Improving Workplace Climate:
A Randomized Intervention on Large Corporations

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Why do corporate professionals burn out very fast?

- Subordinates:
    - TOXICITY of the relational environment
    - not being appreciated, not taken seriously, being bullied
    - not given credits for good ideas, achievements
    - unapproachable, rude, non-empathetic leaders
    - not much chance of career advancement

- Leaders:
    - TOXICITY of the relational environment
    - subordinates not understanding the stress the leaders are under
    - having to juggle too many objectives
    - subordinates not caring about the company

    ‣ Qualitative Evidence

- 5-year cost of toxicity-related turnover to the US economy: $223b
- Importance of a good workplace and prosocial interactions and good leadersip:
  - Worker well-being, engagement, motivation
  - Retention
  - Performance and productivity
  - Long-term success of the firm

Literature on Importance of Good Climate-Culture

- For corporate success: Guiso et al 2015 (culture, social capital and firm performance); Graham et al 2017 (culture and performance link, correlational)

- Management practices and employee productivity: Blader et al 2019; Gosnell 2020

- Consulting interventions: Bruhn et al 2018; Azulai et al 2020 (training on identifying processes to improve, Ghana civil service)

- Effective leadership: Bolton et al 2013; Bandiera et al 2020; Heinz et al 2020.

Corporate Policy Question

Can large and competitive corporations

- improve relational dynamics and lower toxic interactions amongst employees?
- improve leader-subordinate relationships?
- make their employees happier, more attached to the firm?
- create good norms and make them stick?
- lower employee turnover?

- Can a particular training approach where subordinates and leaders learn to interact with each other in a unique way improve workplace climate for all (especially for subordinates)?

- What kind of an approach?
    - An approach that signals that the leaders care and are willing to improve the relational atmosphere
    - An approach that people lower their protective guards against each other act in a more prosocial manner

Evaluation Design

- A cluster randomized controlled trial (AEA Registry no:AEARCTR-0007532)
- Sample: 20 large corporations in Turkey operating in defence, chemistry, construction, energy, finance and textiles
- Some are multinationals, 9 of them held publicly
- 10 corporations treated, 10 to be treated later
- About 2500 professionals (18% of them team leaders, about 20% female leaders) in company headquarters
- Randomization is at the corporation level and stratified by sector

Timeline of the Trial

- Headquarter employees only (white-collars)
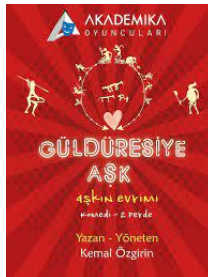- Volunteer participation in the study
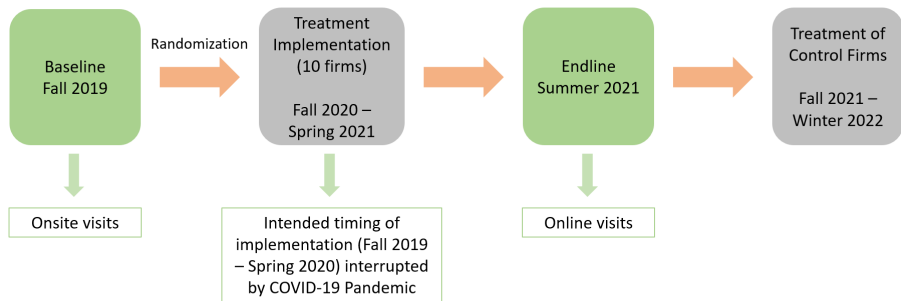
Intervention

Implementing Partner: AKADEMIKA

We partnered with a consulting firm, established by "burned out" corporate professionals. **"It doesn't have to be like this"** movement.

