

# SOFT SKILLS TO PAY THE BILLS: EVIDENCE FROM FEMALE GARMENT WORKERS

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# Motivation

- Global surveys of employers indicate highest demand for non-cognitive/soft skills (Cunningham and Villasenor (2016))
- Non-cognitive skills associated with better labor market outcomes and higher overall economic wellbeing (Heckman & Rubinstein 2001; Heckman et al. 2006; Deming 2016)
- Is teaching non-cognitive skills to adults possible? And if so what impact can this type of training have?
  - Most of the literature focuses on early life/adolescent teaching of these skills. Complementarity of stocks and investments exists for late periods imply that it may not be very high-return to develop non-cognitive skills in the workplace (Heckman & Mosso 2014; Kautz et al. 2014)

# Soft skills

The ability to allocate resources (time, money, facilities), interpersonal skills (such as teamwork, teaching others, leadership), the ability to acquire and to use information, the ability to understand systems, and the ability to work well with technology

*(Kautz et al. 2014)*

Responsibility, sociability, self-management, time-management, communication, integrity, and honesty

# Policy focus; recent evidence from developing countries

- Big push from World Bank, ILO, etc. to get governments and employers to invest in transferrable skills training (Groh et al. 2015; Hirschleifer et al. 2015; Kluve et al. 2014;...)
- Recent studies providing soft-skills training do not find impacts on employment (Groh et al. 2015; Hirschleifer et al. 2015; Kluve et al. 2014;...)
- But this may not be appealing to employers, simply because teaching transferrable skills increases the attractiveness of the worker to outside employers, which might increase turnover

This study:

