



Impact Evaluation Report

for ILO's In Business soft-skills programme for women in STEM occupations in South-East Asia



International
Labour
Organization



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Executive Summary

The Women in STEM (Science Technology Engineering and Mathematics) Workforce Readiness and Development Programme developed by ILO was developed in 2017. While the programme included several elements, a key aspect was the ILO In Business soft skills training. The program implemented a group-activity based training using an innovative implementation approach to produce strong effects on workers.

Using administrative data from one of the participating firms (Seagate Technologies) to estimate the quantitative impact of the program along with semi-structured interviews across four (including Seagate) partner firms, the effectiveness of the training programme was evaluated. In Seagate, between July 2018 and June 2019, a total of 15,130 employees were trained. In other firms - Nestle, Firm C and the Employers Federation of the Philippines (ECOP), 350, 196 and 650 employees were trained respectively.

In Thailand, at Seagate, statistical methodology on quantitative data referred to as the “staggered difference-in-difference design” was applied to evaluate the effects of the training. The results were further supported by a qualitative analysis through interviews with training participants.

- It was found that training on average reduces the probability of being absent for at least a day in a month by any given employee by 10% (7 percentage points) in the year after training.
- In Seagate, training on average increases the probability of a DL2 or DL3 worker being promoted in a given month by 1.5 percentage points. However, it did not lead to any statistically significant increase in the salary of the participants.
- Trained workers submitted fewer (two times lower) improvement suggestions. The effect can be explained by increased direct communication with managers and supervisors which has replaced formal Kaizen suggestions.
- A higher share of trained workers in a production cell leads to fewer products failing the quality assurance test. Training of workers reduces the share of goods that fail quality checks by 10 to 30 percent (2 to 4.5 percentage points).

In the Philippines, across Nestle, Firm C and ECOP the effects of the training were evaluated using qualitative interviews. The effect across other firms were evaluated using a structured keywords mapping method to identify and map results across different criterias. The ILO In Business soft skills training programme was found to have the following effects:

- The training programme is well suited to the existing skill needs of the workers across all firms. Respondents highlight that pre-training they lack confidence to speak to seniors/supervisors and coworkers.
- There is a strong preference for offline training despite recognising the benefits of online mode of training - greater outreach, less logistical challenges.
- Strong preference for group-activity based training over traditional classroom training. It stems from the opportunity to interact with new people and sharing different ideas and perspectives.
- Across all firms, training leads to more collaboration between workers, greater efficiency and better prioritization of work by employees.
- Across all firms, training leads to more opportunities within the firm in terms of working on new machines, handling more responsibilities and greater say over decisions in the firm.
- Effects on absenteeism are difficult to measure across other firms in the Philippines due to lack of quantitative data. In all firms, training however did not lead to any statistically significant increase in the salary of the participants.
- Training helped participants actively undertake retirement and financial planning especially among those who are closer to their retirement date. Participants were also able to stand up for themselves at home because of greater self-confidence gained as a result.

The report provides evidence of strong positive effects of the ILO In Business soft-skills training for both workers and the participating firms. It should be noted that soft skills complement other hard skills training programmes along with other workplace improvements. The effect of the In Business training programme is consistent with the soft-skills programme evaluated by GBL in the context of textile manufacturing firms as well. (Adhvaryu, et. al., 2022)

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1. Introduction

1.1. The ILO In Business Soft Skills Programme

ILO initialized the Women in STEM (Science Technology Engineering and Mathematics) Workforce Readiness and Development Programme in 2017 with the support of JP Morgan Chase Foundation. The objective of the program was to provide women workers in STEM sectors with essential soft and technical skills along with employability and leadership skills. The programme aimed to help with the advancement of women workers to quality jobs and leadership positions.

Women workers face challenges across sectors and job roles. First, entry into jobs especially in STEM sectors can be more challenging for women due to their lower levels of education and participation in vocational programmes in these sectors. Second, women are subjected to gender bias during the hiring process which vitiates entry into these roles (Pew Research, 2021). Even after entry into the workforce, women workers face discrimination within firms and are subjected to slow promotion cycles. Such challenges are exacerbated by the double burden on women workers to manage additional care work at home along with their workplace responsibilities.