An Intervention on Social and Communication Skills

- An interactive training intervention aiming at improving professional communication among
  - colleagues
  - leaders and subordinates
- Eliminate toxic language and competition, increase cooperation
- Increase prosocial acts
- Lower social exclusion
- Strengthen social bonds

Component 1:

- Series of Workshops (3 workshops)
  - Constructive and professional feedback
  - Professional communication (using peaceful language)
  - Lowering guards and learn about each other
  - Taking the others' perspective

Using Creative Drama

- Fun role playing (leader-subordinate hat exchange)
- Relying on each other, having each other's back

Component II:

- Follow-up project development (8-weeks of monitoring)
    - Incorporating these skills and developing projects
    - Emphasizing teamwork, reliance on each other, on leader
    - Project development stage presentations
    - Project presentations to CEOs and upper management

Outcomes

Social Skills: Experimentally Elicited

1 Performance Sabotage (Sabotage game)
- Two minute competition task, winner gets 150TL
- 50TL sabotage endowment
- Amount of sabotage endowment used (toxic competition)

2 Trust and Reciprocity (Trust game)
- Endowment of 100TL, triples
- Amount sent (trust)
- Average fraction set back (reciprocity)

3 Inequality Aversion (Ultimatum game)
- Endowment of 200TL
- Amount offered
- Minimum amount rejected

Surveys: Workplace Quality and Relational Atmosphere

Using item-response questions, we constructed 5 workplace climate indicators (Colleagues, relationships):

- Workplace Satisfaction
    - "I am very glad that I chose to work at this company"
- Perceived meritocratic values
    - "My chances of advancing in my profession and career are very high in this firm"
- Collegial Department
    - "My department colleagues protect each other against an outside criticism"
- Behavioral Norms
    - "How often do you observe your department colleagues: Helping someone"
- Prescriptive Norms
    - "What percentage of your colleagues think: Crucial to treat people friendly and nicely"

Social Networks

We elicited Social and Professional Networks within the company

- Nominate 3 names you receive professional support (work-related matters)
- Nominate 3 names you receive personal support (personal matters)

We construct individual and department-level indicators

- Individual (connection to leader)
- Department-level (proportion of isolated nodes, within-department density)
- Department-level (cohort segregation, age range: 18-39, 40-70)

Professional network ties in a firm

In-degree
- 0
- 4
- 8
- 12
- 16
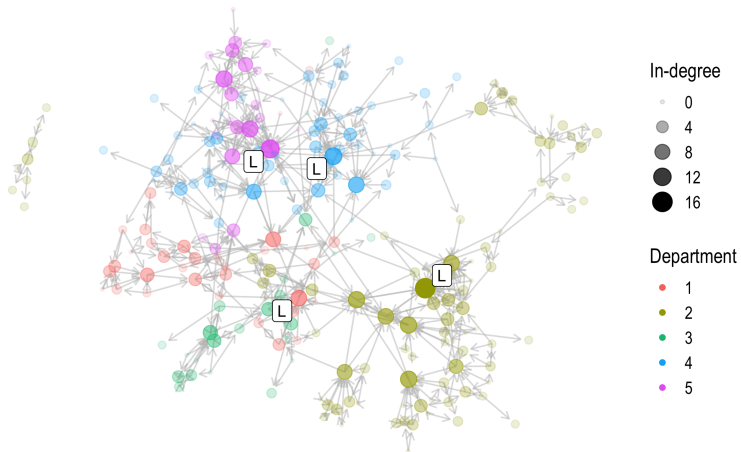
Department
- 1
- 2
- 3
- 4
- 5

Size N = 286
# of Participants in Network = 202

Treatment Effects

$$y_{idf} = \alpha_0 + \alpha_1 T_f + X'_{idf}\gamma + \delta_s + \varepsilon_{idf}$$

- y_{idf}: outcome of employee i, in department d, firm f.
- T_f: treatment dummy
- X'_{idf}: vector of observables for worker i in department d, firm f
- δ_s: sector (strata) fixed effects

$\hat{\alpha}_1$ is the intent-to-treat effect (ITT).