**What impacts do transferrable skills training have on workplace outcomes of already employed workers?**

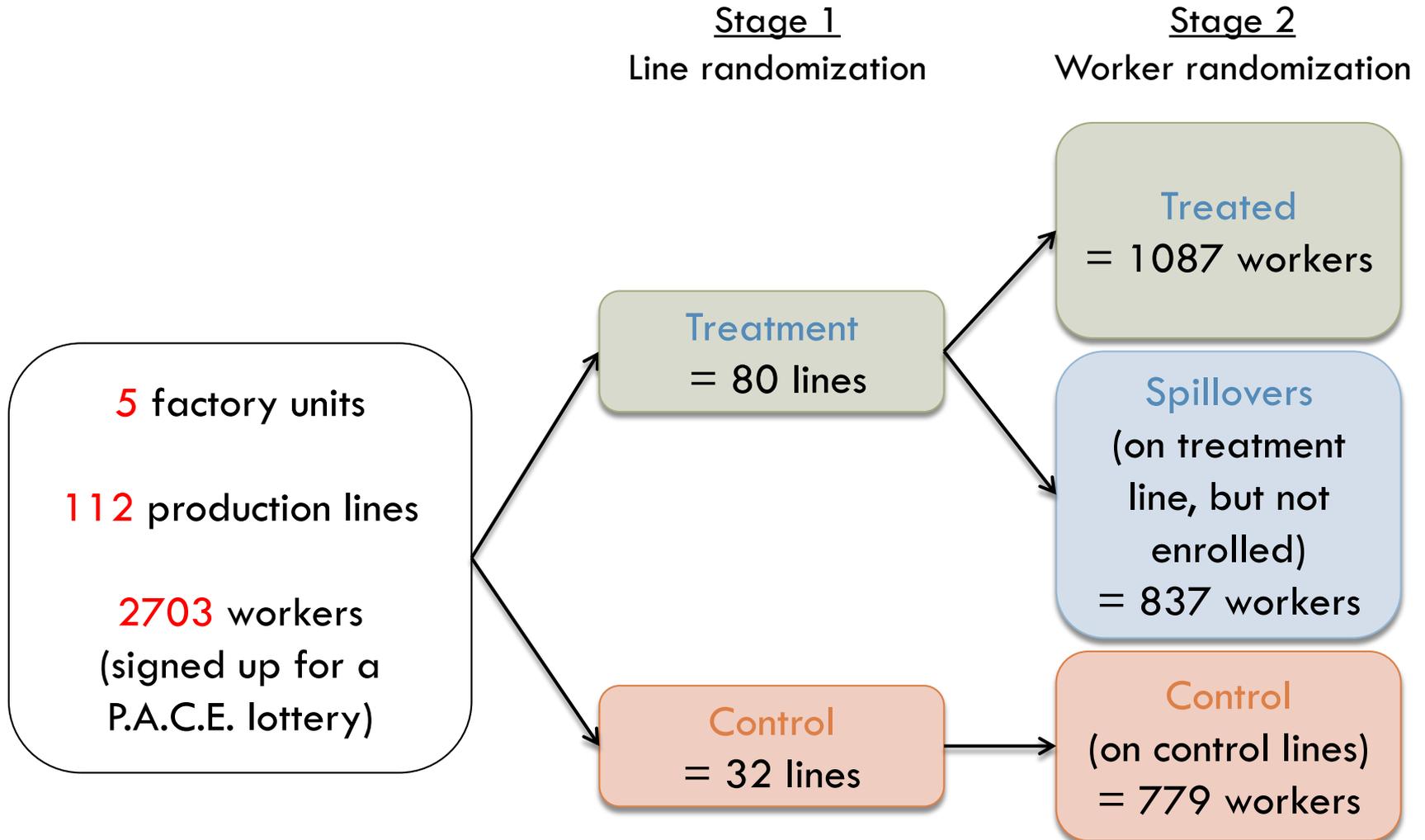
# Our study

- We partnered with a large garment firm to implement and evaluate Gap Inc.'s flagship CSR program of soft-skills training
- Broad-based soft skills delivery to empower female garment workers
- One 2-hour session per week (1h “own time,” 1h factory time) for ~11 months. 80 hours training.
- Modules
  - Communication
  - Time Management
  - Financial Literacy
  - Execution Excellence (internal motivation, teamwork etc.)
  - Problem-solving and Decision-making

