# Supplementary Materials for

# **Microinclusions:**

Treating Women as Respected Work Partners Increases Sense of Fit in Technology

Companies

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## Behavioral Pilot Experiments Methods

# **Participants and Procedure**

See main text for overview.

#### Measures

Quantitative performance (Pilot Experiments 1 and 2). Quantitative performance was assessed as the guess corrected score (i.e., number correct minus a ¼ point deduction for each wrong answer) on the test (Steele & Aronson, 1995).

**Feelings of working together (Pilot Experiment 2).** Participants were provided a page labeled "Questions about Participant: Daniel," with "Daniel" handwritten by the experimenter. Participants' feelings of working together were assessed along four items (e.g., "I felt a sense of togetherness with this participant while working on the math problems," "I felt like I was collaborating with this participant on the math problems; Carr & Walton, 2014). Items were completed on 7-point Likert scales (1 = Strongly disagree; 7 = Strongly agree) and were averaged and combined into a single composite ( $\alpha = 0.85$ ). Higher scores indicate higher feelings of working together with the confederate.

# Sense of connectedness with the male confederate (Pilot Experiment 2).

**Inclusion of other in the self (IOS).** Women's sense of connection to the male confederate was assessed using an adapted version of the Inclusion of Other in the Self scale (Aron et al., 1992). Participants saw a series of eight pictures of overlapping pairs of circles, one labeled "Self" and the other labeled, "Other," graded from no overlap (coded I) to almost completely overlapping (coded 8). Participants were asked, "Which picture below do you think best describes your relationship with [Daniel]?" (Aron et al., 1992). Feelings of working together and IOS were related but not identical, r(35) = 0.49, p = 0.002.

**Perception of the man's inclusion of the woman in his self (P-IOS).** We also measured women's perception of the male confederate's sense of connection to her using the same adaptation of the IOS. Participants were shown the series of eight overlapping circles a second time and asked, "Which picture below would [Daniel] think best describes his relationship with you?" Feelings of working together and P-IOS were not correlated, r(35) = 0.03, p = 0.87; however, IOS and P-IOS were correlated, r(35) = 0.49, p = 0.002.

#### **Results**

### **Quantitative Performance**

We conducted a linear regression to test the effect of microinclusions on women's quantitative performance. Analyses controlled for SAT-math scores (Steele & Aronson, 1995), as this was a strong predictor of performance for Pilot Experiment 1, r(59)=0.76, p<0.001, and 2, r(36)=0.36, p=0.027. See Figure S1.

**Pilot Experiment 1.** In Pilot Experiment 1, there was no main effect of condition, F(1, 56) = 0.08, p = 0.77. There was, however, a main effect of gender, F(1, 56) = 6.02, p = 0.017, and a significant interaction, F(1, 56) = 5.59, p = 0.022. As expected and replicating classic stereotype threat studies (Spencer et al., 1999; Steele & Aronson, 1995), women performed worse than men under evaluative instructions in the control condition, t(56) = -2.46, p = 0.017, d = -0.66 [95% CI: -1.19, -0.12]. Consistent with our theory, however, the inclusive-stance eliminated, and directionally reversed, the gender disparity while controlling for SAT-math scores (Walton & Spencer, 2009), t(56) = 0.83, p = 0.41, d = 0.22 [95% CI: -0.30, 0.75]. Women performed 73% better on the math test in the inclusive-stance condition compared to the control

condition, t(56) = 3.66, p = 0.001, d = 0.98 [95% CI: 0.42, 1.53]. There was no difference in men's performance across conditions, t(56) = 0.29, p = 0.77, d = 0.08 [95% CI: -0.45, 0.60].

**Pilot Experiment 2.** Replicating Pilot Experiment 1, in Pilot Experiment 2, women performed 96% better in the inclusive-stance condition than in the control condition, t(35) = 2.51, p = 0.017, d = 0.85 [95% CI: 0.15, 1.53].

**Pilot Experiments 1 and 2.** Combining data from both studies, women performed 87% better in the inclusive-stance condition than in the control condition, t(66) = 3.77, p < 0.001, d = 0.93 [95% CI: 0.42, 1.43].

**Robustness test.** We also tested whether microinclusions would be robust to dropping SAT-Math scores as a covariate, while combining data from women in both studies to mitigate the loss of power. The effect remained significant, t(67) = 3.26, p = 0.002, d = 0.80 [95% CI: 0.30, 1.29].

# **Feelings of Working Together (Pilot Experiment 2)**

Confirming that the manipulation created the intended experience, women reported greater feelings of working together with the male confederate in the inclusive-stance condition (M = 2.58, SE = 0.20) than in the control condition (M = 1.73, SE = 0.20), t(36) = 2.58, p = 0.014, d = 0.86 [95% CI: 0.17, 1.54]. The low means in both conditions likely reflect that participants did not actually collaborate on the test (as in past research, Carr & Walton, 2014); nonetheless, the inclusive-stance condition induced greater feelings of working together compared to the control condition.

## Sense of Connectedness with the Male Confederate (Pilot Experiment 2)

**Inclusion of other in the self (IOS).** Women included the man in her sense of self more in the inclusive-stance condition (M = 2.28, SE = 0.21) than in the control condition (M = 1.63, SE = 0.15), t(35) = 2.48, p = 0.018, d = 0.84 [95% CI: 0.14, 1.52].

Perception of the man's inclusion of the woman in his sense of self (P-IOS). Women also perceived that the man included her in his sense of self more in the inclusive-stance condition (M = 2.39, SE = 0.18) than in the control condition (M = 1.68, SE = 0.15), t(35) = 2.96, p = 0.005, d = 1.00 [95% CI: 0.29, 1.70].

**Figure S1.** *Tip and Strategy Manipulation for Behavioral Pilot Experiments.* 

Inclusive-stance condition: 'Tip' from a male confederate (handwritten)

Hey [participant's first name],

Many people probably already do this, but it sometimes helps me save time to plug in numbers (a bunch of different numbers like zero, a fraction, a negative number) instead of actually trying to properly solve the math equation.

Hope this helps you too!

- Daniel

Control condition: 'Strategy' from a general study pool (typed and printed)

Strategy #29: Authored by Participant #167

Many people probably already do this, but it sometimes helps me save time to plug in numbers (a bunch of different numbers like zero, a fraction, a negative number) instead of actually trying to properly solve the math equation.

# **Supplementary Materials for Experiment 1**

# Means and Statistical Tests for Extant Experiences in Tech Company

**Table S1A**Raw and Adjusted Means for Extant Sense of Fit in Experiment 1 (1-7 scale).

	Raw Means	Adjusted Means (controlling for Tenure)	Adjusted Means (controlling for Job Type)
Men	5.48 (0.05)	5.57 (0.07)	5.49 (0.06)
Women	5.28 (0.05)	5.35 (0.07)	5.28 (0.07)

*Note*. Standard errors in parentheses.

Table S1B
Regression Results for Extant Sense of Fit in Experiment 1

Predictors		b	SE	t	<i>d</i> [95% CI]
Main Analyses					
	Gender	-0.20	0.08	-2.63**	-0.19 [-0.33, -0.05]
With Tenure Cova	ariate				
	Gender	-0.21	0.08	-2.74**	-0.20 [-0.34, -0.06]
	Tenure	-0.06	0.04	-1.63	-0.12 [-0.26, 0.02]
With Job Type Co	ovariate				
	Gender	-0.20	0.08	-2.48*	-0.18 [-0.32, -0.04]
	Job Type	-0.04	0.08	-0.46	-0.03 [-0.17, 0.11]

*Note*. Gender variable is dummy coded (Men=0; Women=1). Tenure covariate is z-scored. Job role variable is dummy coded (Tech=0; Non-Tech=1). \*\*\*p<0.001, \*\*p<0.01, \*p<0.05, †p<0.1

 Table S1C

 Results for Individual Measures of Extant Sense of Fit in Experiment 1

	Men	Women	Statistical Test		Гest
Outcome	M (SE)	M (SE)	b	t	d [95% CI]
Sense of Fit Composite (1-7)	5.19 (0.04)	5.01 (0.04)	-0.17	-2.53*	-0.18 [-0.32, -0.04]
Sense of Belonging	5.32 (0.07)	5.16 (0.06)	-0.16	-1.64	-0.12 [-0.26, 0.02]
Respect & Value	5.70 (0.05)	5.42 (0.06)	-0.27	-3.27**	-0.24 [-0.38, -0.09]
Future Self	5.40 (0.07)	5.24 (0.06)	-0.16	-1.70 <sup>†</sup>	-0.12 [-0.26, 0.02]

*Note*. Gender variable is dummy coded (Men=0; Women=1). \*\*\*p<0.001, \*\*p<0.01, \*p<0.05, †p<0.1

## **Exploratory Analyses of Employees' Extant Experiences at the Company**

In addition to measuring employee's extant sense of fit at the company, we also measured other aspects of employees' work experience primarily to explore potential points for intervention. These measures are secondary for the purpose of Experiment 1, which aimed to understand employees' response to the three workplace scenarios and these measures were not assessed vis-à-vis those scenarios. We describe them and the results below.

#### **Methods**

#### **Measures**

Unless specified otherwise, all measures were assessed on 7-point Likert scales (1 = *Strongly disagree*; 7 = *Strongly agree*), averaged into single composites with higher scores indicating greater levels of that construct.