‣ Balance

Headquarters (Treated)

Participation ≈ 70%

Treated = 46%
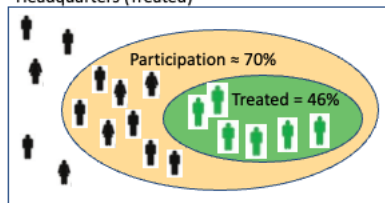
Headquarters (Control)

Participation ≈ 74%

Intention to Treat (ITT)

Comparison of mean outcome:
Participating employees in treatment firms vs.
Participating employees in control firms

Treatment Effect on Experimentally Elicited Social Skills

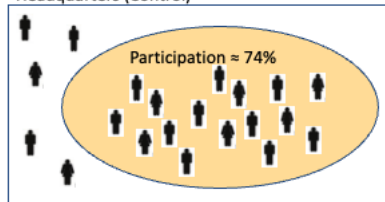| **Panel I: Full sample**	Sabotage	Trust	Reciprocity	Ultimatum Offer	Min. Accepted
Treatment	-2.70***	-0.00	0.03***	2.81	-1.55
	(0.43)	(1.52)	(0.01)	(2.29)	(1.57)
Wild Bootstrap P-value	0.00	1.00	0.02	0.31	0.39
Control Mean	23.13	52.15	0.37	101.15	101.15
N	2233	2233	2233	2233	2233
Panel II: Subordinates only					
Treatment	-2.56***	-1.01	0.04**	2.02	-2.54
	(0.51)	(1.36)	(0.01)	(2.46)	(1.78)
Wild Bootstrap P-value	0.00	0.61	0.01	0.51	0.29
Control Mean	22.58	51.56	0.36	101.16	101.16
N	1825	1825	1825	1825	1825
Panel III: Leaders only					
Treatment	-4.60**	2.32	0.02	5.60***	3.15
	(2.16)	(2.55)	(0.02)	(1.85)	(4.40)
Wild Bootstrap P-value	0.18	0.45	0.43	0.01	0.60
Subordinate = Leader	0.39	0.11	0.54	0.08	0.24
Control Mean	25.66	54.87	0.41	101.06	101.06
N	408	408	408	408	408

Treatment Effect on Workplace Climate

| Panel I: Full sample	Workplace Quality		Relational Atmosphere		
	Workplace S.	Meritocratic Values	Collegial Dept.	Behavioral Norms	Prescriptive Norms
Treatment	0.28**	0.25**	0.25**	0.12	0.18
	(0.11)	(0.11)	(0.10)	(0.10)	(0.11)
Wild Bootstrap P-value	0.04	0.09	0.07	0.36	0.24
Control Mean (Normalized)	-0.00	-0.00	0.00	-0.00	0.00
N	2155	2155	2194	2183	2174
Panel II: Subordinates only					
Treatment	0.35***	0.31***	0.28***	0.13	0.21*
	(0.10)	(0.10)	(0.09)	(0.09)	(0.11)
Wild Bootstrap P-value	0.01	0.02	0.03	0.27	0.14
Control Mean (Normalized)	-0.06	-0.06	-0.03	0.00	-0.03
N	1757	1757	1789	1781	1774
Panel III: Leaders only					
Treatment	-0.03	-0.01	0.10	0.06	0.03
	(0.16)	(0.13)	(0.13)	(0.13)	(0.14)
Wild Bootstrap P-value	0.90	0.97	0.55	0.77	0.89
Subordinate = Leader	0.00	0.00	0.04	0.37	0.08
Control Mean (Normalized)	0.26	0.26	0.15	-0.00	0.15
N	398	398	405	402	400

Treatment Effect on Department Network Structure

Panel I: Full sample	Proportion Isolated		Department Density		Cohort Segregation	
	Professional H.	Personal H.	Professional H.	Personal H.	Professional H.	Personal H.
Treatment	-0.03	-0.05*	0.04**	0.04**	-0.00	0.03
	(0.03)	(0.03)	(0.02)	(0.01)	(0.03)	(0.03)
Wild Bootstrap P-value	0.58	0.17	0.07	0.08	0.93	0.41
Control Mean	0.10	0.20	0.05	0.04	0.04	0.03
N	163	163	156	153	110	111
Panel II: Subordinates only						
Treatment	-0.04*	-0.06***	0.04**	0.04**	0.02	0.07
	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.04)
Wild Bootstrap P-value	0.18	0.02	0.10	0.08	0.58	0.25
Control Mean	0.07	0.12	0.04	0.03	0.06	0.07
N	161	161	156	153	108	108