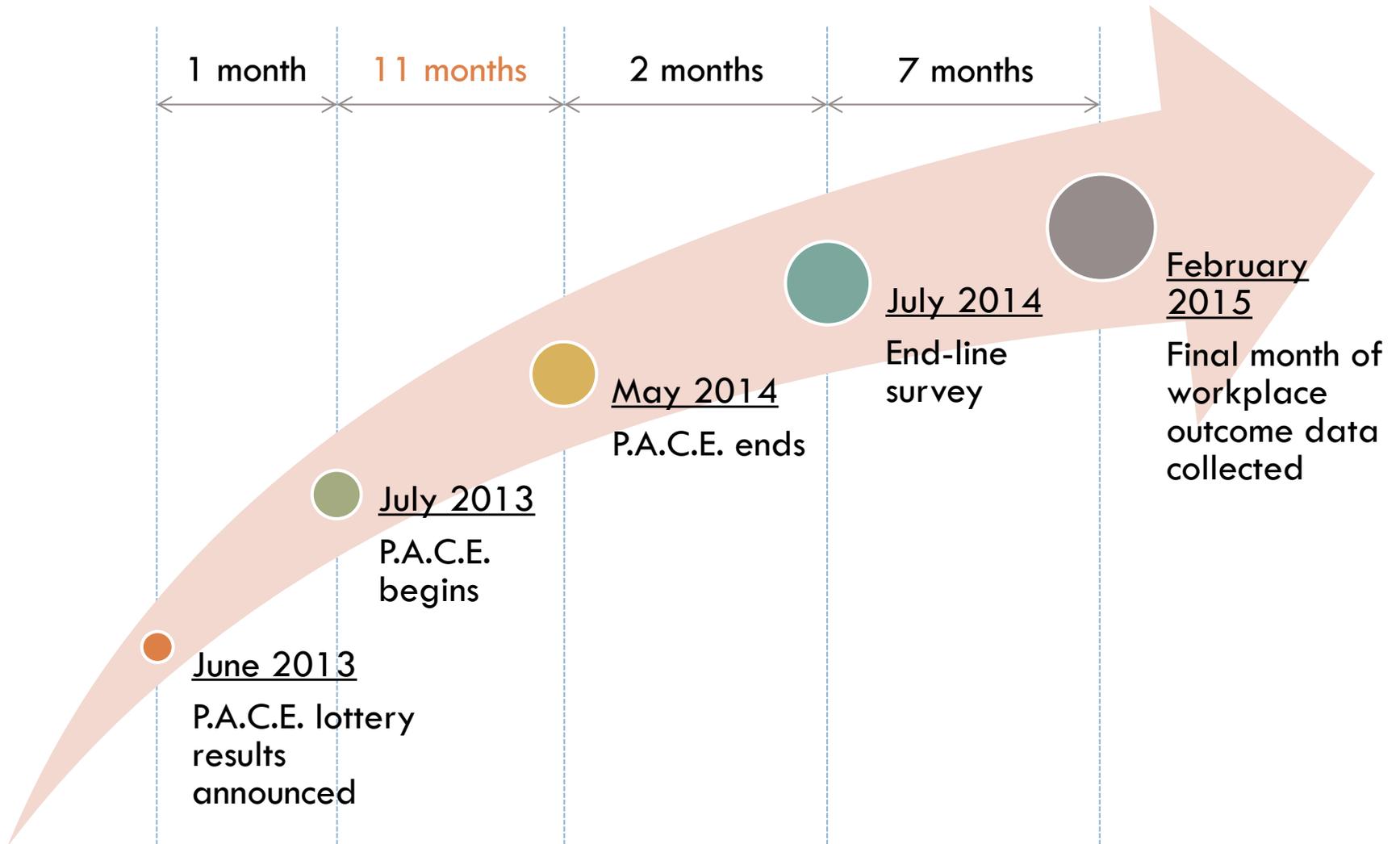
# Context



# RCT: Design



# RCT: Timeline



# Data

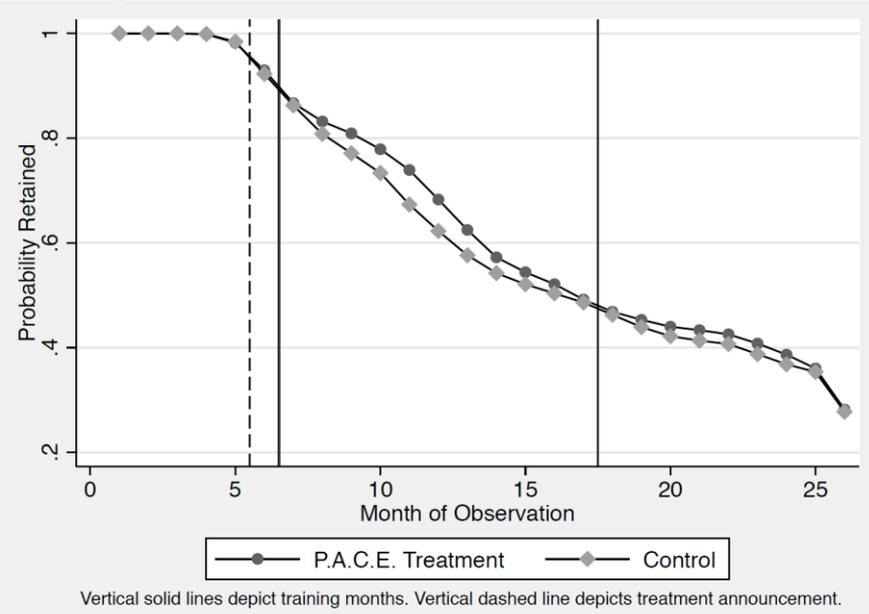
## Workplace Outcomes

- Retention
- Daily attendance (+ unexcused absence)
- Late coming
- Hourly productivity (individual + line)
- Promotion