Additional Measures Assessing Sense of Fit at the Company. In addition to the measures assessing employees' extant sense of fit at the company described in the main text, we also assessed a second belonging item (i.e., "Other people understand more than I do what is going on at [company]", Walton & Cohen, 2007) and one item assessing belonging uncertainty (i.e., "Sometimes I worry that I do not belong at [company]", adapted from Walton & Cohen, 2007), and one item assessed self-efficacy (i.e., "I feel confident that I have the ability to do well at [company]", adapted from Walton & Cohen, 2007). While the sense of fit composite described in the main paper was reliable including these items ( $\alpha = 0.82$ ), we removed these items to maintain consistency with the measures assessing employees' anticipated sense of fit in the three work groups (see Experiment 1 Measures section). The latter measures were confined to four items per work group due to time constraints.

Quality of Relationship with Manager. Employee's perception of the quality of their relationship with their manager is an important predictor of their job satisfaction and commitment to the organization (Bakhshi et al., 2009). We assessed employee's perceptions of their managers using two items ("Overall, my manager at [company] cares about my success", "Overall, my manager at [company] treats me with respect"; r = 0.72).

**Individual Growth Mindset of Intelligence**. We assessed individual's growth mindset of intelligence using a single item (i.e., "I believe that everyone has the potential to be very successful at [company] if they really want to", adapted from Dweck, 1999).

**Institutional Growth Mindset of Intelligence**. As a measure of institutional growth mindsets, we assessed the extent to which employees believed that their manager endorsed a growth mindset using a single item (i.e., "My direct manager seems to believe that some people don't have the potential to become very successful", adapted from Dweck, 1999). The item was reversed coded such that higher scores indicated greater endorsement of a growth mindset.

**Growth-Oriented Feedback.** We assessed the extent to which employee believed that the reason why "people on their team" provide them feedback on "on everyday work and projects" was to help the employee grow and improve using three items (i.e., "To what extent are they trying to help you improve and grow?", "To what extent are they trying to help you succeed?", "To what extent are they trying to help you produce a better product?"). Each item was measured on a 7-point Likert scale (1 = Never, 7 = Always), were averaged into a single composite with higher scores indicating higher beliefs in growth-oriented feedback ( $\alpha = 0.91$ ).

**Social Identity Threat**. Social identity threat was measured with a single item (i.e., "How surprised do you think other people at [company] would be if you or people like you were

very successful at [company]?", adapted from Walton et al., 2023) on a 5-point Likert scale (1 = *Not surprised*, 5 = *Extremely surprised*).

**Work Enjoyment**. Work enjoyment was measured with a single item (i.e., "How much do you enjoy working at [company]", Walton & Cohen, 2007) on a 5-point Likert scale  $(1 = Do not \ enjoy \ at \ all, 5 = Extremely \ enjoy)$ .

#### Results

**Table S2.** *Results for Exploratory Measures in Experiment 1.* 

	Men	Women		Statistical Test			
Outcome (Scale Range)	M (SE)	M (SE)	b	t	d [95% CI]		
Sense of Fit with additional measures (1-7)	5.19 (0.04)	5.01 (0.04)	-0.17	-2.53*	-0.18 [-0.32, -0.04]		
Additional Belonging Item (1-7)	4.55 (0.08)	4.69 (0.07)	0.17	1.22	0.09 [-0.05, 0.23]		
Belonging Uncertainty (1-7)	3.63 (0.09)	3.94 (0.08)	0.32	2.52*	0.18 [0.04, 0.32]		
Self-Efficacy (1-5)	5.51 (0.06)	5.20 (0.06)	-0.31	-3.35***	-0.24 [-0.38, -0.10]		
Quality of Relationship with Manager (1-7)	5.61 (0.06)	5.51 (0.06)	-0.09	-1.10	-0.08 [-0.22, 0.06]		
Individual Growth Mindset (1-7)	4.69 (0.08)	4.27 (0.08)	-0.42	-3.47**	-0.25 [-0.39, -0.11]		
Institutional Growth Mindset (1-7)	5.01 (0.08)	4.89 (0.08)	-0.13	-1.04	-0.07 [-0.22, 0.07]		
Growth-Oriented Feedback (1-7)	4.89 (0.07)	4.91 (0.06)	0.02	0.20	0.01 [-0.13, 0.16]		
Social Identity Threat (1-5)	1.61 (0.04)	1.90 (0.05)	0.29	4.11***	0.30 [0.15, 0.44]		
Work Enjoyment (1-5)	3.58 (0.04)	3.50 (0.04)	-0.07	-1.19	-0.09 [-0.23, 0.06]		

*Note.* Gender variable is dummy coded (Men = 0; Women = 1). \*\*\*p < .001, \*\*p < .01, \*p < .05, †p < .10

# Order Effects in Anticipated Sense of Fit, Opportunity to Contribute, and Perceived Realism in Neutral, Microexclusion, and Microinclusion Work Groups

All employees responded to the neutral scenario first. Next, in a counterbalanced design, employees were presented with either the microexclusion or the microinclusion scenario followed by the other.

We used the linear mixed modeling R package ImerTest (Kuznetsova et al., 2017) with a random intercept for employee to test for the effects of gender, scenario, and order on employees' anticipated sense of fit, anticipated contribution, and perceived realism of the scenario. The ImerTest package predicts p-values for the fixed effects by using Satterthwait's method that can produce a fractional estimate of degrees of freedom. We created three sets of dummy codes with men, neutral scenario, and microexclusion present first as the reference group. We then recoded the dummy codes as needed to test the full set of main effects, simple effects, and all 2-way and 3-way interactions.

The pattern of results was, in general, similar across order. Where there were differences by order, gender differences in the microexclusion condition tended to be greater when the microinclusion condition was presented first. See Figure S2 and Table S3 for statistical results.

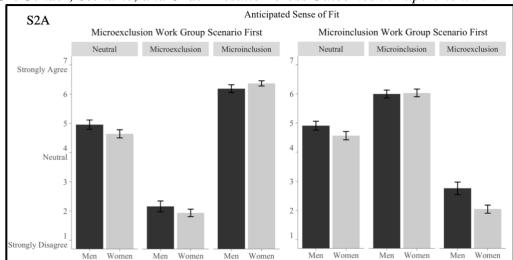
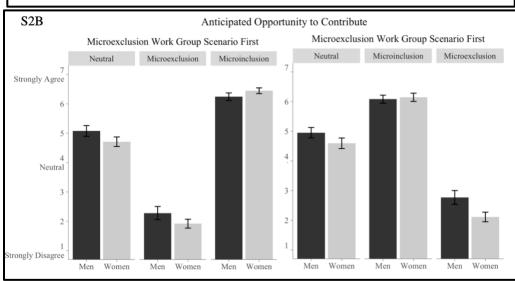
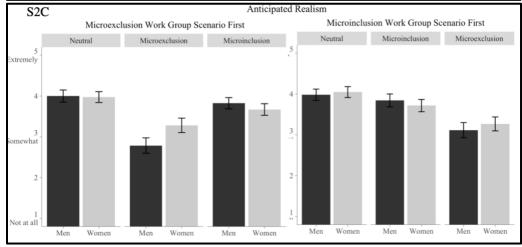


Figure S2. Gender, Scenario, and Order Results Across Outcomes in Experiment 1.





Note: Error bars represent standard errors

**Table S3A.** Gender, Scenario, and Order Main Effects in Experiment 1.

Outcomes	Main Effect of	Main Effect of	Main Effect of
	Gender	Scenario	Order
Anticipated Sense of Fit (1-7)	F(1,1958.50)=9.08	F(2,1353.80)=795.74	F(1,1955.10)=0.21
	p=0.003	p<0.001	p=0.65
Anticipated Contribution (1-7)	F(1, 1982.70)=9.50	F(2,1347.90)=577.85	F(1,1981)=1.08
	p=0.002	p<0.001	p=0.30
Perceived Realism (1-5)	F(1,2048.0)=0.05	F(2,1374)=61.69	F(1, 2048)=0.02
	p=0.81	p < .001	p=0.88

**Table S3B.** Gender, Scenario, and Order 2-Way Interactions in Experiment 1.

Outcomes	Gender × Scenario (Neutral vs Microexclusion)	Gender × Scenario (Neutral vs Microinclusion)	Gender × Scenario (Microexclusion vs Microinclusion)	Gender × Order	Order × Scenario (Neutral vs Microexclusion)	Order × Scenario (Neutral vs Microinclusion)	Order × Scenario (Microexclusion vs Microinclusion)
Anticipated Sense of Fit (1-7)	t(1371.45)=0.65 $p=0.51$ $d=0.04$ $[-0.07, 0.14]$	t(1375.72)=3.56 $p<0.001$ $d=0.19$ $[0.09, 0.30]$	t(1349.71)=2.90 $p=.004$ $d=0.16$ $[0.05, 0.26]$	t(1960.13)=-0.16 p=0.87 d<0.001 [-0.10, 0.08]	t(1376.68)=4.51 p<0.001 d=0.24 [0.14, 0.35]	t(1374.40)=-1.04 $p=0.30$ $d=-0.06$ $[-0.16, 0.05]$	t(1350.46)=-5.49 p<0.001 d=-0.30 [-0.41, -0.19]
Anticipated Contribution (1-7)	t(1363.01)=0.04 p=0.99 d<0.001 [-0.10,0.11]	t(1363.01)=3.52 $p<0.001$ $d=0.19$ [0.08, 0.30]	t(1344.11)=3.51 p<0.001 d=0.19 [0.08, 0.30]	t(1983.72)=0.06 p=0.95 d<0.001 [-0.09, 0.09]	t(1369.04)=3.67 p<0.001 d=0.20 [0.09, 0.30]	t(1366.64)=-0.24 $p=0.81$ $d=-0.01$ $[-0.12,0.09]$	t(1344.86)=-3.88 $p<0.001$ $d=-0.21$ $[-0.32, -0.10]$
Perceived Realism (1-5)	t(1377.44)=3.32 $p=0.001$ $d=0.18$ $[0.07, 0.28]$	t(1383.46)=-0.82 $p=0.41$ $d=-0.04$ $[-0.15, 0.06]$	t(1359.54)=-4.09 $p<0.001$ $d=-0.22$ [-0.33,-0.12]	t(2048.02)=0.59 p=0.56 d=0.03 [-0.06, 0.11]	t(1387.15)=2.13 $p=0.034$ $d=0.11$ $[0.01, 0.11]$	t(1384.52)=0.22 $p=0.83$ $d=0.01$ [-0.09, 0.12]	t(1362.20)=-1.88 $p=0.060$ $d=-0.10$ $[-0.21, 0.00]$