The ILO Women in STEM programme was designed to address some of these issues. While the programme constitutes training in both hard and soft skills, the following report only analyzes the soft skills training. In terms of hard skills the programme assists in skills gap identification, upskilling and job placement. The ILO In Business training programme is an initiative of the larger ILO Women In STEM programme, which aims to improve critical soft skills among women workers. It leverages within-company level peer support and mentorship for creating strong effects. Participating firms benefit from an innovative learning approach designed by the ILO to deliver soft skills training, leveraging peer learning networks to support development, growth, and enhancement of enterprises. The ILO In Business training methodology offers private sector firms a suite of training modules that apply activity-based and peer learning designed to empower female employees and connect them with role models and mentors. However, the nature of the training and corresponding success of it meant

that the training was implemented for male workers too in several of the firms part of the study. However, the share of male workers trained is significantly smaller to that of female workers.

The In Business training suite is designed for flexibility to allow for variation by country, market and location, and adaptation to changing realities on the ground. It is primarily targeted at formal enterprises for soft-skills training. Participating firms can select modules according to their needs and relevance based on the roles and responsibilities of its workforce. The modules can be taken in any sequence and it also allows for new modules based on market demand. The modules are self-guided and leverage activity based group learning methods to increase learning outcomes. Furthermore, the training suite develops business competencies by drawing from the knowledge, experience, and insights of other group members. Hence, training requires no external trainer or consultant and no significant physical burden. Correspondingly, In Business training is a low-cost programme that can be run independently.

1.2. Purpose of Impact Evaluation

The In Business soft skills training was implemented in various firms across Southeast Asia. These firms were in the Information and Communication Technology (ICT) industry, Hospitality industry, Information Technology - Business Process Outsourcing (IT-BPO) as well as the Fast Moving Consumer Goods (FMCG) industry in Thailand and the Philippines. The ILO In Business soft skills training programme is a group-activity based training that leverages within-firm facilitators and hence is significantly different from traditional soft-skills training programmes. There is a need for a robust, unbiased and independent review of the programme. Additionally, the context and scale of the training differed from firm to firm, which posed an additional challenge in the impact evaluation process.

ILO partnered with Good Business Lab (GBL) in 2020 to conduct an extensive quantitative and qualitative evaluation of the training programme. GBL is an independent non-profit organization that conducts research in the space of labor and development economics. GBL specializes in research on worker-wellbeing within the interaction between firms and workers. GBL has experience conducting intensive

quantitative research, both experimental as well as non-experimental retrospective. It has previously partnered with firms in the textile and automotive manufacturing as well as firms in the FMCG industries across India, Colombia and the United States.

The evaluation includes both quantitative and qualitative research to understand the rollout, perception and effectiveness of the In Business soft-skills training programme. It aims to provide an in-depth understanding of the relevance, coherence and effectiveness of the programme in the different firms in which it was implemented.

1.3. Participating Firms

While the ILO In Business soft-skills programme was implemented in several countries across various sectors, the report is based upon data from a few selected participating firms. The table below lists down the specific firms (some firms' names have withheld for anonymity purposes).

Table 1: Participating Firms in the Evaluation

Firms	Description
Seagate Technology (Thailand) Ltd.	Seagate Technology (Thailand) is a manufacturing unit of the American data storage company, Seagate Technologies Holdings PLC. The Thailand unit was established in 1983 and is involved in the manufacturing of internal and external hard drives, solid state drives, data servers and other computer peripherals.
Nestle (Philippines)	Nestle (Philippines) is a manufacturing unit of the Swiss food and drink conglomerate, Nestle. The Philippines unit was established in 1961 and produces several food and drink products.
Firm C (Philippines)*	Firm C is the IT-BPO unit of a multinational financial corporation that addresses and processes client queries and complaints.
ECOP (Employers Confederation of the Philippines)	ECOP is an industry body that represents and aims to promote interests of member firms in labour, social and employment issues.