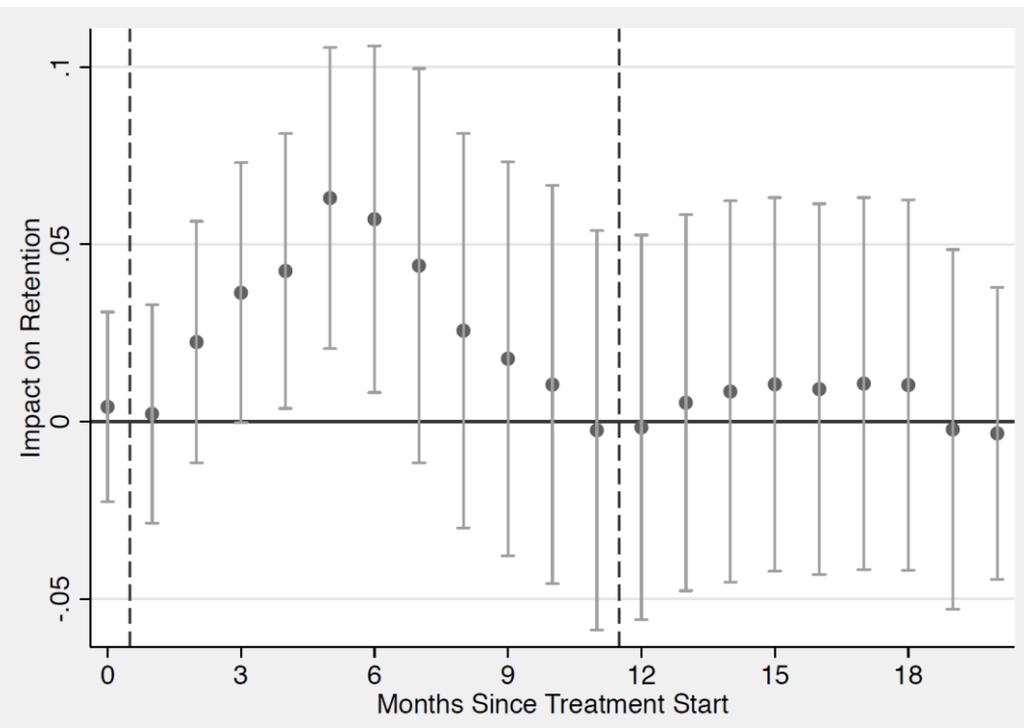
## End-line Survey

- 1000 randomly sampled workers (538 treatment, 462 control)
- Financial decision-making
- Awareness of/participation in safety net programs
- Demand for vocational training
- Personality
- Mental health
- Risk + time preferences
- Self-assessments relative to peers