Treatment Effect on the Probability of Quitting and Promotion

Panel I: Full sample	Probability of Quitting	Probability of Promotion
Treatment	-0.05***	-0.00
	(0.01)	(0.02)
Wild Bootstrap P-value	0.01	0.97
Control Mean	0.05	0.07
N	2326	2326
Panel II: Subordinates only		
Treatment	-0.05***	-0.01
	(0.01)	(0.03)
Wild Bootstrap P-value	0.02	0.84
Control Mean	0.06	0.07
N	1901	1901
Panel III: Leaders only		
Treatment	-0.05*	0.03
	(0.03)	(0.03)
Wild Bootstrap P-value	0.05	0.42
Subordinate = Leader	0.86	0.39
Control Mean	0.05	0.07
N	425	425
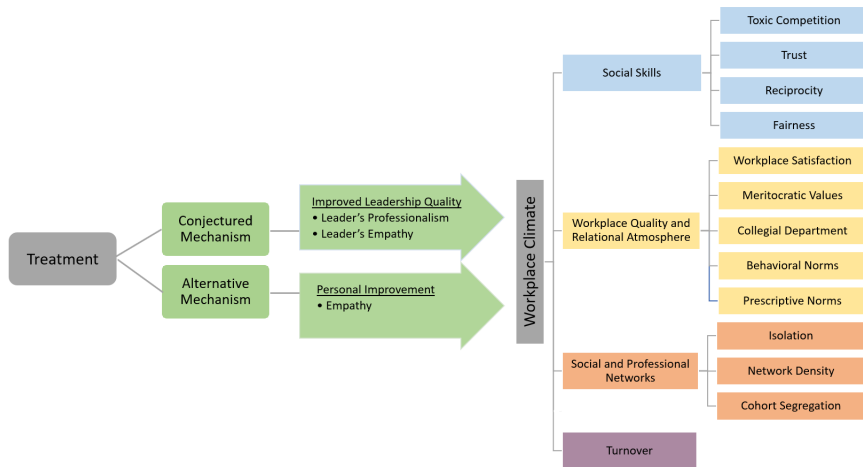
‣ Potential Mechanisms

Summary

- We evaluate a unique intervention that aims to improve workplace climate
- We find that treated professionals
    - are more prosocial, less inclined to engage in toxic competition
    - report higher workplace satisfaction, cooperation with colleagues, better meritocratic values
    - increased professional connection to their leader
    - less likely to quit their jobs
    - due to improved leader-subordinate relationship, measured via surveys and network links.

‣ Heterogeneity
‣ Covid-19 Related Well-being

Appendix

- Top 3 reasons for burn-out, leaving corporate life

‣ Go Back

Motivation
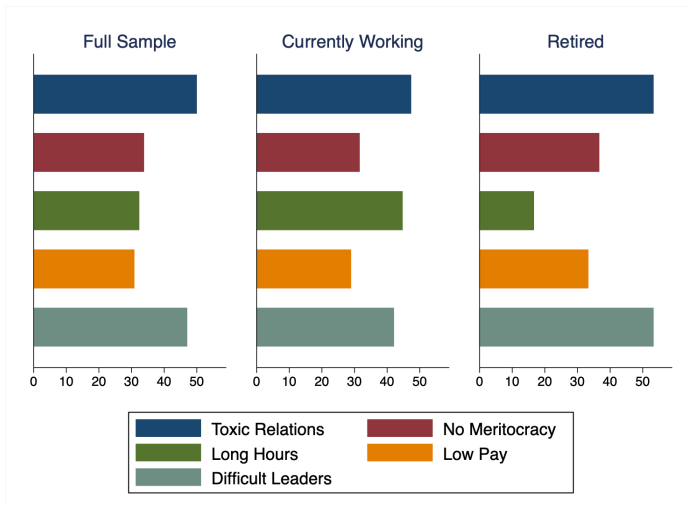
2019 report from the Society for Human Resource Management (SHRM)

- 20% of U.S. employees quit their jobs in the last five years due to the toxicity in the workplace relationships.