* Company name hidden for anonymity purposes. Shall be referred to as Firm C from here on.

1.3.1. Seagate Technology

Seagate is one of the world's largest data storage firms founded in Fremont, California, United States of America in 1979. The American storage giant has founded, developed and played a major role in modern storage solutions including the hard disk drive (HDD), solid state drive (SSD) as well as server storage solutions. Seagate's Thailand operations were established in 1988. It currently employs about 19,000 workers across its two manufacturing facilities - Teparuk and Korat. Korat is the larger of the two factories and employs about 3/4th of the total employees in Thailand. The Teparuk factory was initially established to manufacture head stack and head gimbal assemblies. The Korat factory was established in 1996, to manufacture components - slider, head assembly and head gimbal assembly - as well as hard drives. The factory locations contribute to Seagate's vertically integrated hard drive operations model. Employees are involved in running advanced machines, handling machine errors, coordinating across several departments, labeling and packing the products.



The employee hierarchy within Seagate has significant similarities with that of traditional manufacturing firms in non-STEM sectors such as those in textile manufacturing. While it employs a large number of engineers, the employees are largely clustered into operators and supervisors. Operators are further classified into DL1, DL2 and DL3 with DL3 being the most senior level for operators, all of whom report to a supervisor. A total of 15,130 employees have completed the ILO In Business training programme from July 2018 to Jan 2020. The training was made mandatory for all employees to complete. The counts across DL1, DL2 and DL3 are 13423, 1520, and 187 respectively. Seagate was one of the earlier firms to implement the training programme so all the training was conducted pre-pandemic in an offline classroom setting. Also, while DL2 and DL3 operators were trained in 6 training modules, the DL1 operators were trained across 2 training modules. Seagate, included the In Business training programme as part of their larger up-skilling initiative to help women employees.

1.3.2. Nestle

Nestle is a Switzerland based food and drink conglomerate that produces coffee, tea, breakfast drinks, frozen food, ice-cream, infant food, chocolates and snacks. It is among one of the largest Fortune 500 firms. Nestle Philippines Inc. is a wholly owned subsidiary of Nestle, which began operations all the way back in 1911. However, local manufacturing only began in 1962 through a partnership with San Miguel Corporation. Initially, it manufactured its coffee, Nescafe, however, slowly over the years it was scaled to include a wide variety of products ranging from milk products to breakfast cereals and pet care. It employs more than 3700 employees across its factories in the country.



Nestle being a manufacturing firm has a similar structure to that of Seagate as well, however the scale of operations at Nestle in Philippines is much smaller to that of Seagate. Nestle also employs a production line based structure similar to that of other manufacturing firms, however being a food production company it is substantially different from other firms. It implements significant safety measures to regulate and maintain strict food safety standards across different products it manufactures. Nestle also produces a number of perishable products including frozen food and milk products for which storage, refrigeration and distribution are critical elements. Nestle implemented the training as an optional exercise and as of the end of March 2022, a total of about 350 employees were trained across 7 of their production sites. Due to the pandemic the initial parts of the training was offline whereas later training was implemented online. The exact count of employees who trained offline and those who trained online weren't available. Nestle included the In Business training programme as part of their diversity and inclusion initiative.

1.3.3. Firm C

Firm C is a business processing unit of a global multinational banking and financial corporation. It is specifically an electronic data processing center for the firm that handles several internal and client specific processes. It includes identifying and processing queries as well coordinating with staff across several departments in various international locations.

The benefit of having Firm C in the impact evaluation study is that it is significantly different from the other firms in the study. It is a business processing center that employs largely white collar workers whose education and skill levels are much higher than those employed in Seagate or Nestle. Also, it is not a traditional manufacturing firm and instead is more similar to IT consultancy firms. As a business processing unit, soft skills play an important role in the daily work of its employees. Workers as well as managers are largely familiar with training, in soft skills and have participated in soft skills training programmes previously. Hence, it was crucial to have insights from firm C regarding the ILO In Business training.

