0.078)	0.054 (0.102)
Mixed team ( $\beta_2$ )	0.132*** (0.044)	0.121* (0.064)	0.090* (0.053)	0.177** (0.070)	0.052 (0.070)	0.054 (0.105)	0.151* (0.077)	0.199* (0.108)
Female $\times$ Mixed team ( $\beta_3$ )		0.022 (0.108)		-0.179* (0.100)		-0.005 (0.155)		-0.098 (0.168)
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

# Communication Beliefs: Past Exposure and Partner's Gender

	Belief about:							
	Positivity		Cooperativeness		Likeability		Belief index	
	Females (1)	Males (2)	Females (3)	Males (4)	Females (5)	Males (6)	Females (7)	Males (8)
Female partner 2nd stage ( $\beta_1$ )	0.315*** (0.081)	0.153 (0.093)	0.355*** (0.074)	0.033 (0.089)	0.346*** (0.126)	0.154 (0.124)	0.544*** (0.128)	0.173 (0.144)
Mixed team 1st stage ( $\beta_2$ )	0.218* (0.113)	0.187* (0.099)	0.179 (0.116)	0.188* (0.104)	0.006 (0.136)	0.043 (0.143)	0.232 (0.176)	0.237 (0.158)
Female partner 2nd stage $\times$ Mixed team 1st stage ( $\beta_3$ )	-0.227 (0.141)	-0.104 (0.146)	-0.435*** (0.154)	0.002 (0.153)	-0.034 (0.192)	0.093 (0.200)	-0.404* (0.229)	-0.015 (0.227)
N. 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

# Gender Gap in Number of Turns Over Time