**Table S3C.** Gender, Scenario, and Order 3-Way Interactions in Experiment 1.

Outcomes	Gender × Order × Scenario	Gender × Order × Scenario	Gender × Order × Scenario
	(Neutral vs Microexclusion)	(Neutral vs Microinclusion)	(Microexclusion vs Microinclusion)

Anticipated Sense of Fit (1-7)	t(1377.81)=-2.38 $p=0.017$ $d=-0.13$ [-0.23, -0.02]	t(1376.34)=-0.52 $p=0.56$ $d=-0.03$ [-0.13, 0.08]	t(1351.23)=1.79 $p=0.073$ $d=0.10$ $[-0.10, 0.20]$
Anticipated Contribution (1-7)	t(1370.66)=-1.33 $p=0.18$ $d=-0.07$ $[-0.18, 0.03]$	t(1369.17)=-0.64 $p=0.52$ $d=-0.03$ $[-0.14, 0.07]$	t(1345.64)=0.69 $p=0.49$ $d=0.04$ $[-0.07, 0.14]$
Perceived Realism (1-5)	t(1385.03)=-1.96 $p=0.050$ $d=-0.11$ [-0.21, 0.00]	t(1383.98)=-0.28 $p=0.78$ $d=-0.02$ $[-0.12, 0.09]$	t(1362.20)=1.66 $p=0.10$ $d=0.09$ [-0.02, 0.20]

**Table S3D.** Simple Effects by Gender in Experiment 1.

Outcomes		M	Ien		Women			
	Neutral vs Microexclusion	Neutral vs Microinclusion	Microexclusion vs Microinclusion	Order	Neutral vs Microexclusion	Neutral vs Microinclusion	Microexclusion vs Microinclusion	Order
Anticipated Sense of Fit (1-7)	t(1368.42) = -27.30 $p < 0.001$ $d = -1.48$ $[-1.60, -1.36]$	t(1370.97) = 12.01 $p < 0.001$ $d = -0.65$ $[0.54, 0.76]$	$t(1348.19)= \\ 38.88 \\ p<0.001 \\ d=2.12 \\ [1.98, 2.25]$	t(1956.52)= -0.46 $p=0.65$ $d=-0.02$ $[-0.11, 0.07]$	t(1375.21) = -29.45 $p < 0.001$ $d = -1.59$ $[-1.71, -1.47]$	t(1381.60) = 18.68 $p < 0.001$ $d = 1.01$ $[-0.12, 1.12]$	t(1351.65) = 48.29 $p < 0.001$ $d = 2.63$ $[2.48, 2.77]$	t(1964.17) = -0.72 $p = 0.47$ $d = -0.03$ $[-0.12, 0.06]$
Anticipated Contribution (1-7)	t(1359.03) = -23.55 $p < 0.001$ $d = -1.28$ $[-1.39, -1.16]$	t(1361.72)= 9.82  p<0.001  d=0.53  [0.42, 0.64]	t(1342.47) = 33.04 $p < 0.001$ $d = 1.80$ $[1.68, 1.93]$	t(1981.61) = -1.04 $p = 0.30$ $d = -0.05$ $[-0.13, 0.04]$	t(1367.92) = -26.18 $p < 0.001$ $d = -1.42$ $[-1.53, -1.30]$	t(1374.65) = 16.15 $p < 0.001$ $d = 0.87$ $[0.76, 0.98]$	t(1346.18) = 42.39 $p < 0.001$ $d = 2.31$ $[2.17, 2.45]$	t(1986.07) = -1.02 $p = 0.31$ $d = -0.05$ $[-0.13, 0.04]$
Perceived Realism (1-5)	t(1381.11) = -10.35 $p < 0.001$ $d = -0.56$ $[-0.66, -0.45]$	t(1384.18) = -1.49 $p = 0.14$ $d = -0.08$ $[-0.19, 0.03]$	t(1356.70)= 8.72  p<0.001  d=0.47  [0.37, 0.58]	t(2047.99) = -0.15 $p = 0.88$ $d < 0.001$ $[-0.09, 0.08]$	t(1372.83) = -6.63 $p < 0.001$ $d = -0.36$ $[-0.46, -0.25]$	t(1382.57) = -2.90 $p = 0.004$ $d = -0.16$ $[-0.26, -0.05]$	t(1363.18) = 3.69 $p < 0.001$ $d = 0.20$ $[0.09, 0.31]$	t(2048.05) = 0.70 $p = 0.48$ $d = 0.03$ $[-0.06, 0.12]$

#### Manager- Versus Team-Focused Work Group Scenarios

At the request of our technology company collaborators, we included work group scenarios that focused on interactions with both managers and team members. Our partners hoped to learn about both kinds of experiences to explore potential points for intervention. Thus, the full design was a 2 (participant gender, between subjects)  $\times$  3 (scenario, within-subjects)  $\times$  2 (manager/team, between subjects) study design. The primary results collapse across the manager/team variable because both variants test our core theoretical question and the patterns of results were similar. The scenarios presented in the methods section in Experiment 1 involve the manager because this is the form used in Experiments 2 and 3.

Here we provide detail on this manipulation. After participants read and responded to the neutral scenario, we randomized participants to read work group scenarios about treatment from either a manager (see main text) or team members (see below). Due to a randomization error, employees were randomized unequally into the manager (n = 225) and team (n = 672) conditions. Both sets of scenarios test the same theoretical question. Both manipulated treatment that remedies ambiguity about the opportunity to contribute to shared goals in a setting (microinclusion) or that confirms this doubt (microexclusion). Both variants also held constant the protagonist's competence. What they manipulated was whether the protagonist was listened to and credited for an idea (microinclusion scenario) or not (microexclusion scenario) by a single person, presumptively the manager (manager condition) or by a group of people, presumptively co-workers (team condition).

In the microexclusion team condition, employees read:

It's a small engineering team. The team uses some programs you know and another that is pretty idiosyncratic, with a steep learning curve. Because of this, you ask Evan, a senior engineer on the team, for some tips. He tells you he is busy and to figure it out on your own. You find some tips online. That helps you get going. The team has been working to complete a project that has been underway for some time. The senior engineers of the team, Evan, Justin, and Kevin, usually dominate the discussion. At one meeting, the discussion focuses on a particular technical problem that needs to be solved. You start to describe an approach to the problem you've been looking into. You know it's promising. A senior engineer interrupts you. Later someone else proposes an idea a lot like what you had in mind. Evan, Justin, and Kevin listen carefully and asks your teammate follow-up questions to learn more and figure out how to use it effectively. The team compliments your teammate on the approach.

In the microinclusion team condition, employees read:

It's a small engineering team. The team uses some programs you know and another that is pretty idiosyncratic, with a steep learning curve. Because of this, Evan, a senior engineer on the team, comes by and gives you some tips. That helps you get going. The team has been working to complete a project that has been underway for some time. The senior engineers members of the team, Evan, Justin, and Kevin, usually lead the discussion. At one meeting, the discussion focuses on a particular technical problem that needs to be solved. You feel good about an approach to the problem you've been looking into. You know it's promising. You start describing the approach to the team. The team listens carefully and asks you follow-up questions to learn more. You bounce ideas off

each other and talk through how to use the approach for this specific problem. Together you figure out how to use it effectively. The team compliments you on the approach.

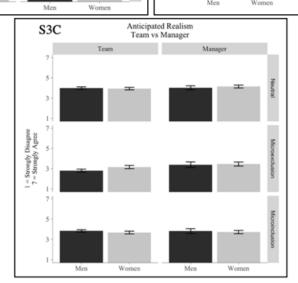
We again used the linear mixed modeling R package lmerTest (Kuznetsova et al., 2017) with a random intercept for employee to test for the effects of gender, scenario, and manager/team condition on employees' anticipated sense of fit, anticipated contribution, and perceived realism of the scenario. We created three sets of dummy codes with men, neutral scenario, and team condition as the reference group. We then recoded the dummy codes as needed to test the full set of main effects, simple effects, and all 2-way and 3-way interactions.

