Supplementary Materials: Leaders in Social Movements: Evidence From Unions in Myanmar

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1 Overview of field implementation

1.1 Protocol for random sampling of workers who were not union leaders

We used a random sampling protocol that we designed to obtain a sample that was representative of the target population: sewing operators in the targeted factories, including union members and non-union members. It entailed three stages. First, the CTUM convened the presidents and secretaries of the 28 garment basic unions for an introduction meeting. During the meeting, the CTUM explained the research, requested the unions' participation, and introduced the survey team. Union leaders also completed (1) a factory information form about the factory's sewing lines, their sizes, and their union membership rate and (2) a union information form about the union's organizational structure. Leaders were informed in advance that the survey team would request this information.

Second, the research team matched LLs and EC members to sewing lines and stratified sewing lines by their quartile in the distribution across lines of the share of workers on the line unionized. We then implemented a stratified random selection of up to 11 sewing lines; in factories with fewer than 11 LLs and EC members, the research team selected a number of lines equal to the total number of LLs and EC members. We prioritized LLs, only selecting EC members in factories with fewer than 11 LLs. In factories with fewer than 11 sewing lines, we selected the minimum of {Number of sewing lines, Number of LLs + EC members}. In factories with greater than 50 workers per line, we randomly selected the front or back half of the line to participate. When when factories were >80% unionized (<20% unionized), we slightly oversampled lines from bottom (top) quartile unionization rate. This was to ensure adequate representation of non-union (union) members in field activities. We excluded sewing lines if the president was the only union leader on the line, although in practice, this was rare.

Third, for each randomly selected line, if it had a LL on it, we assigned the LL to make a complete list of workers on the line, including their union membership status and skill level (higher/low). If a line had multiple LLs, we randomly selected one to make the list. If a line had no LLs, we selected the LL from the nearest non-randomly selected line and broke ties using random selection. We also invited these LLs to participate in the field activities.

LLs brought the lists of workers to their union's first session, which we describe in Section 1 of the paper. At this stage, the survey team conducted a stratified random selection of around 90 workers per factory; within factory, we stratified by line, union

membership, and skill level.
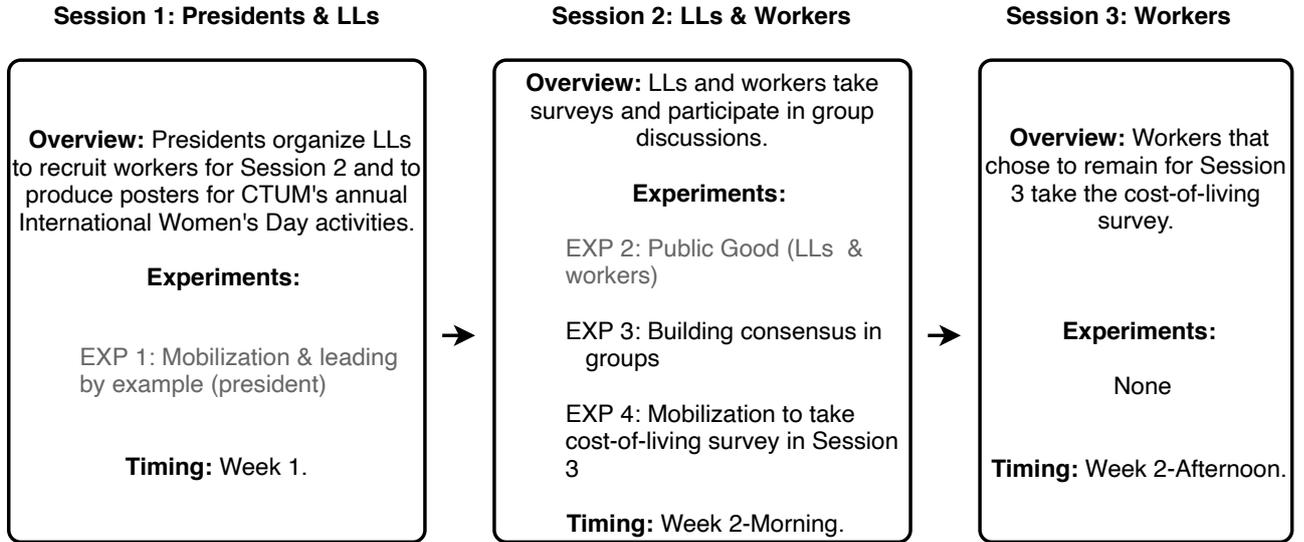
1.2 Field activities

We embedded a series of experiments in the survey and discussion process. We preregistered the experiments on the AEA's RCT registry. For each factory, we scheduled two consecutive sessions on Sundays. In each session, we included two factories. The sessions were held on Sundays because it is the only weekday when most workers do not work. We compensated participants for their transportation costs (5000 kyats) and time at the average wage rate of a typical working day (6000 kyats).[1] It is important to underscore that participation in the session is still costly to workers, as they work very long hours and only have one weekend day. Throughout the activities, we only allowed the research staff and the participants to be onsite when the sessions were taking place; in this way, we aimed to limit any actual or perceived influence of the CTUM on participants' behavior and survey responses.

Figure 1 provides an overview of the field activities. In session 1, only presidents and LLs participated. We implemented a survey and a skill assessment as well as a mobilization experiment (EXP 1). The survey covered basic demographic questions as well as information on wages, behavioral characteristics, and psychological traits. The mobilization experiment was about presidents motivating LLs to mobilize workers to attend the session the next Sunday (session 2) and encouraging LLs to produce posters for CTUM's annual International Women's Day activities (March 8, 2020). Given the much more limited number of presidents compared to LLs, the more limited number of LLs compared to workers, and, crucially, the smaller sample sizes than initially planned due to the Covid-19 outbreak, our results for the mobilization experiment (EXP 1) are underpowered compared to those with workers. As such, we present this experiment in Section 7 of these Supplementary Materials.

In session 2, which is the focus of the main paper, only LLs and workers participated. In the morning, we implemented a survey, a skill assessment, the public good experiment (EXP 2), and the consensus building experiment on the minimum wage (EXP 3). The public good experiment was designed to test leaders' potential role of leading by example in the provision of a public good, that is sewing machines for CTUM Skills Training Centre (e.g., Jack and Recalde (2015)). The consensus building experiment was designed to test how leaders' participation in group discussions about workers' preferred and expected minimum wage levels influenced the group's consensus around these levels.

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[1]When unions preferred to organize communal transportation, we did not reimburse participants.

Figure 1: Overview of field activities

Session 1: Presidents & LLs		Session 2: LLs & Workers		Session 3: Workers
Overview: Presidents organize LLs to recruit workers for Session 2 and to produce posters for CTUM's annual International Women's Day activities. **Experiments:** EXP 1: Mobilization & leading by example (president) **Timing:** Week 1.	→	**Overview:** LLs and workers take surveys and participate in group discussions. **Experiments:** EXP 2: Public Good (LLs & workers) EXP 3: Building consensus in groups EXP 4: Mobilization to take cost-of-living survey in Session 3 **Timing:** Week 2-Morning.	→	**Overview:** Workers that chose to remain for Session 3 take the cost-of-living survey. **Experiments:** None **Timing:** Week 2-Afternoon.

We do not discuss the public good experiment (EXP 2) in the main paper due to very little variation across the treatment arms: only 7% of leaders and 18% of workers donated less than the full endowment amount (regardless of treatment arm). We present this experiment in Section 8 of these Supplementary Materials.

After lunch, we conducted the mobilization experiment (EXP 4), in which we invited workers to remain for an additional, unanticipated living cost survey for the rest of the afternoon. The CTUM planned to use the living cost data from the survey to campaign for its preferred minimum wage level. We induced a strategic complementarity in turnout at the discussion group level by donating to a worker skills training center for each full discussion group that attended the survey. In this design, we aimed to mirror the incentives faced by workers when deciding whether to participate in collective actions, such as street demonstrations in support of the CTUM's proposed minimum wage level, while avoiding experimentally mobilizing them to engage in potentially risky actions.

1.3 Implementation of Mobilization Experiment

The mobilization experiment in Session 2 was implemented as follows: After workers completed the group discussion and follow-up survey, we provided them with lunch. The field team told workers that they would receive their participation payment after lunch, at which time the session would end and a bus would transport workers back to their factory (the meeting point for workers' sharing transportation).[2]

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[2]During lunch, the field team calculated workers' survey incentive payments and implemented the randomized assignment for the mobilization experiment. The field team also randomly assigned the

During lunch, the field team prepared the final experiment. At the end of lunch, the field team informed workers that they would be called into a separate room to sign for their payment and provided them with two paper cards: one that included their number in the order in which they would receive the payment, starting from 1 in each discussion group, and one that was a color-code corresponding to their treatment assignment. Workers were not informed about the meaning of the color coding. The field team also requested that workers turn off their cell phones, barring a critical need to keep it on. In a separate room, the field team informed leaders about the surprise survey session. Among leaders who could stay, the field team randomly assigned two of them to the room where leaders invited workers to stay for the afternoon session and provided them with the invitation script. The rest of the leaders were sent to the room where the survey would take place.

After lunch, the field team called workers by their numbers. When workers entered the payment room, they went to the desk corresponding to the color of their card. Each desk was staffed with a member of the field team, and in the leader motivation treatment arms, a leader. The field team member provided the worker with an envelope containing their payment, the worker signed, and the invitation for the afternoon session corresponding to the desk's treatment arm was made. The paper's Online Appendix provides the scripts for each invitation treatment arm.[3]

The research team carefully planned workers' movement from the discussion room to the payment room and then either directly to the afternoon survey room (if they accepted the invitation) or to the bus (if they did not). We also ensured that there were small amounts of buffer time between workers. These aspects of the design were important in order to prevent information spillovers across workers and were carefully enforced. While they increased the amount of time required to issue the payments, the field team quickly became adept at implementing the procedures. Unfortunately, for the first survey session, which included two factories, the field team ran out of time to complete this experiment. For this reason, the number of observations drops to 790, resulting in a loss of statistical power.

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order in which motivated or non-motivated workers would be invited (either all motivated first or all motivated second). Workers ate lunch with their discussion group members in the discussion room.

[3]Note that our implementation ensured that we did not deceive participants.