- 58% of employees who quit because of a poor workplace culture blame their manager for it.

- Cost of this turnover (5-year): $223 billion

‣ Go Back

Balance Check - Unrestricted Sample

Individual Characteristics

	Control Mean	Treatment mean	P-value of difference
Male	0.63	0.58	0.23
Age	36.15	35.97	0.56
Married	0.69	0.63	0.15
Tenure (yearly)	7.56	7.89	0.59
Leader Age	42.51	42.42	0.89
Male Leader	0.75	0.72	0.35
Being a Leader	0.18	0.19	0.12
Raven Score	0.00	0.07	0.87
Eyes Score	-0.00	-0.22	0.29
Risk	0.00	-0.02	0.15
Choice of Tournament over Piece Rate	0.50	0.49	0.75
Contribution in Public Goods	-0.00	0.07	0.45
Workplace Satisfaction	-0.00	0.14	0.17
Collegial Department	-0.00	-0.10	0.38
Meritocratic Values	0.00	0.09	0.11
Behavioral Norms	-0.00	0.00	0.54
Prescriptive Norms	-0.00	0.02	0.52
Leader Quality	-0.00	-0.00	0.54
Department Leader in Professional Network	0.52	0.59	0.27
Department Leader in Personal Network	0.41	0.43	0.43

Balance Check - Restricted Sample

‣ Go Back

	Control Mean	Treatment Mean	P-value of Difference
Male	0.68	0.63	0.16
Age	35.49	35.95	0.39
Married	0.66	0.66	0.72
Tenure (yearly)	6.47	8.30	0.11
Leader Age	42.29	42.21	0.89
Male Leader	0.71	0.74	0.77
Being a Leader	0.16	0.18	0.17
Raven Score	0.07	0.08	0.59
Eyes Score	0.05	-0.27	0.24
Risk	0.05	-0.03	0.11
Choice of Tournament over Piece Rate	0.52	0.49	0.23
Contribution in Public Goods	0.02	0.11	0.47
Workplace Satisfaction	-0.00	0.14	0.17
Collegial Department	-0.00	-0.10	0.38
Meritocratic Values	0.00	0.09	0.11
Behavioral Norms	-0.02	-0.07	0.93
Prescriptive Norms	-0.02	-0.01	0.77
Leader Quality	-0.00	-0.00	0.54
Department Leader in Professional Network	0.53	0.56	0.92
Department Leader in Personal Network	0.44	0.39	0.51

Potential Mechanisms

Leadership Quality

We elicited leadership quality via

- Survey (Item-response questions)
    - Leader's professional behavior
        - "My team leader claims achievements, but blames mistakes on others"
        - "I receive regular and motivating feedback from my team leader"
    - Leader's cognitive empathy:
        - "My team leader listens disagreements carefully and considers all angles"
        - "My team leader makes sudden emotional decisions"
- Network elicitation
    - Whether team leader is nominated as professional help provider
    - Whether team leader is nominated as personal help provider

- Personal Improvement

  - Empathy-perspective taking:
    - "Sometimes I try to understand my friends better by considering their perspective"
    - "If I am sure I am right, I'd not waste too much time listening to other people"