The pattern of results is similar across manager and team conditions and to the results reported in the main text. However, in general, microexclusions had a larger effect on all outcomes in the team (versus manager) condition. For instance, there was a significant scenario (neutral vs. microexclusion) × team/manager condition interaction, t(1375.04) = 2.78, p < 0.001, d = 0.15. The decrease in anticipated sense of fit between the neutral and microexclusion scenario was larger in the team condition than in the manager condition for men: team: t(1378.05) = -31.09, p < 0.001, d = -1.68, manager: t(1374.08) = -14.32, p < 0.001, d = 0.77. Women showed a similar pattern: team: t(1378.51) = -31.60, p < 0.001, d = -1.70, manager: t(1379.70) = -23.45, p < 0.001, d = -1.26. See Figure S3 and Table S4 for statistical results.

S3A Anticipated Sense of Fit Team vs Manager

Team Manager

Figure S3. Gender, Scenario, and Team/Manager Condition Results Across Outcomes in Experiment 1.



*Note:* Error bars represent standard errors.

**Table S4A.** Gender, Scenario, and Team/Manager Condition Main Effects in Experiment 1.

Outcomes	Main Effect of Gender	Main Effect of Scenario	Main Effect of Team/Manager Condition
Anticipated Sense of Fit (1-7)	F(1,1963.10)=12.84	F(2,1359.90)=1037.27	F(1,1961.60)=0.76
	p<0.001	p<0.001	p=0.38
Anticipated Contribution (1-7)	F(1, 1984.70)=14.49	F(2,1354.60)=780.61	F(1,1983.50)=3.65
	p<0.001	p<0.001	p=0.06
Perceived Realism (1-5)	F(1,2048.40)=0.30	F(2,1381.10)=91.29	F(1, 2048.40)=0.05
	p=0.58	p < .001	p=0.83

**Table S4B.** Gender, Scenario, and Manager/Team Condition 2-Way Interactions in Experiment 1.

Outcomes	Gender × Scenario (Neutral vs Microexclusion)	Gender × Scenario (Neutral vs Microinclusion)	Gender × Scenario (Microexclusion vs Microinclusion)	Gender × Team/Manager Condition	Team/Manager × Scenario (Neutral vs Microexclusion)	Team/Manager × Scenario (Neutral vs Microinclusion)	Team/Manager × Scenario (Microexclusion vs Microinclusion)
Anticipated Sense of Fit (1-7)	t(1378.30)=-0.66 $p=0.51$ $d=-0.04$ $[-0.14, 0.07]$	t(1380.07)=3.06 $p=0.002$ $d=0.16$ $[0.06, 0.27]$	t(1350.61)=3.70 $p<0.001$ $d=0.20$ $[0.09, 0.31]$	t(1965.69)=0.14 p=0.89 d<0.001 [-0.08, 0.09]	t(1375.04)=2.78 p<0.001 d=0.15 [0.04, 0.26]	t(1367.18)=0.04 p=0.97 d<0.001 [-0.10, 0.11]	t(1354.13)=-2.74 p=0.006 d=-0.15 [-0.26, -0.04]
Anticipated Contribution (1-7)	t(1370.71)=-0.47 $p=0.64$ $d=-0.03$ $[-0.13,0.08]$	t(1372.58)=3.21 $p=0.001$ $d=0.17$ $[0.07, 0.28]$	t(1344.41)=3.65 p<0.001 d=0.20 [0.09, 0.31]	t(1985.51)=0.89 $p=0.37$ $d=0.04$ [-0.05, 0.13]	t(1368.40)=3.04 $p=0.002$ $d=0.16$ $[0.06, 0.27]$	t(1360.17)=1.33 $p=0.19$ $d=0.07$ [-0.03,0.18]	t(1348.09)=-1.72 $p=0.09$ $d=-0.09$ [-0.20, 0.01]
Perceived Realism (1-5)	t(1388.17)=3.02 $p=0.003$ $d=0.16$ $[0.06, 0.27]$	t(1391.25)=-0.85 $p=0.39$ $d=-0.05$ $[-0.15, 0.06]$	t(1362.87)=-3.82 $p<0.001$ $d=-0.21$ $[-0.31, -0.10]$	t(2048.39)=1.03 $p=0.30$ $d=0.05$ [-0.04, 0.13]	t(1381.26)=2.88 $p=0.004$ $d=0.15$ $[0.05, 0.26]$	t(1372.07)=-0.28 $p=0.78$ $d=-0.02$ $[-0.12, 0.09]$	t(1365.06)=-3.13 $p=0.002$ $d=-0.17$ $[-0.28, -0.06]$

**Table S4C.** Gender, Scenario, and Team/Manager 3-Way Interactions in Experiment 1.

Outcomes	Gender × Team/Manager × Scenario	Gender × Team/Manager × Scenario	Gender × Team/Manager × Scenario
Outcomes	(Neutral vs Microexclusion)	(Neutral vs Microinclusion)	(Microexclusion vs Microinclusion)

Anticipated Sense of Fit (1-7)	t(1375.04)=2.78 $p<0.001$ $d=0.15$ [0.04, 0.26]	t(1367.18)=0.04 $p=0.97$ $d<0.001$ [-0.10, 0.11]	t(1353.30)=2.61 $p=0.009$ $d=0.14$ $[0.04, 0.25]$
Anticipated Contribution (1-7)	t(1369.66)=-1.86 $p=0.06$ $d=-0.10$ $[-0.21, 0.01]$	t(1363.66)=0.24 p=0.81 d=0.01 [-0.08, 0.12]	t(1347.19)=2.10 $p=0.04$ $d=0.11$ [0.01, 0.22]
Perceived Realism (1-5)	t(1380.83)=-1.89 $p=0.06$ $d=-0.10$ $[-0.21, 0.00]$	t(1374.59)=-0.44 $p=0.66$ $d=-0.02$ [-0.13, 0.08]	t(1363.78)=1.44 $p=0.15$ $d=0.08$ [-0.03, 0.18]

 Table S4D. Simple Effects by Gender in Experiment 1.

Outcomes	Men				Women			
	Neutral vs Microexclusion	Neutral vs Microinclusion	Microexclusion vs Microinclusion	Team/Manager Condition	Neutral vs Microexclusion	Neutral vs Microinclusion	Microexclusion vs Microinclusion	Team/Manager Condition
Anticipated Sense of Fit (1-7)	t(1378.05) = -31.09 $p < 0.001$ $d = -1.68$ $[-1.80, -1.55]$	t(1378.05) = 13.92 $p < 0.001$ $d = 0.75$ $[0.64, 0.86]$	t(1348.19)= 44.45 $p<0.001$ $d=2.42$ $[2.28, 2.56]$	t(1962.82) = -0.87 $p = 0.38$ $d = -0.04$ $[-0.13, 0.05]$	t(1378.51) = -31.60 $p < 0.001$ $d = -1.70$ $[-1.83, -1.58]$	t(1382.03) = 17.99 $p < 0.001$ $d = 0.97$ $[0.86, 1.08]$	t(1352.30) = 49.46 $p < 0.001$ $d = 2.69$ $[2.54, 2.84]$	t(1969.82) = -0.84 $p = 0.40$ $d = -0.04$ $[-0.13, 0.05]$
Anticipated Contribution (1-7)	t(1369.28) = -27.50 $p < 0.001$ $d = -1.49$ $[-1.61, -1.37]$	t(1369.28)= 11.36 $p<0.001$ $d=0.61$ [0.51, 0.72]	t(1342.63) = 38.39 $p < 0.001$ $d = 2.10$ $[1.96, 2.23]$	t(1989.95)= -1.91 $p=0.06$ $d=-0.09$ [-0.17, 0.00]	t(1372.70) = -27.75 $p < 0.001$ $d = -1.50$ $[-1.62, -1.38]$	t(1375.77) = 15.66 $p < 0.001$ $d = 0.84$ $[0.73, 0.95]$	t(1346.17) = 43.37 $p < 0.001$ $d = 2.36$ $[2.22, 2.50]$	t(1987.73) = -0.91 $p = 0.36$ $d = -0.04$ $[-0.13, 0.05]$
Perceived Realism (1-5)	t(1390.82) = -12.51 $p<0.001$ $d=-0.67$ $[-0.78, -0.56]$	t(1390.82)= -1.54 $p=0.12$ $d=-0.08$ [-0.19, 0.03]	t(1361.85)= 10.76 $p<0.001$ $d=0.58$ $[0.47, 0.69]$	t(2048.38) = 0.22 $p = 0.83$ $d < 0.001$ $[-0.08, 0.10]$	t(1385.58) = -8.13 $p < 0.001$ $d = -0.44$ $[-0.54, -0.33]$	t(1391.67) = -2.72 $p = 0.007$ $d = -0.15$ $[-0.25, -0.04]$	t(1363.88) = 5.34 $p < 0.001$ $d = 0.29$ $[0.18, 0.40]$	t(2048.41) = 1.90 $p = 0.06$ $d = 0.08$ $[0.00, 0.17]$

# Additional Analyses of Employees' Response to Scenarios

In addition to measuring employee's perceived realism in response to the three scenarios, we also asked employees how surprising the scenario was in a single item (i.e., "How surprising was this experience?") on a 5-point Likert scale (1=Not at all; 5=Extremely).