2 Variable lists & definitions

2.1 Post Double Selection lasso variables not already included in Table 1

- Management attitude towards union membership: "How would you describe management's general attitude towards union membership?" Minimum score is $1 =$ Extremely negative, management may punish workers for union participation. Maximum score is $5 =$ Very positive, management encourages workers to participate and provides access to factory's facilities to coordinate

- Gender preference for union president (union line leaders): "Overall, who do you think would be a better union president (union line leader), a man or a woman?"

- Overlap in interests with union members, non-members, and managers. Based on the "Adapted Inclusion of Others in Self (IOS) scale" (Aron, McLaughlin-Volpe, Mashek, Lewandowski, Wright and Aron, 2004), which measures the extent to which individuals perceive community- and self-interest as overlapping. IOS has been validated across a wide variety of contexts, and adapted versions are found to be strongly correlated with environmental behavior (Schultz, 2002) and connectedness to the community (Mashek, Cannaday and Tangney, 2007). We code the measure from 1 to 7, where 7 implies highest overlap. Figure 2 displays the survey question: applicants are asked to choose between sets of pictures, each showing two circles (labeled "self" and "community") with varying degrees of overlap, from non-overlapping to almost completely overlapping.

Figure 2: Inclusion of Others in Self scale
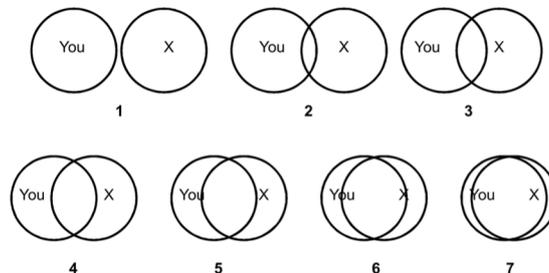
Notes. The figure represents the type of figures showed to participants to elicit their overlap in interest with union members, non-members, and managers. One picture was shown for each type of counterpart. x indicates the counterpart (union members, non-members and managers, respectively).

2.2 Index variables

Consensus-building: Active Group Index

- Share of workers seem to be engaged in the group discussion (e.g. telling opinions, listening to other people's opinions, writing down notes);

- Share of workers seem to be distracted or not paying attention to the group discussion (e.g. looking down, chatting about irrelevant topics);

- Indicator for one or more persons who are actively facilitating discussion;

- Indicator for one or more persons who are asking other workers' opinions;

- Indicator for one or more persons who are summarizing group's opinions;

- Indicator for one or more persons who are writing down notes.

Consensus-building experiment: Worker Engagement Index

- Enjoyment:

  - The group discussion was interesting, engaging and informative;
  - The group discussion was a waste of my time (reversed score);
  - There were some moments during the discussion when I felt unease and I did not know what to say or do (reversed score);
  - Overall, I enjoyed being part of this group discussion.

- Achievement of consensus:

  - At the end of the discussion, to what extent did your group agree on the prediction of the level of the minimum wage that the government will set?;
  - At the end of the discussion, to what extent did your group agree on the ideal level of the minimum wage that the government should set?.

- Participation:

  - During the group discussion, I felt confident to express my views and opinions;
  - All members of my group actively participated in the discussion.

3   Main results estimated with alternative weighting schemes

Throughout the empirical analysis, we weight observations so that each factory equally counts in the analysis by using probability weights calculated as the total number of workers across factories divided by the number of workers in the specific factory. Our rationale for this approach if that while we invited very similar numbers of workers per factory, factory-level turn-out was in part determined by the union leaders. This raises the concern that factories with more (less) capable union leaders may have larger (smaller) sample sizes and thus receive more (less) weight in our analysis.

These weights only adjust for the number of workers in each factory who participated in our field activities. They do not adjust for possible differences between the *types of workers* who participate and who do not; in particular, one may be concerned that union members may be more likely to participate compared to non-union members; if so, our estimates are not representative at the factory-level.

To explore selection into our sample, Table 1 compares factory-level sample statistics (namely, fractions of union members, female workers, and low-skilled workers) for each factory's entire sewing section workers, invited workers, and survey participants. We chose invitees by a stratified random sampling of around 90 workers from the sewing section of each factory. To calculate the statistics for each factory's sewing section workers, we use information provided by the union presidents. We have missing information in two factories because presidents in these factories did not provide enough information to calculate them. Therefore, in this analysis, we focus on 15 factories with non-missing information. In Table 1, columns (1)-(3) present the means and standard deviations of each variable for the population of sewing section workers, invited workers, and participants. For invited workers, we do not have information on gender and skills unless the worker participated the survey. Columns (4)-(6) show the differences in means across samples.

Table 1: Factory-level sample statistics at each stage of sample selection

	(1)	(2)	(3)	(4)	(5)	(6)
	Mean / (SD)			**Difference in means / (p-value)**		
	Population (Sewing Section)	Invitees	Participants	Participants-Population	Invitees-Population	Participants-Invitees
Union Member Share	0.467	0.623	0.670	0.203**	0.156*	0.047
	(0.263)	(0.186)	(0.198)	(0.041)	(0.086)	(0.136)
Female Share	0.902		0.968	0.066		
	(0.197)		(0.031)	(0.358)		
Helper Share	0.146		0.118	-0.022		
	(0.116)		(0.069)	(0.586)		
Observations	15	15	15	30	30	30

Notes. Unit of observation is factory. Columns (1)–(4) show the mean of factory-level sample statistics (fractions of union members, female workers, and low-skilled workers (helpers)) for each sample of workers: factory's sewing section workers (Column 1), workers invited to Session 2 (Column 2), workers participated Session 2 (Column 3). Standard deviation are shown in the parenthesis. Columns (1) uses information collected from presidents about the total number of workers, number of union members, number of female workers, and number of helpers in the factory's sewing section. Column (2) uses information about union membership status for each invited worker (we do not have other characteristics for invited workers who did not participate the survey). Column (3) uses worker survey data. Columns (4)-(6) show the differences in sample statistics across samples controlling for factory fixed effects: the difference between sewing section workers and participants (Column 4), the difference between sewing section workers and invitees (Column 5), and the difference between invitees and participants (Column 6). P-values based on standard errors clustered at factory-level are in parentheses.

Column (4) shows that the union member share is about 20 percentage points higher among participants compared to sewing workers, while the shares of females and helpers are balanced. This over-representation of union members is mostly driven by selection from sewing workers into invitees (column 5) and slightly by self-selection among invitees to participate (column 6). Importantly, among invitees, selection into participation is not significantly different between union and non-union members (column 6).

Over-sampling of union members is partly due to a stratification scheme in the sampling protocol; we specified a fixed the number for each type of workers (stratified by union membership and skills) to invite for each factory, and we had a higher number of union members to invite compared to non-members. More specifically, depending on the number of LLs in the factory, in each selected line, we targeted to have around 50–56% of the invitees to be union members if there were enough non-members and members in the list. It turned out that the actual share of union members among invited workers (0.62) is somewhat higher than the targeted share of union members in the protocol (0.50–0.56). We investigated the reason for this and found that a set of the LLs in three factories possibly deviated from our sampling protocol by listing fewer non-members than what we expect from the overall membership rate in the factory. This results in not having enough non-members listed in some of the lines, causing a higher share of union members among invitees than the targeted share in the protocol.

Given these statistics, we examine the robustness of our main results to using two alternative weights. The alternative weights adjust for the differences in union member share between participants and invitees or between participants and the population of

sewing workers, while keeping the feature of our original weights that each factory equally counts. For each factory i and worker type k (union membership), we define a weight $w_{ik}^* = \frac{S_{ik}}{A_{ik}} K_i$ where A_{ik} is the total number of type k workers who participated the survey from factory i, and S_i is either 1) total number of type k workers invited to the survey in factory i (defined as "invitee weight") or 2) total number of type k workers in the sewing section of factory i (defined as "population weight"). K_i is the factory-specific component to keep the feature that each factory equally counts and to have the inverse of weights sum up to one (i.e., $\sum_k \frac{1}{w_{ik}^*} = \frac{1}{w_i}$, where w_i is our original weight). For the population weight, we do not have information for workers in two factories, so these factories drop from the analysis when these weights are used.

Beginning with the descriptive comparison of union leaders and workers, we examined the robustness of Table 1 in the paper to the two alternative weights and to no weights. Tables 2 (invitee weight), 3 (population weight), and 4 (no weight) present the results. The results are quantitatively and qualitatively similar to our original results. Table 5 shows that the main results for the group discussion experiment hold if we use these two alternative weighting approaches or do not use weights in the regressions. Finally, Table 6 shows the main results for the mobilization experiment are qualitatively similar using the original and invitee weights, although the estimate for the Observation arm is sensitive to the population and unweighted schemes.[4] The High Coordination coefficient is also sensitive to the specification without weights. For the reasons discussed above, however, we prefer the specifications with weights.

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[4]The difference in the Observation coefficient is largely due to the weighting scheme, as opposed to the subsample in column (3) of table 6.