Potential Mechanisms
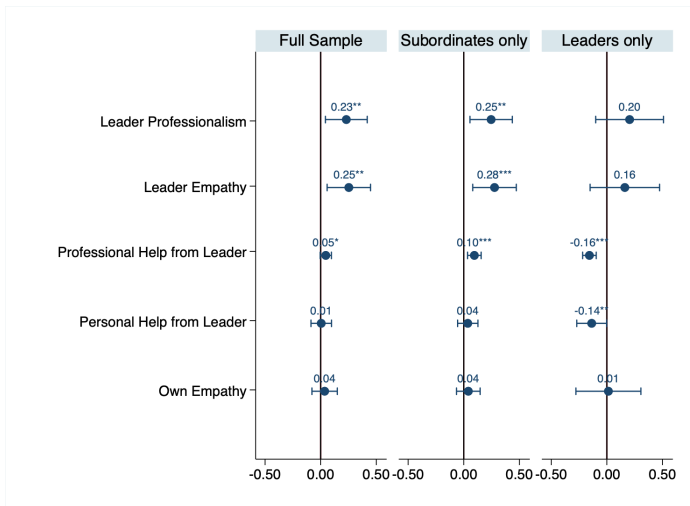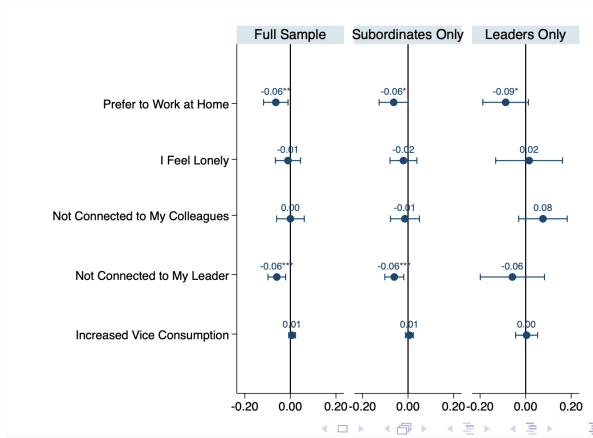

- 16% increase in connection to leader (subordinates)
- 25% decrease in connection to leader (leaders)

Treatment Effects on Covid-19 Related Well-Being

- 21% hybrid mode, 23% work at home
- Balanced across treatment status
- Well-being questions explicitly refer to the current pandemic situation

‣ Go Back

Heterogeneity

Heterogeneous Treatment Effects on Social Skills: Leader Gender

Panel I: Have Male Leader	Sabotage	Trust	Reciprocity	Ultimatum Offer	Min. Accepted
Treatment	-3.24***	-0.62	0.03**	3.58	-0.87
	(0.49)	(1.60)	(0.01)	(2.53)	(2.15)
Wild Bootstrap P-value	0.00	0.75	0.04	0.28	0.72
Control Mean	23.65	53.05	0.38	101.04	101.04
N	1689	1689	1689	1689	1689
Panel II: Have Female Leader					
Treatment	-2.98*	-0.83	0.09***	-1.39	-4.89
	(1.61)	(2.08)	(0.01)	(3.05)	(4.30)
Wild Bootstrap P-value	0.10	0.70	0.00	0.69	0.35
Male leader = Female leader	0.88	0.92	0.00	0.17	0.48
Control Mean	21.85	50.67	0.33	105.16	105.16
N	421	421	421	421	421

‣ Back

Heterogeneous Treatment Effects on Workplace Climate: Leader Gender

Panel I: Have Male Leader	Workplace Quality		Relational Atmosphere		
	Workplace S.	Metirocratic Values	Collegial Dept.	Behavioral Norms	Prescriptive Norms
Treatment	0.22*	0.19*	0.21**	0.11	0.16
	(0.11)	(0.10)	(0.10)	(0.10)	(0.10)
Wild Bootstrap P-value	0.12	0.14	0.13	0.41	0.23
Control Mean (Normalized)	0.04	0.02	0.04	0.00	0.01
N	1729	1729	1761	1753	1744
Panel II: Have Female Leader					
Treatment	0.59***	0.53**	0.46**	0.13	0.27
	(0.21)	(0.19)	(0.21)	(0.14)	(0.19)
Wild Bootstrap P-value	0.12	0.14	0.14	0.41	0.32
Male leader = Female leader	0.02	0.03	0.17	0.89	0.43
Control Mean (Normalized)	-0.20	-0.11	-0.20	-0.00	-0.06
N	426	426	433	430	430

‣ Back

Heterogeneous Treatment Effects on Probability of Quitting and Promotion: Leader Gender

Panel I: Have Male Leader	Probability of Quitting	Probability of Promotion
Treatment	-0.05***	-0.00
	(0.02)	(0.02)
Wild Bootstrap P-value	0.02	0.99
Control Mean	0.05	0.07
N	1766	1766
Panel II: Have Female Leader		
Treatment	-0.04*	-0.01
	(0.02)	(0.03)
Wild Bootstrap P-value	0.08	0.85
Male leader = Female leader	0.86	0.39
Control Mean	0.08	0.07
N	436	1901