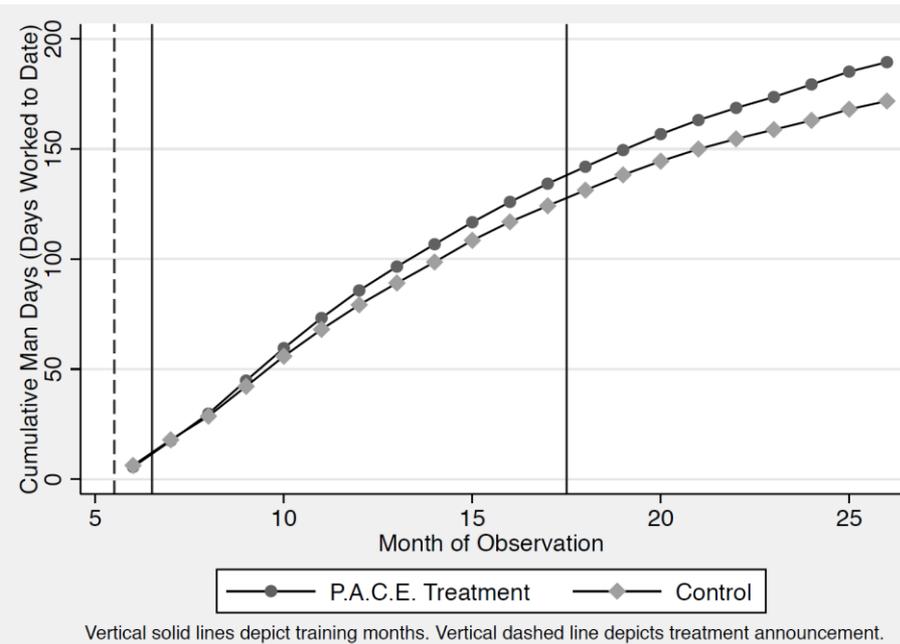
# Retention



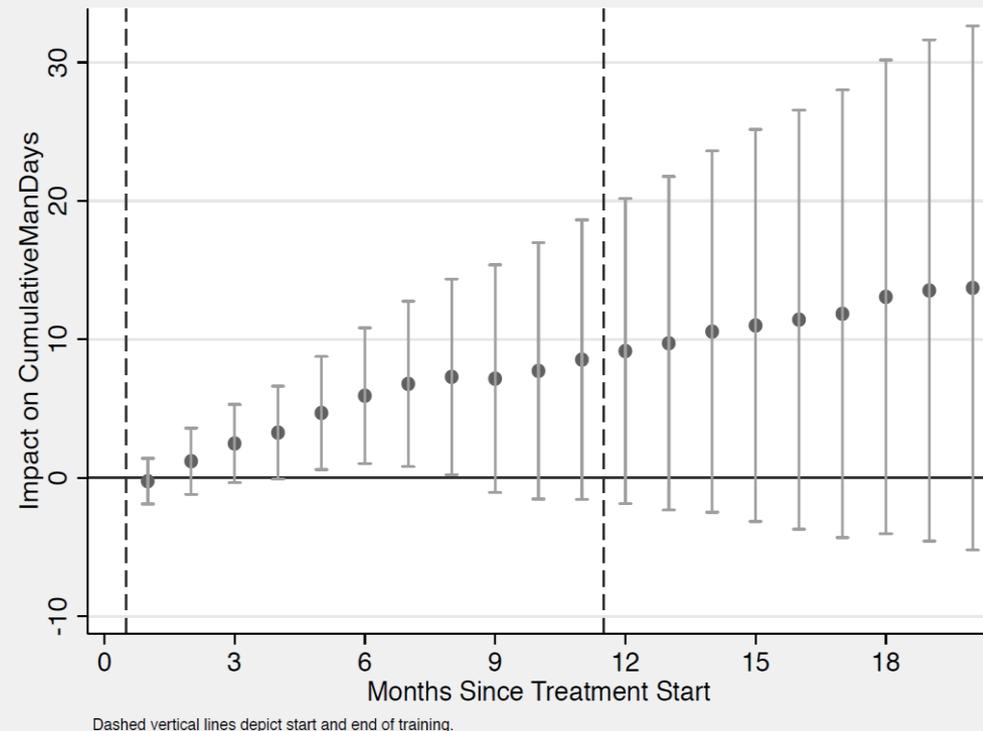
Probability of retention increases by 5 pp during the program (nearly 10 % of the control mean); no difference after the program



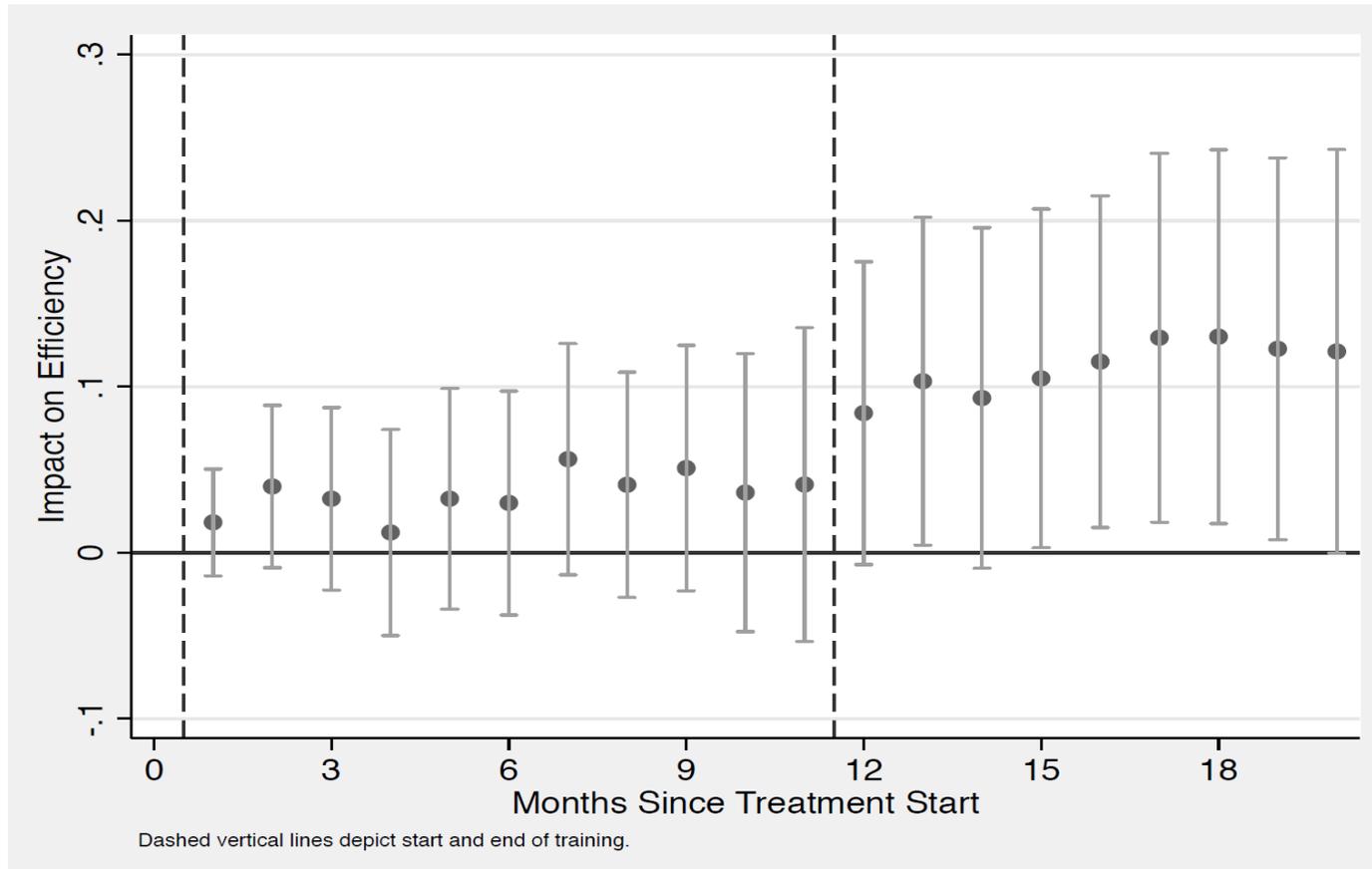
# Cumulative Man-days Accrued to the Firm