Table 2: Differences between Leaders and Workers: Weights for non-leader workers to make them representative of workers invited to the sessions

	Observations (1)	Worker Mean (2)	Coeff. on Line Leader (3)	Coeff. on President (4)	p-value of diff, cols (3)-(4) (5)
Panel A: Demographics & Ability					
Female	1104	0.966	-0.117 [0.024]	-0.518 [0.001]	0.007
Age	1104	24.848	1.856 [0.003]	4.918 [0.002]	0.064
Migrant	1104	0.511	-0.042 [0.341]	-0.080 [0.445]	0.742
Education(Yrs)	1104	7.776	-0.184 [0.474]	0.794 [0.342]	0.260
Raven Score	1104	4.672	-0.104 [0.730]	1.722 [0.009]	0.010
Panel B: Employment & Minimum Wage Views					
Months in Factory	1104	27.369	13.242 [0.000]	18.848 [0.000]	0.132
Months in Sector	1104	47.503	25.003 [0.000]	28.509 [0.013]	0.767
Income (Last Month)	777	238915.3	-3157.6 [0.469]	-23064.7 [0.070]	0.143
Sewing Efficiency	777	0.011	-0.109 [0.068]	0.072 [0.647]	0.261
Preferred Min Wage	1104	7345.983	21.094 [0.897]	166.319 [0.484]	0.548
Expected Min Wage	1104	6443.731	-136.156 [0.262]	-85.870 [0.707]	0.801
Panel C: Personality traits					
Altruism	1104	1252.577	146.949 [0.000]	154.508 [0.124]	0.936
Extraversion	1104	3.400	0.240 [0.020]	0.484 [0.021]	0.126
Agreeableness	1104	3.874	0.215 [0.005]	0.113 [0.620]	0.698
Conscientiousness	1104	3.949	0.225 [0.001]	0.514 [0.002]	0.052
Neuroticism	1104	2.678	-0.302 [0.001]	-0.687 [0.016]	0.142
Openness	1104	2.980	-0.068 [0.301]	-0.476 [0.010]	0.037
BFI Index	1104	2.305	0.183 [0.000]	0.264 [0.023]	0.421
Grit	1104	2.576	0.849 [0.000]	1.194 [0.000]	0.022
Locus of Control	1104	4.033	0.192 [0.218]	0.352 [0.083]	0.365

Notes. Unit of observation is worker. Probability weights are used. Controlling for Factory fixed effects. *p*-values calculated using the wild cluster bootstrap-t method are reported in square brackets. For the Income variable, only those workers with non-missing value on sewing efficiency are considered.

Table 3: Differences between Leaders and Workers: Weights for non-leader workers to make them representative of population of sewing section workers

	Observations (1)	Worker Mean (2)	Coeff. on Line Leader (3)	Coeff. on President (4)	*p*-value of diff, cols (3)-(4) (5)
Panel A: Demographics & Ability					
Female	985	0.965	-0.118 [0.042]	-0.505 [0.001]	0.009
Age	985	24.753	2.052 [0.007]	5.253 [0.001]	0.050
Migrant	985	0.538	-0.051 [0.300]	-0.110 [0.281]	0.600
Education(Yrs)	985	7.846	-0.211 [0.463]	0.721 [0.404]	0.293
Raven Score	985	4.638	-0.145 [0.698]	1.630 [0.014]	0.010
Panel B: Employment & Minimum Wage Views					
Months in Factory	985	27.109	15.792 [0.000]	21.569 [0.001]	0.124
Months in Sector	985	48.848	26.336 [0.000]	30.590 [0.013]	0.722
Income (Last Month)	695	233303.9	-2595.1 [0.571]	-23507.0 [0.045]	0.109
Sewing Efficiency	695	-0.003	-0.107 [0.148]	0.070 [0.706]	0.319
Preferred Min Wage	985	7470.177	21.398 [0.908]	178.423 [0.408]	0.536
Expected Min Wage	985	6435.014	-50.710 [0.683]	-11.957 [0.960]	0.846
Panel C: Personality traits					
Altruism	985	1269.349	144.757 [0.001]	159.233 [0.137]	0.891
Extraversion	985	3.456	0.184 [0.136]	0.433 [0.052]	0.125
Agreeableness	985	3.905	0.206 [0.009]	0.105 [0.646]	0.699
Conscientiousness	985	3.922	0.239 [0.009]	0.527 [0.002]	0.054
Neuroticism	985	2.713	-0.278 [0.005]	-0.674 [0.013]	0.124
Openness	985	2.935	-0.043 [0.609]	-0.447 [0.020]	0.044
BFI Index	985	2.301	0.173 [0.000]	0.258 [0.017]	0.389
Grit	985	2.584	0.862 [0.000]	1.221 [0.000]	0.019
Locus of Control	985	4.112	0.220 [0.240]	0.382 [0.071]	0.361

Notes. Unit of observation is worker. Probability weights are used. Controlling for Factory fixed effects. *p*-values calculated using the wild cluster bootstrap-t method are reported in square brackets. For the Income variable, only those workers with non-missing value on sewing efficiency are considered.

Table 4: Differences between Leaders and Workers: No weights

	Observations	Worker Mean	Coeff. on Line Leader	Coeff. on President	*p*-value of diff, cols (3)-(4)
	(1)	(2)	(3)	(4)	(5)
Panel A: Demographics & Ability					
Female	1104	0.967	-0.112 [0.029]	-0.513 [0.002]	0.006
Age	1104	25.005	1.856 [0.002]	4.911 [0.003]	0.065
Migrant	1104	0.520	-0.047 [0.290]	-0.090 [0.387]	0.710
Education(Yrs)	1104	7.754	-0.156 [0.525]	0.811 [0.333]	0.268
Raven Score	1104	4.524	-0.089 [0.761]	1.784 [0.006]	0.009
Panel B: Employment & Minimum Wage Views					
Months in Factory	1104	29.888	12.886 [0.000]	18.405 [0.001]	0.132
Months in Sector	1104	50.621	24.813 [0.000]	28.222 [0.015]	0.774
Income (Last Month)	777	245382.8	-3105.672 [0.472]	-23091.46 [0.063]	0.136
Sewing Efficiency	777	0.018	-0.113 [0.067]	0.082 [0.605]	0.229
Preferred Min Wage	1104	7504.258	14.947 [0.929]	156.430 [0.523]	0.558
Expected Min Wage	1104	6545.961	-158.013 [0.193]	-111.554 [0.627]	0.815
Panel C: Personality traits					
Altruism	1104	1268.777	139.340 [0.000]	144.556 [0.142]	0.958
Extraversion	1104	3.392	0.245 [0.013]	0.488 [0.016]	0.130
Agreeableness	1104	3.862	0.220 [0.004]	0.121 [0.600]	0.705
Conscientiousness	1104	3.979	0.227 [0.001]	0.504 [0.001]	0.057
Neuroticism	1104	2.665	-0.295 [0.000]	-0.681 [0.017]	0.139
Openness	1104	3.001	-0.065 [0.309]	-0.475 [0.008]	0.036
BFI Index	1104	2.314	0.184 [0.000]	0.264 [0.024]	0.429
Grit	1104	2.571	0.857 [0.000]	1.207 [0.000]	0.021
Locus of Control	1104	4.008	0.202 [0.203]	0.354 [0.084]	0.390

Notes. Unit of observation is worker. No weights are used. Controlling for Factory fixed effects. *p*-values calculated using the wild cluster bootstrap-t method are reported in square brackets. For the Income variable, only those workers with non-missing value on sewing efficiency are considered.

Table 5: Group discussion experiment: consensus-building results with alternative weights and without weights

| | Deviation from median worker in discussion group | | | | | | | | Deviation from median union leader | | | | | | | |
| | Baseline Weight | | Invitee Weight | | Population Weight | | Unweighted | | Baseline Weight | | Invitee Weight | | Population Weight | | Unweighted | |
	(1) Preference	(2) Belief	(3) Preference	(4) Belief	(5) Preference	(6) Belief	(7) Preference	(8) Belief	(9) Preference	(10) Belief	(11) Preference	(12) Belief	(13) Preference	(14) Belief	(15) Preference	(16) Belief
Panel A: Leader																
Leader	-83.85	142.5	-81.37	108.4	-139.9	97.47	-74.27	113.8	-266.4***	-11.77	-215.0**	4.456	-284.0**	-10.91	-274.6***	20.31
	(116.4)	(93.6)	(114.6)	(73.9)	(146.6)	(85.3)	(116.1)	(82.5)	(103.2)	(74.0)	(100.7)	(70.3)	(114.5)	(96.5)	(95.4)	(74.7)
	[0.472]	[0.129]	[0.479]	[0.144]	[0.341]	[0.255]	[0.523]	[0.169]	[0.011]	[0.874]	[0.034]	[0.950]	[0.014]	[0.910]	[0.004]	[0.786]
	{0.514}	{0.155}	{0.511}	{0.164}	{0.375}	{0.323}	{0.547}	{0.200}	{0.023}	{0.878}	{0.047}	{0.941}	{0.028}	{0.909}	{0.005}	{0.783}
R-squared	0.211	0.251	0.204	0.242	0.167	0.134	0.188	0.198	0.330	0.342	0.335	0.340	0.399	0.320	0.323	0.312
p-value for testing Preference = Belief	0.077		0.111		0.109		0.133		0.018		0.049		0.023		0.007	
Panel B: Own versus External LL																
External Leader	3.099	179.0	22.43	178.5*	-2.961	167.3	5.066	192.4*	-210.8	49.56	-145.8	61.89	-227.7	27.57	-224.0**	102.7
	(157.4)	(128.5)	(155.6)	(98.9)	(177.2)	(108.3)	(156.3)	(111.3)	(127.8)	(108.5)	(120.2)	(95.2)	(137.9)	(113.5)	(108.4)	(105.9)
	[0.984]	[0.165]	[0.886]	[0.072]	[0.987]	[0.124]	[0.974]	[0.085]	[0.101]	[0.648]	[0.227]	[0.516]	[0.100]	[0.808]	[0.040]	[0.334]
	{0.988}	{0.181}	{0.912}	{0.084}	{0.995}	{0.177}	{0.977}	{0.101}	{0.139}	{0.658}	{0.271}	{0.535}	{0.132}	{0.818}	{0.057}	{0.336}
Own Leader	-140.1	119.0	-148.7	62.81	-222.0	55.56	-124.7	64.03	-302.3**	-50.92	-259.8**	-32.35	-317.5**	-33.55	-306.7***	-30.90
	(136.3)	(107.4)	(128.4)	(82.5)	(162.9)	(97.0)	(123.5)	(89.6)	(120.9)	(80.7)	(122.6)	(78.5)	(130.8)	(114.0)	(113.0)	(82.6)
	[0.305]	[0.269]	[0.248]	[0.447]	[0.175]	[0.568]	[0.314]	[0.476]	[0.013]	[0.529]	[0.035]	[0.681]	[0.016]	[0.769]	[0.007]	[0.709]
	{0.324}	{0.318}	{0.271}	{0.458}	{0.202}	{0.595}	{0.316}	{0.493}	{0.020}	{0.561}	{0.052}	{0.703}	{0.029}	{0.783}	{0.008}	{0.725}
R-squared	0.213	0.252	0.207	0.246	0.173	0.138	0.190	0.202	0.331	0.344	0.337	0.342	0.400	0.321	0.324	0.315
Control Mean	991.637	404.697	963.537	403.604	960.598	406.600	1025.236	441.509	1194.103	654.399	1158.355	625.396	1204.038	709.069	1232.665	655.189
Number of Observations	914	914	914	914	795	795	914	914	914	914	914	914	795	795	914	914
External=Own																
p-values	0.422	0.671	0.300	0.269	0.205	0.341	0.392	0.257	0.513	0.379	0.417	0.346	0.531	0.627	0.482	0.235
RI p-values	0.480	0.719	0.353	0.307	0.250	0.382	0.458	0.297	0.538	0.407	0.471	0.356	0.563	0.651	0.508	0.236
p-value for testing Preference = Belief																
External LL	0.304		0.318		0.349		0.244		0.060		0.134		0.082		0.017	
Own LL	0.063		0.108		0.094		0.163		0.050		0.091		0.049		0.030	
PDS Lasso Selected Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Notes. Unit of observation is worker. Standard errors are clustered at the group level, and are shown in parentheses. The *p*-values calculated using this standard error are in square brackets. The randomization inference (RI) *p*-values are in curly brackets based on 1000 randomization draws (Young, 2019). The last row in each panel reports the *p*-values for (inter-model) testing the equivalence of coefficients between the corresponding preference and belief regression. In Columns 1-8, the dependent variables are the absolute value of the endline minimum wage preference/belief minus the workers' median wage preference/belief at the discussion group level at baseline. In Columns 9-16, the dependent variables are the absolute value of the endline minimum wage preference/belief minus the median of leaders' preferences and beliefs at baseline at the factory level. Stratification fixed effects are Factory FEs × Union FEs. Control variables are selected by applying the post-double lasso control selection procedure.