Heterogeneous Treatment Effects on Covid-19 Related Well-Being: Leader Gender
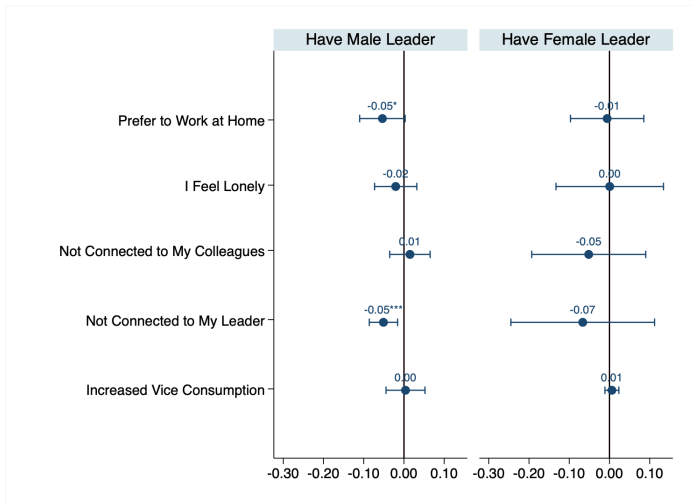
Heterogeneous Treatment Effects on Social Skills: Gender

Panel I: Male only	Sabotage	Trust	Reciprocity	Ultimatum Offer	Min. Accepted
Treatment	-3.79***	1.53	0.03**	5.86**	0.97
	(0.68)	(1.26)	(0.01)	(2.26)	(2.20)
Wild Bootstrap P-value	0.00	0.39	0.05	0.05	0.74
Control Mean	23.95	53.90	0.39	100.00	100.00
N	1564	1564	1564	1564	1564
Panel II: Female only					
Treatment	-1.36	-3.21	0.05*	-4.00	-6.50*
	(1.22)	(3.48)	(0.02)	(4.41)	(3.68)
Wild Bootstrap P-value	0.36	0.55	0.09	0.56	0.16
Male = Female	0.14	0.14	0.35	0.05	0.07
Control Mean	20.95	47.51	0.33	104.16	104.16
N	669	669	669	669	669

‣ Back

Heterogeneous Treatment Effects on Workplace Climate: Gender

Panel I: Male Only	Workplace Quality		Relational Atmosphere		
	Workplace S.	Metirocratic Values	Collegial Dept.	Behavioral Norms	Prescriptive Norms
Treatment	0.24**	0.21*	0.21**	0.09	0.11
	(0.11)	(0.10)	(0.09)	(0.09)	(0.08)
Wild Bootstrap P-value	0.10	0.12	0.10	0.42	0.29
Control Mean (Normalized)	0.05	0.03	0.05	-0.00	0.08
N	1516	1516	1547	1538	1530
Panel II: Female Only					
Treatment	0.31*	0.26	0.30	0.17	0.27
	(0.17)	(0.17)	(0.21)	(0.21)	(0.23)
Wild Bootstrap P-value	0.19	0.27	0.31	0.56	0.42
Male = Female	0.59	0.76	0.64	0.68	0.39
Control Mean (Normalized)	-0.13	-0.09	-0.13	0.01	-0.21
N	639	639	647	645	644

‣ Back

Heterogeneous Treatment Effects on Probability of Quitting and Promotion: Gender

Panel I: Male Only	Probability of Quitting	Probability of Promotion
Treatment	-0.05***	0.01
	(0.01)	(0.02)
Wild Bootstrap P-value	0.01	0.70
Control Mean	0.05	0.06
N	1646	1646
Panel II: Female Only		
Treatment	-0.05***	-0.03
	(0.02)	(0.02)
Wild Bootstrap P-value	0.02	0.39
Male = Female	0.66	0.09
Control Mean	0.07	0.07
N	680	680

Heterogeneous Treatment Effects on Covid-19 Related Well-Being: Gender