Evidence from an Event Study Analysis of the Amader Kotha (AK) Helpline Rollout

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Introduction

We present empirical evidence on Bangladeshi garment workers' take-up, measured in phone calls/reports, of the AK Helpline. The Alliance for Bangladesh Worker Safety (hereafter, the Alliance) implemented a staggered rollout of the AK Helpline over 2014-2016. The roll-out included a first training to factories followed by a "refresher" training approximately one year later. In the Helpline trainings, workers learned how to use the Helpline's services and were also reminded of its existence, potentially increasing the Helpline's salience. We take advantage of this staggered roll-out in order to identify the effects of access to the Helpline, and of refresher training about the Helpline, on workers' calls. We find that substantive calls increase 50-fold following the first training and more than double after subsequent refresher trainings.

Data and Methodology

We exploit the AK Helpline's staggered rollout and call data from 2014-2018 in an event study design to measure the impact of the Helpline trainings on workers' reporting of different types of issues. The Alliance provided Co-Investigator Boudreau with access to both of these datasets through their research collaboration on the Alliance's Safety Committee Program.[1] The sample includes all factories that were present in the Alliance's publicly listed supplier base between December 2014-March 2015 and participated in at least one training on the AK Helpline.

We compare the number of calls per worker to the Helpline from factories that receive the training (treatment factories), before and after they participate, to the number of calls in factories that are not close to receiving this training (control factories). In other words, for a factory that participated in a refresher training in July 2016, we compare calls to the Helpline from this factory between January-June 2016 to calls at factories that were not scheduled to participate in refresher training until, for example, April 2017 or later.[2] This research design is valid as long as we do *not* find a systematic pattern showing that treatment factories have differential growth in calls in the run-up to their participation in training compared to control factories.

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[1] More information about this research is available here.

[2] Further, we only include factories as controls for the refresher training analysis if they have not participated in training in the past nine months. We justify this assumption based on the data (calls plateau 9 months after training).

If this assumption holds, then we can attribute any increase in calls following the training to the effects of the Helpline training (see Appendix for details on the econometric approach).

Results

Table 1 shows summary statistics and Figure 1 presents the results of the event study exercise. The Figure plots the estimated differences in calls to the Helpline between treatment and control factories for overall substantive calls and for different types of issues (results for other types of issues are available upon request). On the X-axis is the number of months relative to a treatment factory's participation in the Helpline training: To the left of the red line are the six months leading up a treatment factory's participation, and to the right are the nine months following their participation. Each blue dot is the estimated average difference in calls to the Helpline between treatment and control factories in that month, and the whiskers are the 95% confidence intervals on the difference. Importantly, we observe similar trends in calls before the training, meaning that our econometric approach is valid. This is clearer in the case of the refresher training.

Key Finding 1: The Helpline training has a large, statistically significant effect on calls to the Helpline.[3] By one month after the first training, the total number of substantive calls increase by 22 times pre-training levels, and by two months, calls increase by 59 times pre-training levels. After the refresher training, the total number of calls more than doubles. The refresher training, which occurs at least nine months after the first training, can be interpreted as a proxy for the effect of raising the salience or credibility of the Helpline and/or signaling its long-run availability to workers.

Key Finding 2: The Helpline training increases calls across nearly all types of issues, even those not presented in this analysis. We find evidence of positive treatment effects for both safety and labor issues, as Figure 1 shows.

Conclusion

Our analysis suggests that Helpline training increases workers' awareness of the Helpline (and the Helpline's salience) and that workers respond by making more reports to the Helpline. We interpret these findings as compelling evidence that workers identify a benefit to the Helpline. These results also provide motivating evidence that through increasing reporting of workplace issues, the Helpline may positively affect working conditions and workers' relations with management in Bangladesh's garments sector.