**Table S5A.** Means (Standard Errors) for Perceived Surprise in Experiment 1

	Men			Women		
Outcome	Neutral	Microexclusion	Microinclusion	Neutral	Microexclusion	Microinclusion
Perceived Surprise (1-5)	1.72(0.05) <sup>a,c</sup>	2.72(0.06) <sup>b</sup>	1.82(0.06) <sup>a</sup>	1.67(0.05) <sup>a</sup>	2.27(0.06) <sup>d</sup>	1.99(0.05) <sup>c,e</sup>

**Table S5B.** Gender and Scenario Main Effects for Perceived Surprise in Experiment 1.

Outcome	Main Effect of Gender	Main Effect of Scenario
Perceived Surprise (1-5)	F(1,2051.80)=0.32 p=0.57	F(2,1381.00) = 69.97 $p < .001$

**Table S5C** Regression Results for (A) Effect of Work Group Scenario within Gender and (B) Effect of Gender within Work Group Scenarios and Gender × Scenario Interaction for Perceived Surprise in Experiment 1

A	Effect of Work Group Scenario Among Women			Effect of Work Group Scenario Among Men		
Outcomes (Scale Range)	Neutral vs. Microexclusion Scenario	Neutral vs. Microinclusion Scenario	Microexclusion vs. Microinclusion Scenario	Neutral vs. Microexclusion Scenario	Neutral vs. Microinclusion Scenario	Microexclusion vs. Microinclusion Scenario
Perceived Surprise (1-5)	t(1381.53) = 7.12 $p < 0.001$ $d = 0.38$ $[0.28, 0.49]$	t(1382.79) = 3.89 $p < 0.001$ $d = 0.21$ $[0.10,0.31]$	t(1360.19) = -3.20 $p = 0.001$ $d = -0.17$ $[-0.28, -0.07]$	t(1385.92) = 10.88 $p < 0.001$ $d = 0.58$ $[0.48, 0.69]$	t(1381.50) = 1.18 $p = 0.24$ $d = 0.06$ [-0.04, 0.17]	t(1358.93) = -9.55 $p < 0.001$ $d = -0.52$ $[-0.63, -0.41]$

В	Effect of Gender Within Work Group Scenario			Gender × Scenario Interactions		
Outcomes (Scale Range)	Neutral Scenario	Microexclusion Scenario	Microinclusion Scenario	Neutral vs Microexclusion	Neutral vs Microinclusion	Microexclusion vs Microinclusion
Perceived Surprise (1-5)	t(2051.77)=-0.57 $p=0.57$ $d=-0.02$ [-0.11, 0.06]	t(2052.12)=-4.96 p<0.001 d=-0.22 [-0.31, -0.13]	t(2052.09)=1.88 $p=0.060,$ $d=0.08$ $[0.00, 0.17]$	t(1383.92)=-3.20 $p=0.001$ $d=-0.17$ [-0.28, -0.07]	t(1382.09)=1.77 p=0.077 d=0.10 [-0.01, 0.20]	t(1359.50)=4.91 $p<0.001$ $d=0.27$ [0.16, 0.37]

*Note*. Gender variable is dummy coded (Men = 0; Women = 1). The scenario variable is dummy coded such that: when comparing to the neutral scenario (coded 0), the microexclusion and microinclusion scenarios are coded 1, and when comparing to the microexclusion scenario (coded 0), the microinclusion scenario is coded 1. 95% CI for Cohen's *d* in bracket.

#### **Supplementary Materials for Experiment 2**

# **Exploratory Measures in Experiment 2**

In addition to the primary measures reported in the main text, we included two exploratory measures, to explore potential consequences of microinclusions beyond employees' sense of fit. We describe these measures and results below.

#### **Methods**

All measures were assessed on 7-point Likert scales (1=Strongly disagree; 7=Strongly agree), averaged into single composites with higher scores indicating greater levels of that construct.

**Stereotype Threat at A-Tech.** If men convey an inclusive stance to women's contributions at work, will women be less apt to worry that they will be seen through the lens of a negative stereotype? Stereotype threat was assessed using four items (e.g., "In engineering at A-Tech, I would worry that people will draw conclusions about my gender based on my performance", adapted from Cohen & Garcia, 2005;  $\alpha = 0.92$ ).

Institutional Growth Mindset at A-Tech. If men convey an inclusive stance to women's contributions at work, will women infer more that the company endorses a growth-mindset? We assessed participants' perceptions of institutional growth mindset using four items (e.g., "People at A-Tech seem to believe that people have a certain amount of intelligence, and they can't do much to change it", "People at A-Tech seem to believe that no matter who they are, people can significantly change their intelligence level", adapted from Dweck, 1999). Fixed mindset items were reverse-coded, then all items were averaged into a single composite with higher scores indicating greater perceptions of institutional growth mindsets ( $\alpha = 0.91$ ).

Anticipated Quality of Future Relationships. If men convey an inclusive stance to women's contributions at work, will women anticipate higher quality work relationships in the future? To examine this, we first prompted participants with the following "Imagine that the project your engineering team was assigned [in the scenario] has come to a close. You are now working on a new engineering team [at A-Tech] with all new engineers on a different project." We then assessed participants' anticipated *quality of future relationships* (e.g., "How confident would you be that you would have a positive experience on the new team?", four items;  $\alpha = 0.93$ ) on 7-point Likert scales (1=Not at all; 7=Very Much). Higher scores indicate higher anticipated quality of future relationships.

#### Results

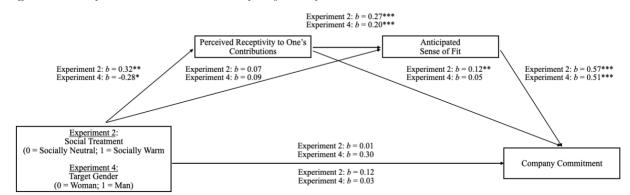
We used the same analytical approach as reported in the main text We created a set of dummy codes to test the main effect of work treatment (0 = working separately; 1 = microinclusion), social treatment (0 = neutral; 1 = warm), and the 2-way interaction. We then recoded as necessary to test the full set of comparisons.

In general, we find similar patterns of results as with participants' sense of fit; that is, a main effect of microinclusions. See Table S5 for means, standard errors, and statistical tests for individual composite measures

**Test of Sequential Mediation**. As an exploratory analyses, we tested whether there was a sequential indirect effect of microinclusion on company commitment through perceived reception of contributions and sense of fit using the using the R package *lavaan* (version 0.6-12; Rosseel, 2012) using 5000 bootstrapped samples. As reported in the main text, there was a

significant sequential indirect effect of microinclusions on company commitment through perceived reception of contributions and sense of fit, z = 3.88, p < 0.001, indirect effect = 0.12 [95% CI: 0.06, 0.18]. There was a marginal sequential indirect effect of gender target, z = 1.82, p = 0.068, indirect effect = 0.03 [95% CI: 0.001, 0.06], and a significant sequential indirect effect of the interaction, z = 2.61, p = 0.009, indirect effect = 0.03 [95% CI: 0.01, 0.05]. See Figure S4.

**Figure S4.** Sequential Mediation Analysis for Experiment 2 and 4



*Note:* See Figure 3 in main text for path coefficients for microinclusion variable. On the path from condition to company commitment, the value above the arrow represents the direct effect, and the value under the arrow represents the effect of condition after controlling for the mediators. \*p<0.05. \*\*p<0.01, \*\*\*p<0.001.

**Table S6A.** Results for Exploratory Measures in Experiment 2.

	Socially	y Neutral	Socially Warm		
Outcome (Scale Range)	Working separately	Microinclusion	Working separately	Microinclusion	
Stereotype Threat (1-7)	4.96 (0.15) <sup>a</sup>	4.65 (0.16) <sup>a</sup>	4.99 (0.14) <sup>a</sup>	4.02 (0.17) <sup>b</sup>	
Institutional Growth Mindset (1-7)	3.87 (0.10) <sup>a</sup>	4.63 (0.09) <sup>b</sup>	3.84 (0.10) <sup>a</sup>	4.83 (0.08) <sup>b</sup>	
Anticipated Quality of Future Relationships (1-7)	4.25 (0.11) <sup>a</sup>	5.08 (0.10) <sup>b</sup>	4.55 (0.11) <sup>c</sup>	5.35 (0.10) <sup>b</sup>	

**Table S6B.** Results for Individual Composite Measures in Experiment 2.

	Socially I	Neutral	Socially Warm	
Outcome (Scale Range)	Working separately Microinclusion		Working separately	Microinclusion
Sense of Fit				
Belonging (1-7)	3.42 (0.12) <sup>a</sup>	5.51 (0.09) <sup>b</sup>	4.16 (0.13) <sup>c</sup>	5.80 (0.10) <sup>b</sup>