Cumulative man-days increase (mostly due to improvements in retention) throughout program period and afterward. At the end of the program, treatment group has accrued 8.4 working days (4.25 % of the control mean) more than the control group, and after the program, 19 days more (9 % of the control mean).

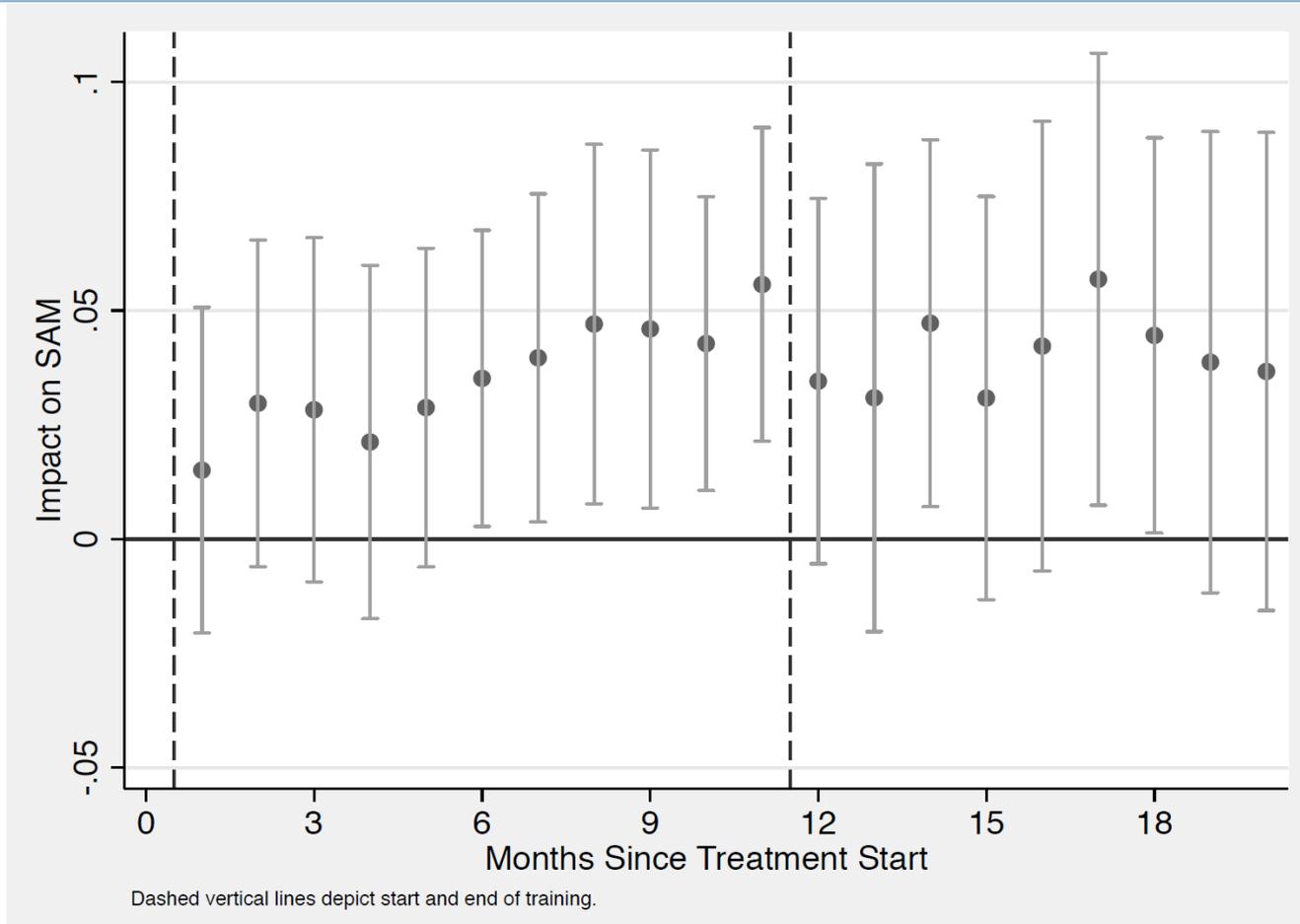


# Efficiency



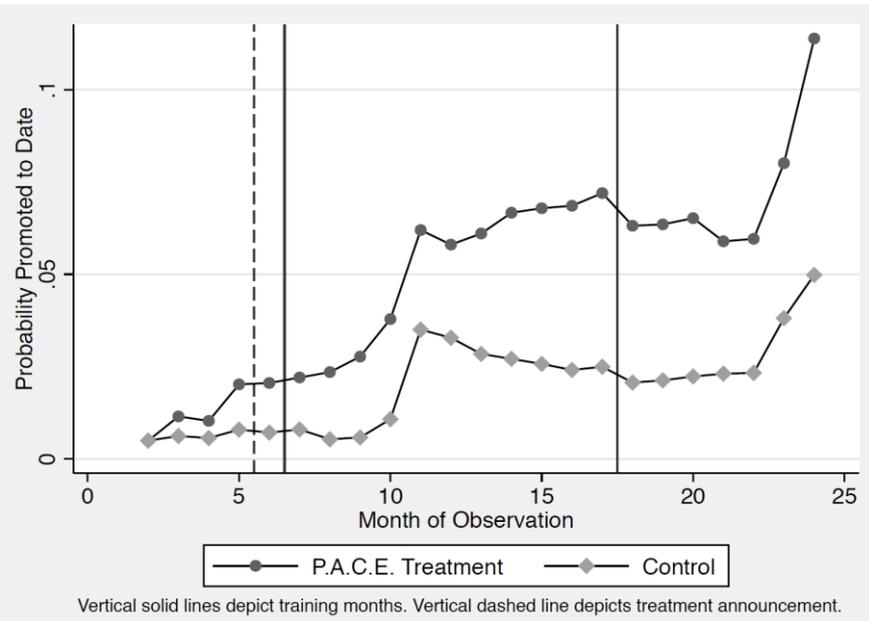
Efficiency (Pieces Produced/Target Number of Garments) increased by 6.6 pp after the program (about 12 % relative to control mean)