Firm C had a staggered training approach where they first trained a few mid and senior employees on several training modules who acted as a training facilitator later. However, training overall was optional even though employees were encouraged to participate in it. Initial training was conducted pre-covid hence was implemented in an offline format where employees participated in the workplace. However, owing to the pandemic it had to be scaled up using online video conferencing later. Overall as of the beginning of April 2022, Firm C has been able to train over 196 employees with the ILO In Business soft skills training programme. Among the total employees trained, 110 employees were trained offline whereas the remaining 86 were trained online. Also, most mid and senior level employees completed their training in 12 modules. Firm C included the In Business training programme as part of their diversity and inclusion initiative.

1.3.4. Employers Confederation of the Philippines (ECOP)



**Employers Confederation
of the Philippines**

ECOP is an industry body comprising several of the largest firms operating in the Philippines across sectors. It is an umbrella organization that unifies the interests and concerns of the employers on important national issues related to employment, industrial relations, labor issues and related social policies. It aims to advance the interests of the employers through proactive engagement at the national, regional, and international levels. It also promotes a cohesive positive environment for businesses to

flourish and fosters sustainable business through ethical management standards and good employment practices. It is primarily involved in training, advocacy and information facilitation to its member firms.

As an industrial body, ECOP plays an important role in facilitating and promoting the ILO In Business training programme across various partner organizations. ILO through its partnership with ECOP has managed to leverage the network and power of ECOP in scaling up the soft skills programme across different firms. ECOP was able to train over 350 peer facilitators from five industry associations and four ambassador companies, around 315 of whom are women. As a result a total of around 650 employees from the firms were trained as of March 2022. The training programme is still being run in some firms so the total beneficiaries are likely to increase further.

Table 2: Total Training Participants

Firms	Total Trained	Female	Male	Offline/Online
Seagate Technology (Thailand) Ltd.	15,130	12,558	2,572	Offline All
Nestle (Philippines)	350	350	0	
Firm C (Philippines)*	196	155	39	110 / 86
ECOP (Employers Confederation of the Philippines)	650 employees (315 peer facilitators)	NA	NA	NA

*NA refers to data not available.

2. Evaluation Methodology

In order to comprehensively evaluate the effectiveness of the programme, GBL used a mixed methods approach that incorporates robust quantitative causal inference techniques along with qualitative surveys. The qualitative method complements the

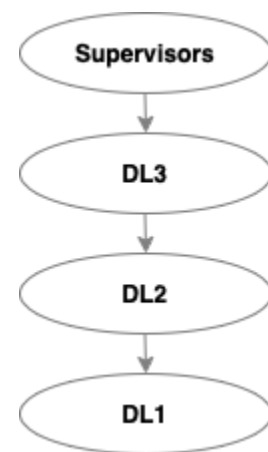
quantitative method and helps address questions and mechanisms that wouldn't be possible to capture using solely quantitative methods.

GBL partnered with Seagate to receive access to a comprehensive dataset of several Key Performance Indicators (KPIs) to implement a quantitative evaluation. Because the other firms did not collect detailed enough information on the variables required for an unbiased quantitative evaluation, GBL conducted qualitative surveys among program participants and facilitators in Nestle, Firm C and ECOP. GBL conducted the same qualitative surveys in Seagate as well to better understand mechanisms that were beyond the scope of quantitative evaluation.

2.1. Quantitative Approach

2.1.1. Background

The quantitative approach covers only Seagate since it is the only firm where GBL was able to obtain extensive access to quantitative data. The ILO In Business soft-skills programme was first implemented in Seagate's factories between July 2018 and June 2019. It was first implemented for senior workers and later scaled-up to junior workers. Seagate classifies workers in its production chain into a hierarchical structure. The factories at Seagate classify workers as DL1, DL2, DL3 and supervisors, with DL1s reporting to DL2s who themselves report to DL3s who correspondingly report to supervisors.