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Table 6: Mobilization experiment: results with alternative weights and without weights

	Attendance at afternoon survey session			
	(1)	(2)	(3)	(4)
	Baseline Weights	Invitee Weights	Population Weights	Unweighted
Leader	-0.0135	-0.0244	-0.00964	-0.0368
	(0.045)	(0.045)	(0.050)	(0.040)
	<0.045>	<0.045>	<0.050>	<0.040>
	{0.760}	{0.578}	{0.850}	{0.349}
High Coord.	0.0790	0.0863	0.0610	0.0163
	(0.066)	(0.072)	(0.081)	(0.062)
	<0.066>	<0.072>	<0.081>	<0.062>
	{0.241}	{0.222}	{0.464}	{0.770}
Low Coord.	-0.0514	-0.0274	-0.0945	-0.0589
	(0.068)	(0.063)	(0.062)	(0.062)
	<0.068>	<0.063>	<0.062>	<0.062>
	{0.456}	{0.706}	{0.132}	{0.359}
Observation	0.0467	0.0603	-0.0487	0.0101
	(0.043)	(0.045)	(0.065)	(0.040)
	<0.043>	<0.045>	<0.065>	<0.040>
	{0.317}	{0.210}	{0.489}	{0.816}
R-squared	0.332	0.314	0.506	0.313
Control Mean	0.341	0.333	0.452	0.358
Observations	790	790	671	790
High Coord. = Low Coord.				
p-values	0.145	0.203	0.094	0.367
RI p-values	0.144	0.209	0.109	0.372
PDS Lasso Selected Controls	Y	Y	Y	Y

Notes. Unit of observation is worker. Standard errors clustered at the group level are reported in parentheses. The dependent variable is an indicator for whether the worker attends the minimum wage survey. Stratification fixed effects are Factory FEs × Discussion Group FEs. Control variables are selected by applying the post-double lasso control selection procedure.

4 Who are the union leaders: Robustness checks

We report additional robustness checks for Section 4 in the paper that provides descriptives on the union leaders.

Table 7: Differences between Leaders and Workers, with controls

	Observations	Worker Mean	Coeff. on Line Leader	Coeff. on President	p-value of diff, cols (3)-(4)
	(1)	(2)	(3)	(4)	(5)
Panel A: Demographics & Ability					
Female	1104	0.967	-0.136	-0.533	0.007
			[0.009]	[0.001]	
Age	1104	25.005	0.017	3.077	0.041
			[0.982]	[0.066]	
Migrant	1104	0.520	-0.011	0.038	0.687
			[0.826]	[0.692]	
Education(Yrs)	1104	7.754	0.141	0.650	0.544
			[0.544]	[0.444]	
Raven Score	1104	4.524	0.124	1.592	0.010
			[0.717]	[0.011]	
Panel B: Employment & Minimum Wage Views					
Months in Factory	1104	29.888	2.484	6.269	0.422
			[0.506]	[0.249]	
Months in Sector	1104	50.621	13.456	7.365	0.522
			[0.000]	[0.447]	
Income (Last Month)	777	245382.8	-2959.417	-24449.62	0.079
			[0.561]	[0.040]	
Sewing Efficiency	777	0.018	-0.094	0.055	0.490
			[0.372]	[0.846]	
Preferred Min Wage	1104	7504.258	75.421	175.284	0.651
			[0.751]	[0.454]	
Expected Min Wage	1104	6545.961	-211.319	-350.109	0.517
			[0.130]	[0.120]	
Panel C: Personality traits					
Altruism	1104	1268.777	205.197	320.024	0.254
			[0.001]	[0.029]	
Extraversion	1104	3.392	-0.000	0.000	0.444
			[0.627]	[0.683]	
Agreeableness	1104	3.862	-0.000	0.000	0.444
			[0.627]	[0.683]	
Conscientiousness	1104	3.979	-0.000	0.000	0.444
			[0.627]	[0.683]	
Neuroticism	1104	2.665	0.000	-0.000	0.444
			[0.627]	[0.683]	
Openness	1104	3.001	-0.000	0.000	0.444
			[0.627]	[0.683]	
BFI Index	1104	2.314	0.000	-0.000	0.444
			[0.627]	[0.683]	
Grit	1104	2.571	0.933	1.371	0.017
			[0.000]	[0.000]	
Locus of Control	1104	4.008	0.184	0.377	0.396
			[0.292]	[0.171]	

Notes. Unit of observation is worker. Probability weights used. All regressions include factory FE. The sewing efficiency and income regressions control for all variables included in the table. All other regressions control for all variables included in the table except for sewing efficiency and income. p-values calculated using the wild cluster bootstrap-t method.

**Table 8:** Wages: Presidents, line leaders, union and non-union workers

	Last month income (logs)			
	(1)	(2)	(3)	(4)
President	-0.121	-0.137	-0.145	-0.285
	(0.0886)	(0.122)	(0.127)	(0.277)
Line Leader	-0.0826	-0.107	-0.118	-0.197
	(0.121)	(0.137)	(0.144)	(0.243)
Union Worker	0.0473	0.0449	0.0405	0.0365
	(0.0411)	(0.0413)	(0.0413)	(0.0419)
R-squared	0.096	0.115	0.118	0.134
Number of obs.	771	771	771	771
Demographic controls	No	Yes	Yes	Yes
Skills controls	No	No	Yes	Yes
Personality controls	No	No	No	Yes

Notes. Probability weights and robust standard errors used. Controlling for factory FE. Sample restricted to sewing operators since we could collect data on their skills by developing a skill assessment module for sewing operators. The dependent variable is the last month total income in logs. Demographic controls are gender, age, education, raven score, migrant status, experience in factory and in garment sector. Skills controls are average sewing efficiency and skill grade. Personality controls are the Big Five traits, locus of control and grit.

5 Consensus building experiment: additional tables & figures

5.1 Additional figures and tables

Figure 3: Discussion group forms: Common bi- and tri-grams in responses to each discussion prompt
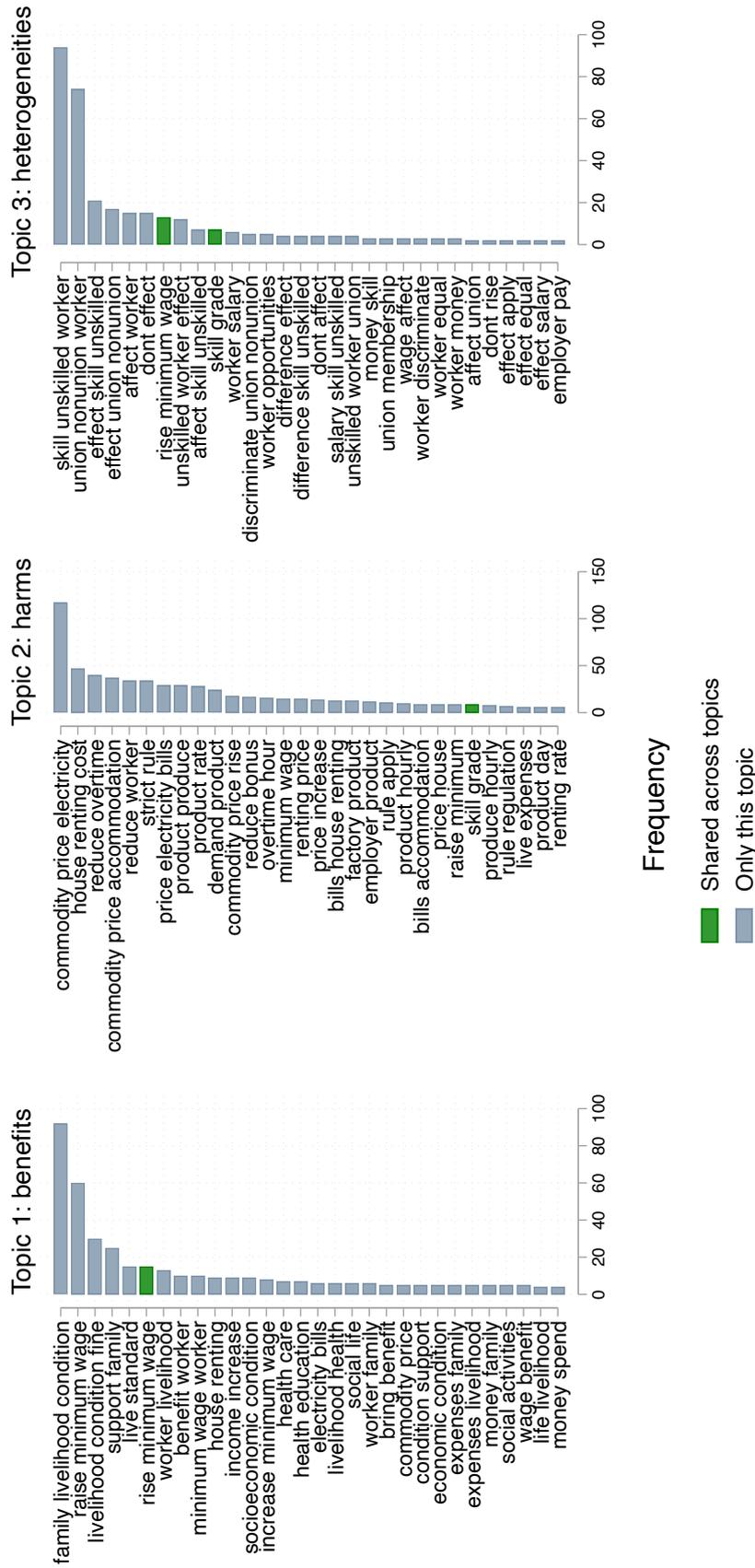
Notes. This figure shows the frequencies of common bi- and tri-grams in discussion groups' responses to 3 questions in the discussion prompt: 1) "How do you think that a minimum wage increase may benefit workers?", 2) "How do you think that a minimum wage increase may harm workers?", and 3) "Do you think it will affect different groups of workers, for example, skilled versus unskilled, union members versus non-members, differently?". Each discussion group was requested to write down their answer to each of 3 topics in a reporting template at the end of the group discussion.