# Task Complexity

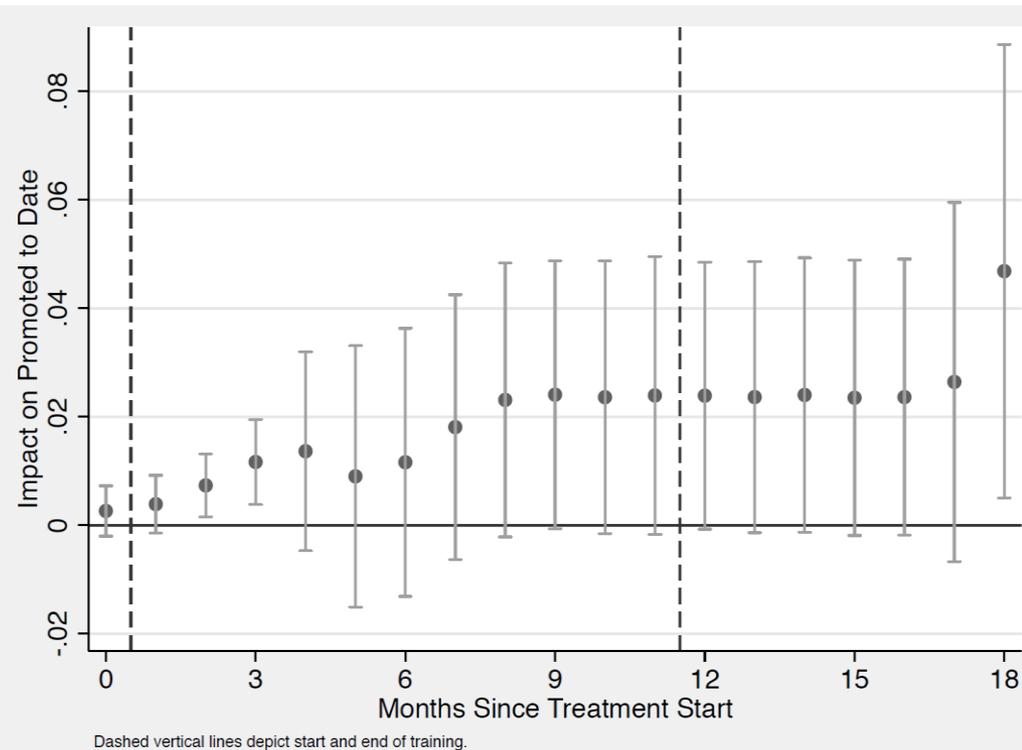


Task Complexity (Number of minutes a task is expected to take, Standard Allowable Minutes) increased by 0.03 minutes ( ~ 5% of the control group mean) during and after the program

# Promotion Probability



Probability of promotion increases by 1.4 pp during program ( ~87 % of control group mean), and 2 pp after program ( ~160% of the control group mean)



# Survey results

Panel C: Government and Firm Entitlements	Pension	Gov. Subsidized Healthcare	Firm Subsidized Housing	Firm Subsidized Schooling
PACE Treatment	0.0268 (0.0149)*	0.0220 (0.00904)**	0.0135 (0.00763)*	0.0270 (0.0139)*
Weighted Observations	Yes 621	Yes 621	Yes 621	Yes 621
Control Group Mean of Dependent Variable	0.038	0.003	0.010	0.022

# Survey results

	(1)	(2)	(3)	(4)	(5)
Panel A: Career Advancement	Expect Promotion Next 6 mos	Skill Development	Award or Incentive	Self-Assement	Line Peer Self- Assessment
PACE Treatment	0.0807 (0.0549)	0.139 (0.0501)***	0.0323 (0.0184)*	0.0661 (0.0735)	0.121 (0.0741)
Weighted Observations	Yes 621	Yes 621	Yes 621	Yes 621	Yes 621
Control Group Mean of Dependent Variable	0.562	0.251	0.032	5.276	5.321

# Conclusion

- Adult training of non-cognitive skills can have positive impacts on workplace outcomes, and some of these impacts seem persistent
- Short-term retention gains; longer-term productivity, ability to handle complex tasks and promotion probabilities
- It is possible to teach soft skills: survey results suggest stock of soft skills did actually increase as a result of the program
- Spillover effects (possible because of two-stage randomization) and Return-on-investment analysis forthcoming

# Motivation: female labor market participation in India

- Female labor market participation (LMP) *down* to 27% from 37% one decade ago, despite high economic growth (WDR 2011, 2012; Chatterjee et al. 2015)
- Retention important because working women improve HH incomes and equalize intra-HH bargaining; may have broader consequences for economic growth (Doepke & Tertilt 2014)
- Can “empowerment” through soft skills training generate meaningful improvements in retention of female workers?