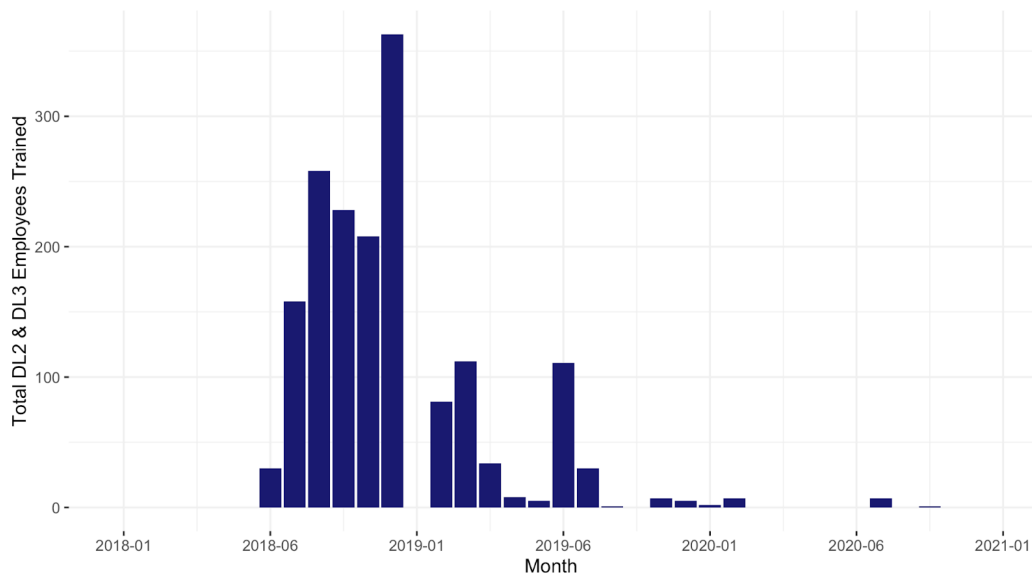
The DL2 and DL3 workers were first trained in six different ILO *In Business* training modules, each aimed at improving specific soft skills. Each module takes about 3-4 hours to complete. A total of 1,707 DL2 and DL3 workers were trained. The training programme was later scaled-up to include DL1 workers as well and a total of 13,423 DL1 were trained on 2 modules. The training was compulsory for all workers, but some employees were not trained if they joined later, left early or were on long-term leave during the period in which the training was conducted. The following

report is focused on the impact of training specifically on DL2 and DL3 workers who were trained on a larger set of training modules.

2.1.2. Training Timeline

The training was carried out in a staggered manner, which means that workers or worker-units were trained gradually across the factory. Hence, some workers completed their training earlier while others completed their training a few months later. The training was largely carried out between July 2018 and June 2019 for a total of 1,707 DL2 and DL3 workers. Thereafter, the training was scaled up to train a total of 13,423 DL1 workers.

Figure 1: Training Timeline Seagate



2.1.3. Data

GBL gained access to the anonymized data of Seagate's employees from the period of January 2018 to December 2020 at the monthly level. The dataset contains a unique employee identifier and a corresponding supervisor identifier for each employee. Since training was completed in the period July 2018 to June 2019 across Seagate, this provided several months of pre- and post-training data necessary to evaluate the

training programme. The datasets include all workers at the firm during the period of consideration irrespective of their final training status, i.e. it covers all participants and non-participants. A total of 2,044 DL2 and DL3 workers were employed in the two factories during this time period which included 1,707 trained workers and 337 untrained workers. As mentioned earlier, the training was compulsory for all workers, however some workers joined the firm later, left the firm earlier or were on long-term leave during the period of training so they did not complete the training.

The data contains details on the training start and end dates for each worker where start date is defined as the month in which the earliest module commenced and end date as the month in which the latest module was completed by that worker. The dataset contains details on key outcome variables including absenteeism, salary and promotion for each worker for each month. It also contains details on demographic variables of the workers - age, education, gender and marital status.

Additionally, Seagate also records Kaizen (continuous improvement) suggestions made by workers. It has an extensive employee suggestion portal where workers can submit suggestions or grievances on a wide range of issues. The Kaizen data provides a timestamp of the suggestion, verbatim description of the issue, potential solutions and the potential benefit of the suggestion to the firm, workers and customers for every suggestion as written by workers. The data can be mapped to the monthly panel of workers using unique employee identifiers.