Table 9: Heterogeneous treatment effects by union membership: Consensus building & mobilization experiments

	Consensus-building experiment				Mobilization experiment
	Deviation from median worker in discussion group		Deviation from median union leader		Attendance at afternoon session
	(1)	(2)	(3)	(4)	(5)
	Preference	Belief	Preference	Belief	
Leader, Union	-156.4	134.5	-298.4**	6.091	0.0139
	(121.9)	(124.3)	(116.2)	(84.8)	(0.047)
Leader, Non-Union	66.48	159.1**	-199.9	-48.62	-0.0661
	(161.5)	(78.6)	(138.5)	(91.1)	(0.059)
High Coord., No Union					0.0947
					(0.077)
Low Coord., No Union					-0.0845
					(0.085)
Observation, No Union					-0.0171
					(0.064)
High Coord., Union					0.0527
					(0.072)
Low Coord., Union					-0.0279
					(0.073)
Observation, Union					0.0668
					(0.051)
Union					-0.0434
					(0.063)
R-squared	0.213	0.251	0.330	0.342	0.374
Number of obs.	914	914	914	914	915
Control Mean, Union	1019.98	422.40	1249.43	635.37	0.29
Control Mean, Non-Union	940.80	372.94	1094.85	688.53	0.30
p-value					
Leader: Union = Non-Union	0.140	0.848	0.505	0.571	0.271
High Coord: Union = Non-Union					0.666
Low Coord: Union = Non-Union					0.595
Observation: Union = Non-Union					0.301

Notes. Unit of observation is worker. Probability weights are used. Standard errors clustered at the group level are reported in parentheses. The dependent variables in columns 1–2 are the deviation from the median discussion group worker's views and preferences respectively. The dependent variables in columns 3–4 are the deviation from the factory median of baseline leaders' views and preferences respectively. Columns 1-4 control for the baseline value of the dependent variable, strata fixed effects, and group size fixed effects. The dependent variable in column 5 is an indicator for attendance at the afternoon session. Stratification fixed effects for columns 1–4 are Factory FEs × Union FEs and for column 5 is Factory FEs × Discussion Group FEs. Column 5 additionally controls for the interactions between non-union status and inclusion in the leader observation arm, high coordination arm, and low coordination arm of the experiment.

5.2 Balance tables dropping workers who incorrectly reported being line leaders

We report balance tests for the subset of workers with non-missing data for the question "Was there a LL in your discussion group?" in the follow-up survey after the group discussions. The sample of workers with non-missing data for this question is smaller than the full worker sample (n=914) because 18% of workers incorrectly reported that they were line leaders in the follow-up survey and were not asked this question.

Table 10: Share of workers who answer that they are a LL in the follow-up survey

	(1)	(2)	(3)	(4)	(5)
	Mean / (SE)			**Difference in means / (p-value)**	
Variable	Control	Own LL	External LL	Diff Own-Control	Diff External-Control
Correctly answer that they are not a LL/EC	0.806	0.887	0.844	0.014	-0.008
	(0.396)	(0.318)	(0.364)	(0.377)	(0.615)
Observations	425	284	206	709	631

Notes. Probability weights are used. Standard errors clustered at the group level are reported in parentheses. Controlling for factory FE x union status. Columns (1)-(3) show the mean share of workers who correctly answer that they are not a LL/EC in the follow-up survey for each sample: control (Column 1), own LL (Column 2), and external LL (Column 3). Standard errors are shown in parenthesis. Columns (4)-(6) show the differences in means across samples: the difference between own and control samples (Column 4), and the difference between external and control (Column 5). P-values based on standard errors clustered at the group level are in parenthesis.

Table 11: Balancing table using only the workers who correctly answer that they are not a LL/EC in the follow-up survey

	(1)	(2)	(3)	(4)	(5)
		Mean / (SE)		Difference in means / (p-value)	
Variable	Control	Own LL	External LL	Diff Own-Control	Diff External-Control
Gender	1.028	1.037	1.062	0.006	0.021
	(0.165)	(0.189)	(0.242)	(0.653)	(0.315)
Age	25.518	23.457	24.482	-1.916***	-1.147**
	(6.552)	(5.190)	(5.566)	(0.000)	(0.037)
Education (Yrs)	7.620	7.997	7.687	0.386	-0.013
	(2.711)	(2.909)	(2.798)	(0.119)	(0.961)
Literacy	2.077	2.074	2.113	-0.003	0.036
	(0.323)	(0.347)	(0.426)	(0.927)	(0.295)
Raven Score	4.558	5.033	4.792	0.514**	0.410
	(2.736)	(2.785)	(2.771)	(0.022)	(0.162)
Months in Factory	28.313	25.742	30.186	-0.095	1.217
	(33.021)	(28.880)	(38.408)	(0.964)	(0.607)
Months in Sector	49.037	39.159	49.394	-6.336**	1.607
	(48.482)	(37.473)	(52.833)	(0.032)	(0.720)
Min. Wage Belief	6,509.660	6,332.367	6,376.171	-129.236	-29.120
	(1,036.336)	(1,064.034)	(1,044.922)	(0.106)	(0.723)
Min. Wage Preference	7,496.740	7,216.832	7,295.683	-185.740	-112.789
	(1,592.867)	(1,524.021)	(1,607.800)	(0.166)	(0.419)
Absolute diff., worker and median leader min. wage preference	1,301.959	1,215.885	1,229.245	-93.329	-59.061
	(1,194.818)	(1,024.726)	(1,070.047)	(0.384)	(0.532)
Absolute diff., worker and median leader min. wage belief	754.704	739.031	907.145	-54.891	178.393*
	(829.345)	(812.436)	(960.233)	(0.451)	(0.055)
Grade	2.662	2.879	2.793	0.056	-0.172*
	(1.434)	(1.412)	(1.515)	(0.492)	(0.075)
Last Month Income	242561.453	233188.438	235591.016	-1,746.769	-1,880.242
	(38,239.953)	(38,216.246)	(39,089.641)	(0.453)	(0.507)
Observations	332	243	171	575	503

Notes. Probability weights are used. Standard errors clustered at the group level are reported in parentheses. Controlling for factory FE x union status. Columns (1)-(3) show the mean of demographic, ability, employment and minimum wage views variables for each sample: control (Column 1), own LL (Column 2), and external LL (Column 3). Standard errors are shown in parenthesis. Columns (4)-(6) show the differences in means across samples: the difference between own and control samples (Column 4), and the difference between external and control (Column 5). P-values based on standard errors clustered at the group level are in parenthesis. Statistics use only the workers who correctly answer that they are not a LL/EC in the follow-up survey.

5.3 Placebo and robustness tests for consensus-building experiment

We conduct a placebo test for the main results. For each control discussion group, we identify the worker with the highest predicted leader similarity score, and we assign this worker as the placebo leader. For leader groups, we use the assigned leader's baseline view. We test whether we find greater convergence in treatment groups to the real leader's view compared to the placebo leader's view. Column (1) of Table 12 shows that we find much stronger convergence to the real leaders' minimum wage preferences relative to the placebo leaders' preferences. The evidence of convergence is qualitatively stronger for the own leader treatment arm, although there is suggestive evidence of greater convergence to the external leaders' preferences compared to the placebo control leaders' (column (2)). Consistent with our main results, we find no evidence of effects on expectations about the likely minimum wage level (columns (3) and (4)).

We also conduct multiple robustness checks. First, Table 13 shows that results are very similar if we use the mean of views rather than the median as used in our main specification. Second, we check whether union leaders have effects on group discussion outcomes even conditional on the predicted leader similarity of the workers in their discussion group. We show that our results hold controlling for the average or the maximum of the similarity score among workers in the discussion group (Table 14). We also run a flexible specification where we rank group participants by their similarity score and control for the similarity of each rank (Table 15, Panel A). It is clear that leaders influence groups' outcomes above and beyond even other potentially prominent individuals in the group.

Third, the results hold when controlling for the leader or placebo leader similarity (Table 15, Panel B). Fourth, we conduct a robustness test for our leader similarity measure, which is that we drop one family of variables in the prediction model at a time (i.e., demographics, personality traits, psychological traits, and Raven score) and re-estimate the results. Our results are robust to dropping each family of variables, as reported in Table 18.

Finally, leaders are somewhat more likely than workers to be men (12.9% compared to 3.3%). Gender is an observable characteristic that may be an alternative channel through which leaders affect workers or may complement or substitute for leadership. Consequently, we separately test for effects of female and male leaders in Table 16. While the smaller sample of male leaders limits our precision for this group, the effects do not provide evidence of heterogeneity except for the deviation from the union's beliefs about

the minimum wage; in addition to inducing convergence in preferences to the union's ideal (of a similar magnitude as female leaders), male leaders also induce convergence in beliefs to that of the union's leaders. As the leader's gender also affects the group's gender composition, which may affect consensus building through other channels than leadership, Table 16 also shows that our main results are robust to controlling for groups' gender composition.