Belonging Uncertainty (1-5)	3.44 (0.08) <sup>a</sup>	2.63 (0.09) <sup>b</sup>	3.17 (0.09) <sup>c</sup>	2.36 (0.10) <sup>d</sup>
Respect and Value (1-7)	3.79 (0.12) <sup>a</sup>	5.49 (0.10) <sup>b</sup>	4.18 (0.13) <sup>c</sup>	5.95 (0.10) <sup>d</sup>
Self-Efficacy (1-7)	4.46 (0.13) <sup>a</sup>	5.21 (0.11) <sup>b</sup>	4.34 (0.12) <sup>c</sup>	5.50 (0.11) <sup>d</sup>
Future Self (1-7)	4.22 (0.12) <sup>a</sup>	5.07 (0.11) <sup>b</sup>	4.41 (0.14) <sup>a</sup>	5.35 (0.14) <sup>b</sup>
Work Enjoyment (1-7)	3.78 (0.12) <sup>a</sup>	5.29 (0.10) <sup>b</sup>	4.41 (0.12) <sup>c</sup>	5.53 (0.11) <sup>b</sup>
Trust (1-7)	3.70 (0.12) <sup>a</sup>	5.28 (0.09) <sup>b</sup>	4.28 (0.12) <sup>c</sup>	5.60 (0.11) <sup>d</sup>
Percentile Potential for Success (0-100)	48.22 (1.86) <sup>a</sup>	55.41 (1.91) <sup>b</sup>	49.11 (1.97) <sup>a</sup>	56.20 (2.03) <sup>b</sup>
Anticipated Quality of Personal Relationships at Work in General				
Socially Included (1-7)	3.79 (0.11) <sup>a</sup>	4.95 (0.11) <sup>b</sup>	4.51 (0.12)°	5.35 (0.12) <sup>d</sup>
Loneliness (1-7)	4.56 (0.13) <sup>a</sup>	3.07 (0.14) <sup>b</sup>	3.74 (0.14) <sup>c</sup>	2.40 (0.14) <sup>d</sup>
Co-Worker Support (1-7)	3.14 (0.13) <sup>a</sup>	4.97 (0.09) <sup>b</sup>	3.78 (0.10) <sup>c</sup>	5.31 (0.11) <sup>d</sup>

#### **Supplementary Materials for Experiment 3**

## **Exploratory Measures in Experiment 3**

In addition to the primary measures reported in the main text and the exploratory measures reported above, we included two exploratory measures, to explore potential consequences of microinclusions beyond employees' sense of fit. We describe these measures and results below.

#### Methods

Unless indicated otherwise, all measures were assessed on 7-point Likert scales (1=Strongly disagree; 7=Strongly agree), averaged into single composites with higher scores indicating greater levels of that construct.

Value of Relationships with Men/Women at A-Tech. If women are included by men at work, will they value their relationships with male co-workers more? We assessed the value participants placed on relationships with male and female co-workers using three items (e.g., "I value my relationships with male/female engineers at A-Tech";  $\alpha_{men} = 0.93$ ;  $\alpha_{women} = 0.94$ ).

Goal Affordances. We assessed five kinds of goal affordances adapted from Johnson, (2002): (1) Four items assessed *extrinsic affordances* (e.g., "I think the work I would do at A-Tech is work that would have high status and prestige";  $\alpha$ =0.72); (2) six items assessed *intrinsic affordances* (e.g., "I think the work that I would do at A-Tech would allow me to learn new things, learn new skills";  $\alpha$ =0.82); (3) three items assessed *altruistic affordances* (e.g., "I think the work that I would do at A-Tech would be work that I could use to help other people like me";  $\alpha$ =0.85); (4) two items assessed *security affordances* (e.g., "I think the work I would do at A-Tech would offer a reasonably predictable, secure future; r=0.49); and (5) two items assessed *influence affordances* (e.g., "I think the work I would do at A-Tech would give me the chance to participate in decision making"; r=0.19).

All items were measured on 5-point Likert scales (1=Not at all, 5=Very much), and were averaged into their five respective composites with higher scores indicating higher perceived goal affordances. We did not analyze the security and influence affordances, given their low reliabilities.

#### Results

We used the same analytical approach as reported in the main text and used a series of linear regressions with the outcome variables regressed onto the dummy codes for the condition variable. We first conducted analyses with the working separately in a low representation context as our baseline to test the impact of microinclusions from a woman and a man. We then recoded as necessary to test the full set of comparisons.

In general, we find similar patterns of results as with participants' sense of fit. That is, in low representation contexts, both microinclusion from a man and from a woman led to more positive outcomes. Although the two microinclusion conditions often did not differ, in general the microinclusion from a man produced directionally more positive results. For the value of relationships with a man and extrinsic, intrinsic, and altruistic goal affordances, only the microinclusion from a man and not that from a woman produced significant improvement.

**Table S7A.** Results for Exploratory Measures in Experiment 3.

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Outcome (Scale Range)	Working separately	Microinclusion from a Woman	Microinclusion from a Man	Working separately
Value of Relationships with Men (1-7)	4.88 (0.21) <sup>a</sup>	5.08 (0.13) <sup>a,b</sup>	5.43 (0.12) <sup>b</sup>	5.06 (0.16) <sup>a,b</sup>
Value of Relationships with Women (1-7)	6.11 (0.15) <sup>a</sup>	6.22 (0.11) <sup>a</sup>	6.41 (0.07) <sup>a</sup>	6.19 (0.14) <sup>a</sup>
Quality of Future Relationships (1-7)	4.46 (0.19) <sup>a</sup>	4.72 (0.13) <sup>a</sup>	4.83 (0.13) <sup>a</sup>	4.64 (0.19) <sup>a</sup>
Stereotype Threat (1-7)	5.44 (0.21) <sup>a</sup>	5.17 (0.15) <sup>a</sup>	5.23 (0.17) <sup>a</sup>	5.44 (0.18) <sup>a</sup>
Institutional Growth Mindset (1-7)	3.57 (0.18) <sup>a</sup>	4.29 (0.11) <sup>b,c</sup>	4.67 (0.15) <sup>b,d</sup>	3.99 (0.15) <sup>a,c</sup>
Saliency of Gender Identity (1-7)	4.88 (0.18) <sup>a</sup>	4.77 (0.16) <sup>a</sup>	5.09 (0.16) <sup>a</sup>	4.99 (0.16) <sup>a</sup>
Extrinsic Goal Affordances (1-5)	4.06 (0.16) <sup>a</sup>	4.14 (0.11) <sup>a,b</sup>	4.45 (0.09) <sup>b</sup>	4.27 (0.13) <sup>a,b</sup>
Intrinsic Goal Affordances (1-5)	4.37 (0.16) <sup>a</sup>	4.33 (0.11) <sup>a</sup>	4.78 (0.09) <sup>b</sup>	4.37 (0.15) <sup>a</sup>
Altruistic Goal Affordances (1-5)	3.37 (0.21) <sup>a</sup>	3.71 (0.16) <sup>a,b</sup>	4.04 (0.14) <sup>b</sup>	3.71 (0.17) <sup>a,b</sup>

**Table S7B.** Results for Individual Composite Measures in Experiment 3.

	I	Higher Representation		
Outcome (Scale Range)	Working separately	Microinclusion from a Woman	Microinclusion from a Man	Working separately
Sense of Fit				
Belonging (1-7)	3.58 (0.21) <sup>a</sup>	4.45 (0.17) <sup>b,c</sup>	4.89 (0.16) <sup>b</sup>	4.13 (0.20) <sup>c</sup>
Belonging Uncertainty (1-5)	3.59 (0.14) <sup>a</sup>	3.09 (0.12) <sup>b</sup>	3.17 (0.12) <sup>b</sup>	3.45 (0.11) <sup>a</sup>
Respect and Value (1-7)	3.90 (0.19) <sup>a</sup>	4.73 (0.16) <sup>b</sup>	5.09 (0.16) <sup>b</sup>	4.26 (0.17) <sup>a</sup>
Self-Efficacy (1-7)	3.91 (0.19) <sup>a</sup>	4.45 (0.16) <sup>b,c</sup>	4.82 (0.17) <sup>b</sup>	4.32 (0.19) <sup>a,c</sup>
Future Self	4.21 (0.23) <sup>a</sup>	4.66 (0.19) <sup>a,b</sup>	4.82 (0.18) <sup>b</sup>	4.92 (0.17) <sup>b</sup>

(1-7)				
Work Enjoyment (1-7)	3.40 (0.22) <sup>a</sup>	4.24 (0.16) <sup>b</sup>	4.77 (0.15) <sup>c</sup>	4.02 (0.20) <sup>b</sup>
Trust (1-7)	3.97 (0.19) <sup>a</sup>	4.54 (0.12) <sup>b</sup>	4.93 (0.13) <sup>b</sup>	4.29 (0.18) <sup>a</sup>
Percentile Potential for Success (0-100)	49.00 (2.97) <sup>a</sup>	52.08 (2.87) <sup>a</sup>	52.19 (2.80) <sup>a</sup>	53.40 (3.28) <sup>a</sup>
Quality of Personal Relationships at Work				
Socially Included (1-7)	3.91 (0.20) <sup>a</sup>	4.19 (0.14) <sup>a</sup>	4.66 (0.15) <sup>b</sup>	3.94 (0.15) <sup>a</sup>
Loneliness (1-7)	4.47 (0.25) <sup>a</sup>	4.11 (0.16) <sup>a,b</sup>	3.78 (0.20) <sup>b</sup>	4.16 (0.18) <sup>a,b</sup>
Co-Worker Support (1-7)	3.49 (0.22) <sup>a</sup>	4.32 (0.13) <sup>b</sup>	4.83 (0.15) <sup>c</sup>	3.57 (0.22) <sup>a</sup>

## Supplementary Materials for Experiment 4

# **Exploratory Measures in Experiment 4**

#### Methods

**Saliency of Gender Identity.** In Experiment 4, we added an exploratory measure of gender saliency. If women are included by men at work, will their gender identity there seem less salient? Saliency of gender identity was assessed using four items (e.g., "In engineering at A-Tech, my gender would be an important part of who I am", adapted from Cohen & Garcia, 2005;  $\alpha = 0.84$ ) on 7-point Likert scales (1=Strongly disagree; 7=Strongly agree).