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[3] The delayed onset of the treatment effect is not surprising, as we use the date that the Alliance initiates training with a factory. The actual training is provided over a period of 1-3 months.
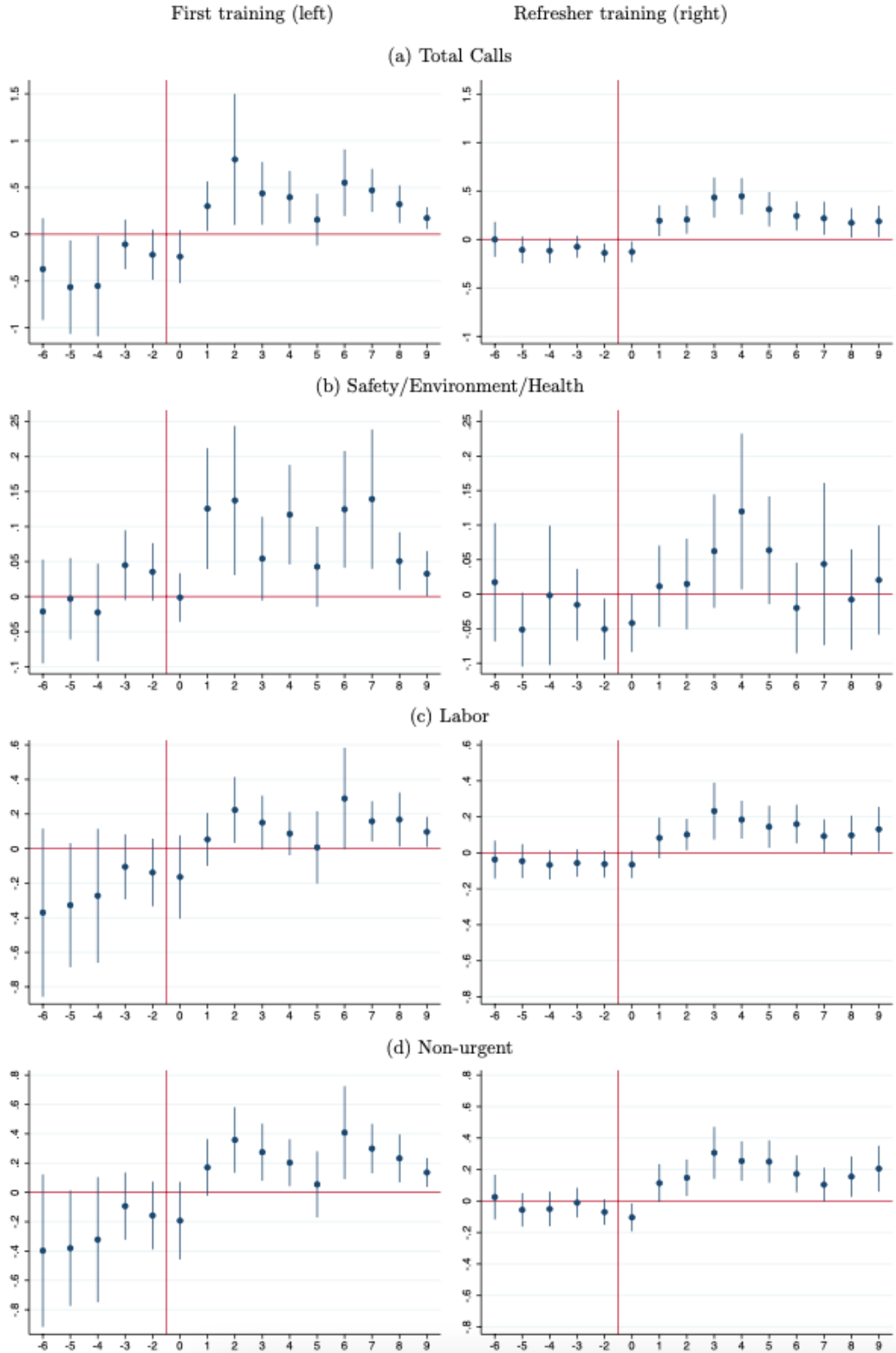
Tables and Figures

Table 1. Summary statistics – Monthly Calls per Factory

	Pre-Training	12 months after 1st Training	12 months after 2nd Training
Total Calls	0.01	0.41	0.98
	(0.12)	(3.07)	(2.27)
General	0.00	0.09	0.23
	(0.00)	(0.40)	(0.62)
Safety/Health/Environment	0.00	0.06	0.24
	(0.00)	(0.47)	(1.82)
Labor	0.01	0.23	0.48
	(0.12)	(2.91)	(1.23)
Harassment	0.00	0.03	0.08
	(0.00)	(0.21)	(0.34)
Urgent	0.00	0.02	0.08
	(0.00)	(0.29)	(0.52)
Non-Urgent	0.00	0.29	0.67
	(0.00)	(2.95)	(1.88)
Observations	11,165	7,284	1,476
Factories	606	606	123

Note: Sample means, standard deviation in parenthesis. The sample includes all factories that were present in the Alliance's publicly listed supplier base between December 2014-March 2015 and participated in at least one training on the AK Helpline. Rows: *Total calls* refers to total substantive calls; it excludes calls in the following categories: False reports, test calls (training and other), and missed calls. The other types of calls are divided according to the Helpline's classification of issues. Columns: *Pre-Training* includes only calls per month in factories before they participated in the Helpline's first training, *Post-1st Training* includes the 12 months following a factory's first participation in the Helpline training; *Post-2nd Training* includes the 12 months following a factory's second participation in the Helpline training, if the factory participated in training twice; *Total* includes all factories in the sample.

Figure 1: Effects of Helpline Training on Monthly Calls at Factory Level

First training (left)   Refresher training (right)

(a) Total Calls

(b) Safety/Environment/Health

(c) Labor

(d) Non-urgent

Note: Estimated coefficients β_k in equation (1), 95% confidence intervals, -1 omitted. *Total calls* refers to total substantive calls; it excludes calls in the following categories: False reports, test calls (training and other), and missed calls.

APPENDIX – Estimating strategy and identifying assumptions

The estimating strategy is summarized in equation (1). We study the effect of a new training on calls to the Helpline, controlling for factory fixed effects to capture time-invariant heterogeneity across factories and time fixed effects to account for secular trends in the number of calls to the Helpline. The event-time dummy equals 1 if factory *i* in month *t* received the training exactly *k* months ago (or will receive it *|k|* months in the future if *k<0*).

$$Calls_{i,t} = \lambda_t + \alpha_i + \sum_{k=a}^{b} \beta_k \ D_{i,t}^k + \epsilon_{i,t} \tag{1}$$

The coefficients of interest are the *ß$_k$* coefficients. These estimates provide two pieces of information:

- The estimates for k<0, the months leading up to a factory's participation in Helpline training, test whether the parallel trends assumption holds. In this setting, the parallel trends assumption means that in the absence of participation in the AK Helpline training, calls from the factory would follow the same trend as calls from other factories. I test this assumption by looking for trends in the differences between factories that are just about to participate in training (treatment factories) and those that are not just about to participate (control factories). If we see that these differences are systematically increasing or decreasing, then we should be concerned that this assumption does not hold.

- If the parallel trends assumption holds, the estimates for k>=0, the months after a factory's participation in Helpline training, test whether the Helpline's introduction affects the number of calls to Helpline. If the *ß$_k$* coefficients are positive, it means that calls to the Helpline increase following training.

To implement the analysis, we exclude factories that were selected to participate in the Helpline's pilot and factories that never participate in AK Helpline training. For the remaining population of factories, we use the universe of calls to the Helpline for December 2014 through one year following the factory's participation in training.