Robustness checks for leaders' traits and charisma. We examine the real leaders' similarity relative to placebo control leaders, whom we define in the same way as the first placebo test above. We use the similarity score to partition the control group into high and low placebo leader similarity. Table 17 presents the results. For minimum wage preferences and beliefs, we first use the baseline construction of the outcome, then we exclude the individual leader's views from the union views and finally we use deviation from the placebo leader view for the control groups. Across numerous specifications, our main results continue to hold: high-similarity union leaders are the most effective at inducing convergence to the union's preferred minimum wage and increasing engagement in the discussion. We cannot reject that the effects of low-similarity union leaders and placebo leaders are the same, which is consistent with our finding that they are indistinguishable in terms of their similarity to union presidents. We also conduct a robustness test for our leader similarity measure, which is that we drop one family of variables in the prediction model at a time (i.e., demographics, personality traits, psychological traits, and Raven score) and re-estimate the results. Our results are robust to dropping each family of variables as shown by Table 18 below.

Table 12: Placebo leaders (workers with highest leader similarity) in control groups

| | Predicted Leader Control Deviation from median union leader | | | |
| | (1) | (2) | (3) | (4) |
	Preference		Belief	
Leader	-256.7**		136.1	
	(122.0)		(83.68)	
Own Leader		-288.3**		127.6
		(143.0)		(95.73)
External Leader		-206.8		149.6
		(153.7)		(109.3)
R-squared	0.286	0.286	0.485	0.485
Control Mean	1395.362	1395.362	684.124	684.124
Number of obs.	833	833	833	833
p-values				
External=Own:		0.628		0.850

Notes. Unit of observation is worker. Probability weights are used. Standard errors clustered at the group level are reported in parentheses. For groups with leaders, the dependent variables are the absolute value of the endline minimum wage preference/belief minus the median of leaders' preferences and beliefs at baseline at the factory level. For control groups, the dependent variables are the absolute value of the endline minimum wage preference/belief minus baseline preference/belief of the worker of highest similarity (placebo leader). Sample restricted to workers who are not placebo leaders. Stratification FEs included: Factory FEs x Union FEs. Controlling for group size FE.

Table 13: Group Discussions: deviation from mean views

	Deviation from workers' mean in discussion group		Deviation from union leaders' mean in factory	
	(1) Preferences	(2) Beliefs	(3) Preferences	(4) Beliefs
Panel A: Leader				
Leader	-57.74	67.30	-223.0**	-19.82
	(84.88)	(54.77)	(94.63)	(55.04)
R-squared	0.218	0.347	0.246	0.340
Control Mean	987.455	506.739	1130.078	712.308
Number of obs.	914	914	914	914
Panel B: Own versus External LL				
Own Leader	-127.4	40.95	-248.9**	-25.43
	(104.1)	(69.88)	(105.4)	(64.38)
External Leader	50.03	108.0	-182.9	-11.05
	(112.0)	(72.04)	(111.2)	(76.99)
R-squared	0.224	0.348	0.247	0.340
Control Mean	987.455	506.739	1130.078	712.308
Number of obs.	914	914	914	914
p-values				
External=Own:	0.189	0.468	0.532	0.869

Notes. Unit of observation is worker. Probability weights are used. Standard errors clustered at the group level are reported in parentheses. In Col. 1-2, the dependent variables are the absolute value of the endline minimum wage preference/belief minus the workers' mean wage preference/belief at the discussion group level at baseline. In Col. 3-4, the dependent variables are the absolute value of the endline minimum wage preference/belief minus the mean of leaders' preferences and beliefs at baseline at the factory level. Stratification FEs included: Factory FEs x Union FEs. Controlling for group size FE.

Table 14: Average and max discussion group leader similarity and union leader

	Deviation from median union leader	
	(1) Preference	(2) Belief
Panel A: Average discussion group leader similarity		
Leader	-198.1***	-20.52
	(68.75)	(42.08)
Average Group Similarity	-7889.4***	1019.3
	(1511.1)	(1530.9)
R-squared	0.344	0.342
Panel B: Maximum discussion group leader similarity		
Leader	-204.3***	-22.81
	(68.73)	(41.84)
Max Similarity in Group	-1496.5***	268.6
	(307.2)	(321.7)
R-squared	0.342	0.343
Control Mean	1194.103	654.399
Number of obs.	914	914

Notes. Unit of observation is worker in all columns. The dependent variables represent the absolute value of the endline minimum wage preference/belief minus the workers' median wage preference/belief at the discussion group level at baseline. Probability weights are used. Bootstrap standard errors clustered at the group level are reported in parentheses. Controlling for group size FE and stratification FEs (Factory FEs x Union FEs).

Table 15: Robustness to flexibly controlling for group and leader similarity

	Deviation from median union leader	
	(1) Preference	(2) Belief
Panel A: Flexibly controlling for Individual President Similarity		
Leader	-176.8***	-18.30
	(67.76)	(42.64)
Similarity of Member w/ Rank=1	-1245.5***	347.5
	(314.8)	(353.4)
Similarity of Member w/ Rank=2	7058.2*	-1021.5
	(3717.9)	(3160.4)
Similarity of Member w/ Rank=3	-67187.5***	-5010.5
	(22904.7)	(18472.9)
Similarity of Member w/ Rank=4	-89949.5	-23648.9
	(74186.7)	(64674.4)
R-squared	0.358	0.344
Panel B: Controlling for Placebo President Similarity		
Leader	-241.8***	-23.81
	(67.26)	(41.05)
Leader or placebo leader similarity	-856.1***	426.9
	(299.8)	(345.9)
R-squared	0.333	0.344
Control Mean	1194.103	654.399
Number of obs.	914	914

Notes. Unit of observation is worker in all columns. The dependent variables represent the absolute value of the endline minimum wage preference/belief minus the workers' median wage preference/belief at the discussion group level at baseline. Probability weights are used. Bootstrap standard errors clustered at the group level are reported in parentheses. Controlling for group size FE and stratification FEs (Factory FEs x Union FEs).

Table 16: Robustness to gender of leader and share of men in the group discussion

| | Deviation from median union leader | | | |
| | (1) | (2) | (3) | (4) |
	Preference		Belief	
Panel A: Leader				
Female Leader	-248.2**		10.66	
	(114.4)		(78.48)	
Male Leader	-368.8**		-190.8	
	(186.6)		(123.4)	
Leader		-243.4**		28.95
		(105.5)		(75.25)
Male share in group		-582.3		-1032.7***
		(751.3)		(347.9)
R-squared	0.331	0.332	0.347	0.356
P-val: Female Leader = Male Leader	0.548		0.109	
Panel B: Own versus External LL				
Own Female Leader	-304.7**		-28.16	
	(136.4)		(86.65)	
Own Male Leader	-211.5		-158.4	
	(237.6)		(128.0)	
External Female Leader	-142.2		77.39	
	(140.7)		(119.7)	
External Male Leader	-743.6***		-265.8	
	(208.6)		(291.6)	
Own Leader		-280.4**		-12.62
		(127.0)		(81.08)
External Leader		-184.9		95.46
		(123.4)		(111.2)
Male share in group		-593.8		-1046.5***
		(746.0)		(348.1)
R-squared	0.336	0.333	0.349	0.359
Control Mean	1194.103	1194.103	654.399	654.399
Number of obs.	914	914	914	914
P-val: Female Own = Male Own	0.730		0.329	
P-val: Female External = Male External	0.010		0.279	
P-val: Female Own = Female External	0.309		0.411	
P-val: Male Own = Male External	0.089		0.737	
P-val: Own Leader = External Leader		0.498		0.352

Notes. Unit of observation is worker in all columns. The dependent variables represent the absolute value of the endline minimum wage preference/belief minus the workers' median wage preference/belief at the discussion group level at baseline. Probability weights are used. Standard errors clustered at the group level are reported in parentheses. Controlling for group size FE and stratification FEs (Factory FEs x Union FEs).

Table 17: Placebo control group leaders, leader similarity, and main results, control group leader is member with highest similarity

	Deviation from Union Median (1)	Deviation Exc. Leader (2)	Deviation from Union or Placebo leader (3)	Deviation from Union Median (4)	Deviation Exc. Leader (5)	Deviation from Union or Placebo leader (6)
		Preference			Belief	
Leader, High Similarity	-365.2**	-323.0**	-509.1***	-54.40	-43.93	64.03
	(142.1)	(144.1)	(183.4)	(114.8)	(115.9)	(116.4)
Leader, Low Similarity	-278.5*	-250.8*	-470.4**	-26.31	-6.790	33.80
	(148.1)	(149.9)	(196.7)	(115.3)	(115.0)	(121.2)
Control, High Similarity	-58.18	-87.75	-262.2	-25.73	-20.89	-23.89
	(164.7)	(165.9)	(207.0)	(117.1)	(117.1)	(145.1)
R-squared	0.323	0.319	0.291	0.342	0.340	0.342
Control Mean	1135.491	1188.522	1395.362	713.572	656.318	684.124
Number of obs.	833	833	833	833	833	833
p-values						
High Similarity= Low:	0.507	0.582	0.773	0.796	0.733	0.792
Leader High= Control High:	0.037	0.102	0.118	0.781	0.825	0.503
Leader Low= Control High:	0.176	0.312	0.284	0.996	0.890	0.710

Notes. Unit of observation is worker in all columns. The variable *Leader, High Similarity* is a binary variable equal to 1 if the estimated probability of a line leader having similar attributes to president is above the median in the treatment group. The probabilities are estimated for each worker based on a probit model, which includes demographics (gender, age, education, migrant(0/1), months in factory/sector), personality metrics (extraversion, agree- ableness, conscientionsness, neuroticism, openness) and psychological metrics (raven, score, grit, altruism, locus of control). In the control group, the worker with the highest probit scores is considered as the leader (placebo leader). The variable *Control, High Similarity* is a binary variable equal to 1 if the placebo leader's probit score is above the median in the control group. Sample restricted to workers who are not placebo leaders. The dependent variables in Cols. 1-6 represent the deviation from the factory median of baseline leaders' preferences and beliefs (Cols. 1 and 4, respectively); Cols. 2 and 5 exclude the individual leader view from construction of the factory median for the leader groups and Cols. 3 and 6 use deviation from the placebo leader view for the control groups. Probability weights are used. Standard errors clustered at the group level are reported in parentheses. Controlling for group size FE and stratification FEs (Factory FEs x Union FEs).