# **Test of Sequential Mediation**

As an exploratory analyses, we tested whether there was a sequential indirect effect of microinclusion on company commitment through perceived reception of contributions and sense of fit using the using the R package *lavaan* using 5000 bootstrapped samples. As reported in the main text, there was a significant sequential indirect effect of microinclusions (0 = working separately; 1 = microinclusion) on company commitment through perceived reception of contributions and sense of fit, z = 3.88, p < 0.001, indirect effect = 0.12 [95% CI: 0.06, 0.18]. There was a marginal sequential indirect effect of gender target (0 = woman target, 1 = man target), z = 1.82, p = 0.068, indirect effect = 0.03 [95% CI: 0.001, 0.06], and a significant sequential indirect effect of the interaction, z = 2.61, p = 0.009, indirect effect = 0.03 [95% CI: 0.01, 0.05]. See Figure S4.

**Table S8A.** Results for Exploratory Measures in Experiment 4.

	Man Target		Woman Target	
Outcome (Scale Range)	Working separately	Microinclusion	Working separately	Microinclusion
Institutional Growth Mindset (1-7)	4.07 (0.11) <sup>a</sup>	4.44 (0.12) <sup>b</sup>	3.64 (0.10) <sup>c</sup>	4.59 (0.09) <sup>b</sup>
Quality of Future Relationships	4.31 (0.13) <sup>a</sup>	4.83 (0.13) <sup>b</sup>	3.97 (0.13) <sup>a</sup>	5.07 (0.12) <sup>c</sup>
Salience of Gender Identity (1-7)	4.71 (0.14) <sup>a</sup>	4.49 (0.15) <sup>a</sup>	4.88 (0.13) <sup>a</sup>	4.10 (0.14) <sup>b</sup>

**Table S8B.** Results for Individual Composite Measures in Experiment 4.

	Man Target		Woman Target	
Outcome (Scale Range)	Working separately	Microinclusion	Working separately	Microinclusion
Sense of Fit				
Belonging (1-7)	3.95 (0.15) <sup>a</sup>	4.71 (0.15) <sup>b</sup>	3.30 (0.14) <sup>c</sup>	5.14 (0.12) <sup>d</sup>

Belonging Uncertainty (1-5)	3.13 (0.11) <sup>a</sup>	2.85 (0.10) <sup>b</sup>	3.63 (0.08) <sup>c</sup>	2.63 (0.09) <sup>b</sup>
Respect and Value (1-7)	4.24 (0.13) <sup>a</sup>	4.71 (0.13) <sup>b</sup>	3.48 (0.13) <sup>c</sup>	5.51 (0.10) <sup>d</sup>
Self-Efficacy (1-7)	4.55 (0.15) <sup>a</sup>	5.00 (0.14) <sup>b</sup>	4.26 (0.13) <sup>a</sup>	5.13 (0.13) <sup>b</sup>
Future Self (1-7)	4.22 (0.16) <sup>a,b</sup>	4.43 (0.16) <sup>b</sup>	3.71 (0.15) <sup>a</sup>	4.97 (0.15) <sup>c</sup>
Work Enjoyment (1-7)	4.00 (0.15) <sup>a</sup>	4.65 (0.15) <sup>b</sup>	3.62 (0.13) <sup>a</sup>	5.16 (0.12) <sup>c</sup>
Trust (1-7)	4.12 (0.14) <sup>a</sup>	4.60 (0.14) <sup>b</sup>	3.52 (0.13) <sup>c</sup>	5.14 (0.11) <sup>d</sup>
Percentile Potential for Success (0-100)	46.52 (2.39) <sup>a</sup>	49.16 (2.28) <sup>a</sup>	37.86 (1.91) <sup>b</sup>	47.87 (2.20)ª
Anticipated Quality of Personal Relationships at Work in General				
Socially Included (1-7)	4.20 (0.13) <sup>a</sup>	4.52 (0.14) <sup>a</sup>	3.65 (0.13) <sup>b</sup>	4.92 (0.12) <sup>c</sup>
Loneliness (1-7)	4.13 (0.16) <sup>a</sup>	3.71 (0.19) <sup>a</sup>	4.88 (0.15) <sup>c</sup>	3.17 (0.15) <sup>d</sup>
Co-Worker Support (1-7)	3.69 (0.15) <sup>a</sup>	4.75 (0.14) <sup>b</sup>	3.18 (0.14) <sup>c</sup>	5.29 (0.11) <sup>d</sup>

## **Supplementary Experiment: Microinclusions and Numerical Representation**

We tested the robustness of the effect of microinclusions on women's sense of fit within technology contexts that vary along this dimension. We hypothesized that microinclusive treatment that directly conveys the (inclusive) stance others take towards women's contributions would increase women's sense of fit over and beyond the representation of women in the setting (see also Begeny et al., 2020; Hall et al., 2019).

In the Supplementary Experiment, we dropped the working separately condition, and manipulated microexclusion and microinclusion treatment of women by men, and crossed this with a manipulation of numeric representation. We predicted that microinclusive treatment would increase how receptive others are seen to be of one's contributions and, in turn, that this perceived receptivity would mediate the effect of microinclusive treatment on gains in women's sense of fit.

#### **Methods**

### **Participants**

One hundred twenty-eight women college or graduate students (24% URM; 25% graduate students; mean age = 20.6) either majoring or intending to major in, or enrolled in a graduate program in a technology-related discipline (e.g., Computer Science, Engineering, Product Design) were recruited from a Women in Engineering student organization. We stopped data collection after one academic term and analyzed the data only upon completion of data collection. Results did not change when controlling for graduate student status; therefore, analyses collapse across this factor. Six participants either did not indicate a technology-related major or did not respond to that question. Results did not change when excluding these participants; therefore, they were retained. This sample provides 80% power to detect a medium effect size (d = 0.59) at p < 0.05. Participants were compensated with an \$8 gift card.

#### **Experiment Design and Procedures**

Participants were invited to a study about experiences in STEM via an email from the student leaders of the student organization. Participants were randomly assigned to read a one-page scenario in a 2(numerical representation: low vs higher) × 2(interpersonal treatment: microexclusion vs microinclusion) between-subjects design. The scenarios asked participants to imagine they had begun a new position at "A-Tech", a fictitious engineering company. After reading the scenario, they completed dependent measures (described below).

Each scenario included photos of employees and an office space. We manipulated the numeric representation of women at the company using the same scenarios for low representation (Experiments 2-4 in the main text) and higher representation (Experiment 3 in the main text).

We manipulated microinclusions and microexclusions using similar scenarios from Experiment 1. The Supplementary Experiment was conducted before Experiment 1, so the scenarios were simpler and less elaborated than those used in Experiment 1. The scenarios, however, still hold constant key elements including the protagonist's competence while manipulating whether the protagonist is supported in her work and whether her coworkers convey an inclusive (i.e., microinclusion) or exclusive (i.e., microexclusion) stance towards her contributions. The microexclusion condition read:

The team uses a program that is pretty idiosyncratic with a steep learning curve. You don't know how it works and no one shows you how. But one day, you find some tips online. That helps you get going. At one meeting [with three senior male engineers], you

start to share some ideas you've been thinking about. But one of the senior engineers, Evan, interrupts you. Later someone else proposes an idea a lot like you had in mind. The senior engineers like the idea and decide to pursue it.

In contrast, the microinclusion condition read:

The team uses a program that is pretty idiosyncratic with a steep learning curve. You don't know how it works but one day, Evan, a senior engineer on the team, comes by and offers to give you some tips. That helps you get going. At one meeting, you start to share some ideas you've been thinking about. The senior engineers listen to your idea and like it. They decide to pursue the direction you suggest.

#### **Measures**

Anticipated sense of fit, perceived receptivity to one's contributions, and anticipated quality of work relationships. We measured anticipated sense of fit ( $\alpha = 0.97$ ), perceived receptivity to one's contributions (r = 0.83), and anticipated quality of work relationships ( $\alpha = 0.92$ ) using the same items as Experiment 2 in the main text.

**Exploratory measures.** In addition to the primary measures described above, participants also completed the exploratory measures mentioned above. See Table S9 for means and standard errors.

#### **Results**

We created dummy codes to test the main effect of numerical representation (0 = low; 1 = higher) and interpersonal treatment (0 = microexclusion; 1 = microinclusion) and the 2-way interaction. We then recoded as necessary to test the full set of comparisons.

# **Anticipated Sense of Fit**

There was a large main effect of interpersonal treatment, F(1, 123) = 54.61, p < 0.001, d = 1.33 [95% CI: 0.94, 1.72], and a smaller main effect of numerical representation, F(1,123) = 14.24, p < 0.001, d = 0.68 [95% CI: 0.32, 1.04]. The interaction was not significant, F(1, 123) = 0.98, p = 0.32, d = 0.17 [95% CI: -0.18, 0.53]. However, we explored the robustness of the effect of interpersonal treatment across broadly meaningful differing representational contexts.

As predicted, microinclusions increased women's sense of fit relative to microexclusions both in the low representation context, t(123) = 7.39, p < 0.001, d = 1.33 [95% CI: 0.94, 1.72], and higher representation context, t(123) = 6.70, p < 0.001, d = 1.15 [95% CI: 0.77, 1.53]. If women's sense of fit varies most directly as a function of the stance others take towards their contributions, they may report a higher sense of fit in the microinclusion/low representation context than in the microexclusion/higher representation context (Hall et al., 2019). This was the case, t(123) = 3.79, p < 0.001, d = 0.68 [95% CI: 0.32, 1.05]. We again find the same pattern of results examining women's anticipated sense of belonging. See Figure S5.