Table 18: Taking out families of variables from president probit model

| | Deviation from median union leader | |
	Preference	Belief
Panel A: Probability estimated without demographic controls		
Leader, High Similarity	-315.2***	67.93
	(110.2)	(91.65)
Leader, Low Similarity	-223.1*	-81.42
	(129.3)	(88.39)
R-squared	0.331	0.347
P-val: High Similarity= Low Similarity	0.470	0.138
Panel B: Probability estimated without personality metrics		
Leader, High Similarity	-368.5***	-92.18
	(116.2)	(84.58)
Leader, Low Similarity	-162.8	68.80
	(130.1)	(95.45)
R-squared	0.335	0.348
P-val: High Similarity= Low Similarity	0.146	0.136
Panel C: Probability estimated without psychological metrics		
Leader, High Similarity	-359.7***	-11.73
	(107.4)	(83.66)
Leader, Low Similarity	-166.2	-11.81
	(141.8)	(97.11)
R-squared	0.334	0.342
P-val: High Similarity= Low Similarity	0.181	0.999
Panel D: Probability estimated without Raven score		
Leader, High Similarity	-347.4***	-41.99
	(115.0)	(89.58)
Leader, Low Similarity	-186.1	17.99
	(129.2)	(92.68)
R-squared	0.333	0.343
P-val: High Similarity= Low Similarity	0.231	0.577
Control Mean	1194.103	654.399
Number of obs.	914	914

Notes. Unit of observation is worker. The variable *Leader, High Similarity* is a binary variable equal to 1 if the estimated probability of a line leader having similar attributes to president is above the median. The probabilities are estimated for each worker based on a probit model, which includes demographics (gender, age, education, migrant(0/1), months in factory/sector), personality metrics (extraversion, agreeableness, conscientionsness, neuroticism, openness) and psychological metrics (raven, score, grit, altruism, locus of control). The dependent variables represent the absolute value of the endline minimum wage preference/belief minus the median of leaders' preferences and beliefs at baseline at the factory level. Probability weights are used. Standard errors clustered at the group level are reported in parentheses. Controlling for group size FE and stratification FEs (Factory FEs x Union FEs).

6 Mobilization experiment: List of variables eligible to be included in regression forest prediction analysis

- Demographics-related:

    - Age

    - Female

    - Raven Score

    - Migrant

    - Years of education

    - Perceived relationship with family

- Personality and psychology:

    - Extraversion (Big Five Inventory (BFI))

    - Agreeableness (BFI)

    - Conscientiousness (BFI)

    - Neuroticism (BFI)

    - Openness (BFI)

    - Grit

    - Altruism (amount of donation to orphanage)

    - Locus of control (perceived degree of choice in life)

- Employment:

    - Tenure in factory

    - Experience in sector

    - Total income from factory (previous month)

    - Base wage from factory (previous month)

    - Position type

    - Skill grade indicators

    - Perceived relationship with management

- Indicator for expecting to work in the same factory in one year

- Union participation and views:

  - Indicator for being a union member
  - Perceived relationship with union
  - Perceived relationship with non-union members in factory
  - Number of times met a union leader outside of factory for social activities (past 4 months)
  - Number of times sought work-related advice from a union leader (past 4 months)
  - Number of union meetings attended (past 4 months)
  - View on whether men or women are better union presidents (or neutral)
  - View on whether men or women are better union line leaders (or neutral)

- Group discussion:

  - Baseline minimum wage guess (winsorized)
  - Baseline minimum wage ideal (wisorized)
  - Mean of workers' self-reported engagement in group discussion, leaving out focal worker's own report
  - Focal worker's self-reported engagement in group discussion
  - Indicator for whether worker and line leader from same production line if line leader in group discussion
  - Count of workers in discussion group from same production line

- Other:

  - Factory fixed effects
 - Number of times met co-workers outside of factory for social activities (past 4 months)

7 Mobilization and leading by example experiment (presidents and line leaders)

We report the design and results of the mobilization and leading-by-example experiment we conducted with union presidents and Line Leaders (LLs) in Session 1. The context

is for the president to motivate LLs to recruit workers for the survey taking place the next Sunday (Session 2) and to encourage LLs to produce posters for CTUM's annual International Women's Day activities (March 8, 2020). As part of the Session 1 activities, LLs are given 30 minutes to produce similar posters (one slogan per poster, all LLs choose slogans from the same list). The goal of the experiment is to test the motivation and leading-by-example channels of leadership.

The experiment consists of a cross-cutting design with two interventions, as Figure 4 illustrates. In the Speech by President arm, LLs receive a motivational speech by the president of their union, where the president is given a standardized set of instructions with talking points by the research staff. The Speech by President arm is to test whether motivation by the president increases LLs' effort to recruit workers. In the Poster by President arm, a sample poster about CTUM's annual International Women's Day activities made by the President is shown to the LLs, and they are informed that the president made it. In order to isolate the effect of being informed about the president doing the poster versus simply seeing a sample poster, the other arms are shown a sample poster made by research staff. The Poster by President arm is to test whether leading by example increases LLs' effort to prepare posters for the CTUM.

Figure 4: Session 1: Mobilization and Leading by Example
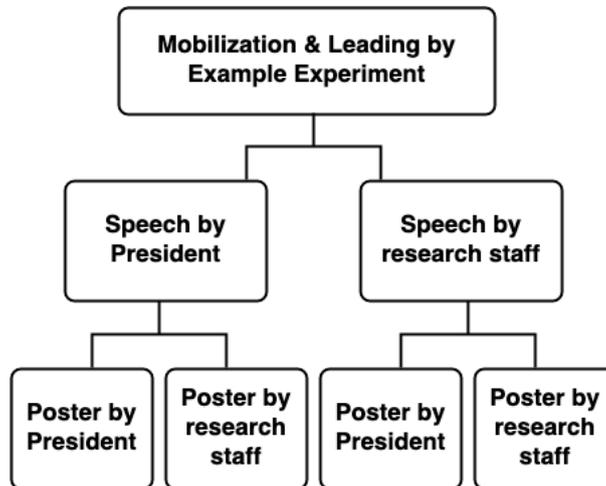
We estimate the following model:

$$Y_i = \alpha_0 + \alpha_2 Speech_i + \alpha_1 Poster_i + \alpha_3 Speech_i \times Poster_i + \mathbf{X}_i'\beta + \epsilon_i \tag{1}$$

where Y_i is an outcome of LL i representing either the share of workers showing up in session 2 (out of the total number assigned to invite) or the number of completed

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posters. X_i includes factory FE and other controls depending on the outcome (see Table 19 notes). Robust standard errors are reported. We weight observations so that they are representative at the factory level. As mentioned in Section 3.2 of the paper, due to the COVID-19 pandemic, we could only cover 60% of the sample and given the much lower number of LLs compared to workers, we are underpowered to detect effects in these experiments.

Table 19 reports the results. Beginning with column (1), the number of observations is less than the 170 LLs who took the survey because we lose: the LLs from the final two factories that only completed Session 1; 13 LLs who could not come to take the survey in session 1 but took it in session 2; 26 LLs who were mistakenly not assigned a line to invite or assigned the same line as at least one other LL. For the worker mobilization outcome, we mainly focus on looking at the impact of the Speech arm, in which LLs received a motivational speech by the president about mobilizing workers to session 2. In addition to the lack of statistical power, the null results may be explained by contamination across the experimental arms since individual interviews with the LLs revealed that in a number of factories, presidents organized a second meeting with all LLs to discuss how to invite the workers, hence likely nullifying any potential effect of the experimental speech.

Column (2) reports the number of completed posters. The number of observations is less than the 170 LLs who took the survey because we lose the 13 LLs who took the survey in session 2 and 13 LLs who had to leave before the poster session due to personal/unexpected reasons. The results suggest a negative effect of both the speech and the poster arms, suggesting that the president intervention might have crowded out the LLs' actions. However, the standard errors are wide, and we are underpowered to make more definite statements.

Table 19: Mobilization (of workers to Session 2) and Leading by Example Experiment

|	Mobilization of Workers	Poster of Activities
	Share Workers (1)	No. Completed Posters (2)
Speech	0.010	-1.848
	(0.055)	(2.386)
	[0.856]	[0.440]
	{0.853}	{0.450}
Poster	0.073	-1.784
	(0.040)	(2.496)
	[0.068]	[0.476]
	{0.078}	{0.474}
Speech × Poster	-0.090	-0.826
	(0.076)	(3.478)
	[0.240]	[0.813]
	{0.280}	{0.812}
R-squared	0.624	0.313
Control Mean	0.615	16.287
Number of Obs.	117	144
p-values		
Poster = Speech	0.217	0.977
Poster + Speech + Poster × Speech = 0	0.900	0.131
RI *p*-values		
Poster = Speech	0.255	0.930
Poster + Speech + Poster × Speech = 0	0.550	0.160
MDE	0.178	3.545

Notes. Unit of observation is LL. Probability weights are used. Robust standard errors are reported in parentheses. Conventional *p*-values are in square brackets, while randomization inference *p*-values (Young, 2019) are in curly brackets. Dependent variables in Columns 1 is the share of workers present out of total number each LL invited. The dependent variable in Column 2 is the number of completed posters without mistakes. Factory fixed effects are controlled. Additional control variables in Columns 1 are the number of workers each LL was assigned to invite and the share of union members in the line. Additional control variable in Columns 2 is an indicator for whether LL could not write well. MDE (minimal detectable effect) is determined from power calculations using planned sample size of 1792 workers, 358 discussion groups, 308 LL, and 28 unions, at a 10% significance level and 80% power.

8 Public good experiment (line leaders and workers)

We ran a two-part public good experiment: the first part was with the LLs and the second was with the workers. In both parts of the experiment, we privately endow participants with 1500 Kyat and ask how much they want to keep and how much they want to donate

to buy sewing machines for CTUM Skills Training Centre.[5] However, participants can receive additional information depending on the treatment arm they are allocated to. The experiment is designed to test the leading-by-example channel of leadership (Hermalin (1998); Potters, Sefton and Vesterlund (2007)): on the leaders' side, we investigate to what extent leaders are willing to donate more when their average contribution is disclosed to workers from their same factory versus a different factory; on the followers' side, we test whether leaders' signaling role varies depending on whether the leaders are from the same versus a different factory. However, as shown in Figure 5, only 7% of LLs and 18% of workers donated less than the full amount (regardless of treatment arm).

Figure 5: Censoring in the Public Good Experiment
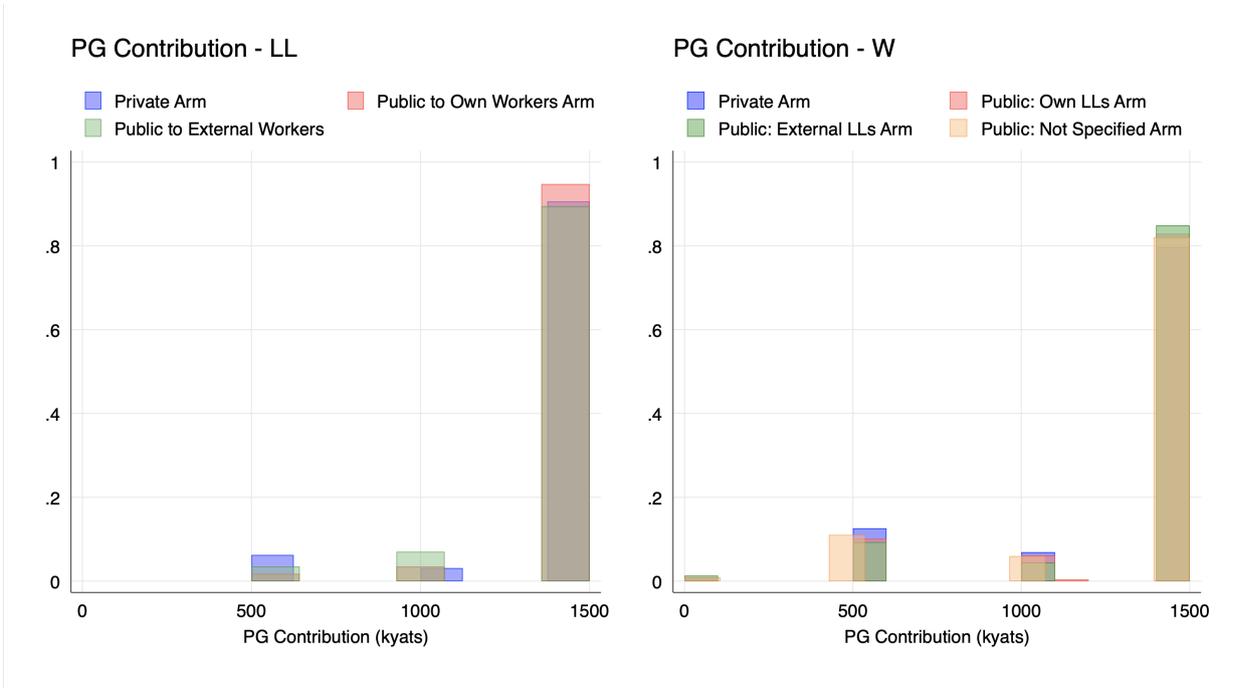
Notes. This figure plots the response to the Public Good (PG) Contribution question, separately by treatment arm. The figure on the left is for the experiment with workers and the figure on the right is for the experiment with the line leaders.

8.1 Public good: line leaders

Figure 6 illustrates the experimental design for the LLs. In the Contribution Public - Same Factory arm, we tell LLs that their contribution is observed by workers from their factories. In the Contribution Public - Different Factory arm we tell LLs that their contribution is observed by workers from another factory. The Contribution Private

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[5]The CTUM Skills Training Centre serves all garment workers, not only union members.

arm is the control group, where the LL contribution is not observed by anyone. The public contribution arms are to test whether the ability to signal the marginal value of a donation to workers increases leaders' contribution. The distinction between whether the contribution is disclosed to the same factory versus a different factory is to test whether this would depend on whether the decision is observed by workers from their own or another factory. We estimate the following model:

$$Y_i = \alpha_0 + \alpha_1 Public\,Same\,Factory_i + \alpha_2 Public\,Diff.\,Factory_i + \mathbf{X}_i'\beta + \epsilon_i \qquad (2)$$

where Y_i is the amount donated to CTUM in Myanmar kyats (out of the 1500 endowment) and X_i includes factory FE. Standard errors are robust. We weigh observations so that they are representative at the factory level. Table 20 reports the results. In Column (1), we group together the two treatment arms, i.e. the contribution being public, and in Column (2) we report the full specification as in Equation 2. A specification using a binary outcome of full donation (1500 kyats) versus partial or no donation yields similar results.
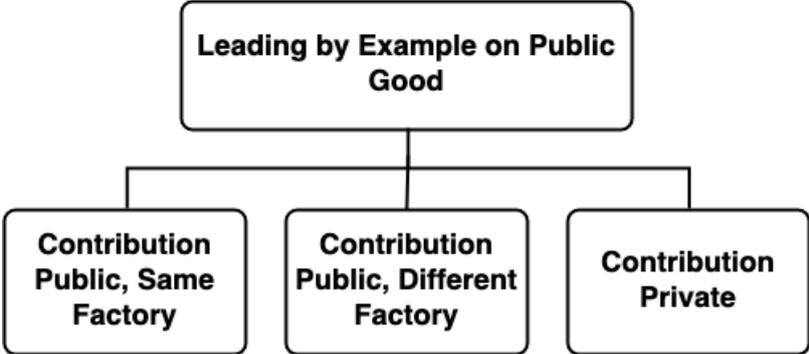
Figure 6: LLs: Leading by Example on a Public Good

**Table 20:** Public Good Experiment: LL Results

	PG Amount the Line Leader Donated	
	(1)	(2)
Contribution Public	8.758	
	(32.90)	
Contribution Public, Same Factory		8.097
		(33.07)
Contribution Public, Different Factory		9.497
		(40.13)
R-squared	0.236	0.236
Mean	1447.1	1447.1
Control Mean	1421.9	1421.9
Number of obs.	170	170
p-values		
Public, Same Factory = Public, Diff. Factory:		0.965

Notes. Unit of observation is LL. Probability weights and robust standard errors used. Controlling for factory FE. The outcome variable is measured in Myanmar kyats.

8.2   Public good: workers

Figure 7 illustrates the experimental design for the public good experiment with the workers. In the Told Leader Contribution - Same Factory arm, workers are told the average LLs' contribution from their factory (from the public arm only); in the Told Leader Contribution - Different Factory arm, workers are told the average LLs' contribution from another factory (from the public arm only); in the Told Leader Contribution - Factory not Specified arm, workers are told the average LLs' contribution amount from the other factory, however, it is not specified which factory. For all treatment arms, there is minimal variation in the donation amount shown (as already evident from Figure 5): the median donation amount shown is 1500 kyats and the interdecile range of the donation amount shown is 300 kyats. The goal is to test whether observing leaders' contributions induces greater contributions by the workers and whether this depends on whether workers observe contributions by LLs from their own factory or LLs from other factories.

Figure 7: Workers: Signaling in Sequential Provision of Public Good
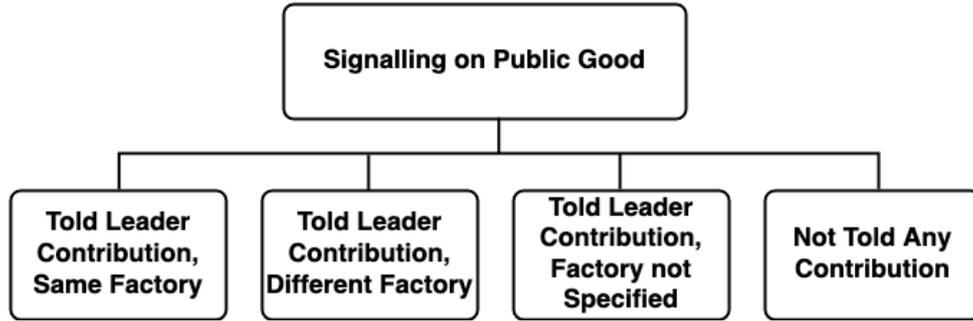
In Table 21, we report the results from estimating the following model:

$$Y_i = \alpha_0 + \alpha_1 Told\,Same_i + \alpha_2 Told\,Diff_i + \alpha_3 Told\,Not\,Specified_i + \beta X_i + \epsilon_i \quad (3)$$

where Y_i is the amount donated to CTUM in Myanmar kyats (out of the 1500 endowment), X_i includes factory times union membership FE. Standard errors are robust. We weigh observations so that they are representative at the factory level. Table 21 reports the results. In Column (1), we group together the 3 treatment arms to just test the effect of being told about the LLs' contribution. In Column (2), we separate out the arm where the factory was not specified versus the other two arms where a factory was specified. Finally, in Column (3) we report the full specification as in Equation 3. A specification using a binary outcome of full donation (1500 kyats) versus partial or no donation yields similar results.

Table 21: Public Good Experiment: Worker Results

	PG Amount the Worker Donated		
	(1)	(2)	(3)
Told Leader Contribution	36.55		
	(26.51)		
Told Leader Contribution, Factory specified		40.38	
		(27.88)	
Told Leader Contribution, Factory not specified		28.57	28.58
		(32.95)	(32.97)
Told Leader Contribution, Same Factory			37.22
			(31.91)
Told Leader Contribution, Different Factory			43.61
			(32.03)
R-squared	0.186	0.186	0.186
Mean	1348.8	1348.8	1348.8
Control Mean	1327.2	1327.2	1327.2
Number of obs.	916	916	916
p-values			
Factory = Factory not specified:		0.675	
Same Factory = Diff. Factory = Factory not specified:			0.896

Notes. Unit of observation is worker. Probability weights and robust standard errors used. Controlling for factory times union FE. The outcome variable is measured in Myanmar kyats.

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