#### **Perceived Receptivity to One's Contributions**

There were main effects of interpersonal treatment, F(1, 122) = 37.02, p < 0.001, d = 1.10 [95% CI: 0.72, 1.48], and a smaller effect of numeric representation, F(1, 122) = 5.08, p = 0.03, d = 0.41 [95% CI: 0.05, 0.77]. The interaction was not significant, F(1, 122) = 0.67, p = 0.42, d = 0.15 [95% CI: -0.21, 0.50].

As expected, microinclusions increased how receptive women believed others would be towards their contributions relative to microexclusions in both the low representation context, t(122) = 6.08, p < 0.001, d = 1.10 [95% CI: 0.72, 1.48], and higher representation context, t(122) = 5.20, p < 0.001, d = 0.94 [95% CI: 0.57, 1.31]. Women in the microinclusion/low representation context believed others would be more receptive than women the microexclusion/higher representation context, t(122) = 3.99, p < 0.001, d = 0.72 [95% CI: 0.35,

#### 1.31].

#### **Test of Mediation**

Did the perceived receptivity of co-workers to women's contributions mediate the effect of interpersonal treatment on women's anticipated sense of fit? To test the indirect effect, we conducted a mediational analysis with 5,000 bootstrapped samples. Our sample provides 80% power to detect medium indirect-effect sizes in a mediation analysis (Fritz & MacKinnon, 2007).

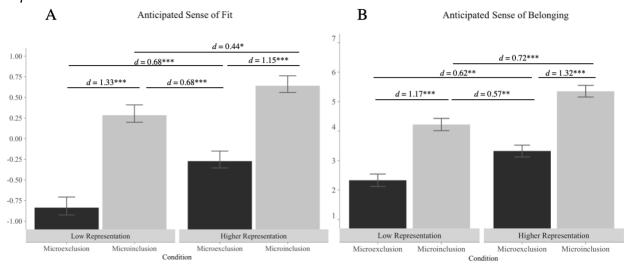
There was a significant indirect effect of numerical representation (low = 0; higher = 1) on anticipated sense of fit, z = 2.10, p = 0.036, indirect effect = 0.11 [95% CI: 0.02, 0.22]. As predicted, interpersonal treatment (microexclusions = 0; microinclusions = 1) had a larger significant indirect effect, z = 3.65, p < 0.001, indirect effect = 0.36 [95% CI: 0.19, 0.57]. There was no significant indirect effect of the interaction, z = -0.85, p = 0.40, indirect effect = -0.02 [95% CI: -0.06, 0.03].

# **Anticipated Quality of Work Relationships**

There were main effects of both interpersonal treatment, F(1,119) = 17.67, p < 0.001, d = 0.77 [95% CI: 0.40, 1.14], and numeric representation, F(1,119) = 11.86, p < 0.001, d = 0.63 [95% CI: 0.26, 1.00]. The interaction was not significant, F(1,119) = 2.74, p = 0.100, d = 0.30 [95% CI: -0.06, 0.66].

Microinclusions led women to anticipate better work relationships relative to microexclusions in the low representation context, t(119) = 4.20, p < 0.001, d = 0.77 [95% CI: 0.40, 1.14], and marginally better work relationships in the higher representation context, t(119) = 1.99, p = 0.049, d = 0.36 [95% CI: 0.00, 0.73]. The microinclusion/low representation context and in the microexclusion/higher representation context did not differ, t(119) = 0.78, p = 0.44, d = 0.14 [95% CI: -0.22, 0.50].

**Figure S5**Anticipated Sense of Fit (A) and Sense of Belonging (B) by Condition in Supplementary Experiment.



*Note:* In (A) the scale represents standard units. In (B), the y-axis represents the full scale. Error bars represent standard errors. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001.

#### Table S9A

Means for Additional Outcomes in Supplementary Experiment

	Low Representation		Higher Representation	
Outcome (Scale Range: 1-7)	Microexclusion	Microinclusion	Microexclusion	Microinclusion
Perceived Receptivity to One's Contributions	2.71 (0.23) <sup>a</sup>	4.55 (0.17) <sup>b</sup>	3.38 (0.19) <sup>c</sup>	4.88 (0.23) <sup>d</sup>
Anticipated Quality of Work Relationships	3.42 (0.11) <sup>a</sup>	3.94 (0.08) <sup>b,c</sup>	3.85 (0.07) <sup>b</sup>	4.09 (0.07) <sup>c</sup>

*Note*. Means with a different superscript within row differ significantly, ps < 0.05. Standard error in parentheses.

#### **Discussion**

The Supplementary Experiment found that women's anticipated sense of fit at a technology company varied with interpersonal treatment that conveyed the stance others took towards their contributions at work. Women reported a greater sense of fit and believed that others would be more receptive to their contributions when they imagined experiencing microinclusions vs. microexclusions, and this was the case in both low and higher representation contexts. Moreover, as predicted, this effect was mediated by how receptive women believed their coworkers would be to their contributions. Microinclusions also led women to anticipated higher quality work relationships in both contexts.

**Table S9B** *Results for Exploratory Measures in Supplementary Experiment.* 

	Low Representation		Higher Representation	
Outcome (Scale Range)	Microexclusion	Microinclusion	Microexclusion	Microinclusion
Value of Relationships with Men (1-7)	4.23 (0.30) <sup>a</sup>	5.27 (0.14) <sup>b</sup>	4.01 (0.22) <sup>a</sup>	5.53 (0.14) <sup>b</sup>
Value of Relationships with Women (1-7)	6.25 (0.19) <sup>a</sup>	6.28 (0.11) <sup>a</sup>	6.24 (0.12) <sup>a</sup>	6.29 (0.11) <sup>a</sup>
Stereotype Threat (1-7)	5.85 (0.26) <sup>a</sup>	5.35 (0.24) <sup>a</sup>	5.50 (0.19) <sup>a</sup>	4.82 (0.22) <sup>b</sup>
Institutional Growth Mindset (1-7)	3.36 (0.25) <sup>a</sup>	4.76 (0.20) <sup>b</sup>	3.69 (0.16) <sup>a</sup>	4.54 (0.17) <sup>b</sup>
Saliency of Gender Identity (1-7)	5.59 (0.20) <sup>a</sup>	4.93 (0.23) <sup>b</sup>	5.27 (0.15) <sup>a,b</sup>	4.99 (0.20) <sup>b</sup>

**Table S9C.** Results for Individual Composite Measures in Supplementary Experiment.

	Low Representation		Higher Representation	
Outcome (Scale Range)	Microexclusion	Microinclusion	Microexclusion	Microinclusion

_				
Sense of Fit				
Belonging (1-7)	2.33 (0.21) <sup>a</sup>	4.22 (0.23) <sup>b</sup>	3.32 (0.20) <sup>c</sup>	5.35 (0.17) <sup>d</sup>
Belonging Uncertainty (1-5)	3.92 (0.14) <sup>a</sup>	3.17 (0.13)°	3.65 (0.12) <sup>a</sup>	2.78 (0.14) <sup>b</sup>
Respect and Value (1-7)	2.24 (0.22) <sup>a</sup>	4.68 (0.20) <sup>b</sup>	3.24 (0.21) <sup>c</sup>	5.57 (0.17) <sup>d</sup>
Self-Efficacy (1-7)	3.28 (0.23) <sup>a</sup>	4.63 (0.18) <sup>b</sup>	4.12 (0.19) <sup>c</sup>	4.87 (0.20) <sup>b</sup>
Future Self (1-7)	3.55 (0.25) <sup>a</sup>	5.10 (0.17) <sup>b</sup>	4.36 (0.24) <sup>c</sup>	5.28 (0.22) <sup>b</sup>
Work Enjoyment (1-7)	2.68 (0.26) <sup>a</sup>	4.57 (0.19) <sup>b</sup>	3.84 (0.19) <sup>c</sup>	5.44 (0.16) <sup>d</sup>
Trust (1-7)	2.64 (0.21) <sup>a</sup>	4.76 (0.18) <sup>b</sup>	3.68 (0.19) <sup>c</sup>	5.52 (0.17) <sup>d</sup>
Percentile Potential for Success (0-100)	47.86 (4.17) <sup>a</sup>	59.20 (2.67) <sup>b</sup>	52.76 (3.48) <sup>a,b</sup>	56.12 (2.54) <sup>a</sup>
Anticipated Quality of Personal Relationships at Work in General				
Socially Included (1-7)	3.40 (0.25) <sup>a</sup>	4.35 (0.20) <sup>b</sup>	4.53 (0.18) <sup>b</sup>	5.09 (0.16) <sup>c</sup>
Loneliness (1-7)	5.38 (0.22) <sup>a</sup>	4.25 (0.19) <sup>b</sup>	3.97 (0.21) <sup>b</sup>	2.92 (0.18) <sup>c</sup>
Quality of Anticipated Personal Relationships at Work (1-7)	3.37 (0.26) <sup>a</sup>	4.80 (0.17) <sup>b,c</sup>	4.36 (0.17) <sup>b</sup>	4.93 (0.16) <sup>c</sup>
Co-Worker Support (1-7)	2.62 (0.20) <sup>a</sup>	4.04 (0.19) <sup>b</sup>	3.89 (0.17) <sup>b</sup>	4.75 (0.17) <sup>c</sup>

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