Seagate also records productivity data, though the data is fairly limited as it only collects data for the previous 12 months. At the time of undertaking the project, GBL was only able to access the productivity data from March 2020 to March 2021. Seagate defines productivity as the share of products (produced units) that passes a quality assurance test each day. Additionally, the productivity data is available at the production cell level which can be linked to supervisors using unique supervisor identifiers. Hence, the share of trained workers under each supervisor was calculated each day and mapped to the productivity data. The production data is therefore a cell-day level panel with a share of workers trained for each day.

2.1.4. Evaluation Strategy

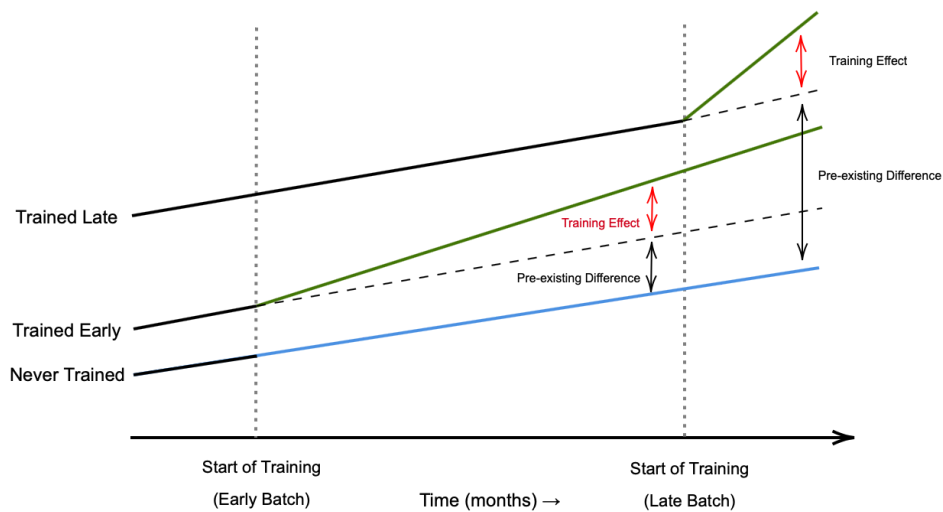
The soft-skills training was implemented in a staggered manner, implying that workers or worker-units were trained gradually across the factory. Hence, some workers completed their training earlier while others completed their training a few months later. The evaluation methodology takes advantage of this feature of the program implementation process to quantitatively estimate the effects of the training. The methodology is referred to as the “staggered difference-in-difference design” in statistics or causal inference literature. We specifically use a robust estimator, Callaway & Sant’Anna (2020), to estimate the effects.¹

- Workers are assigned into training groups based on the calendar month they completed their training.
- Each month, the outcome variable of the groups which had completed training are compared against those who hadn’t completed the training at that time, including those who never completed the training.
- This is conducted for each training group and finally the results are aggregated based on weights given for each training group.
- The figure below shows the methodology in a simple two training group case - early and late along with never trained workers.
- Different groups may have different baseline (pre-training) levels of outcome variables (salary, absenteeism, productivity), hence a double difference for each training group is taken with the untrained group.
- The training effect of the early group is defined as the difference of the differences between pre- and post values of the early group compared to the never trained group. The training effect of the late training group is calculated in a similar way.
- Finally, the aggregate training effect is estimated using a weighted mean of the training effects of the early and late training group.

¹ Callaway, B. and Sant’Anna, P. H. (2020). Difference-in-differences with multiple time periods. *Journal of Econometrics*.

- Since effects change over time, the training effect can be estimated for each month post training.

Figure 2: Training Effects Methodology



As mentioned earlier, although training was compulsory, some workers did not complete the training as they joined the firm later, left the firm earlier or were on long-term leave during the period of training. Those workers are dropped from the sample as they don't comprise a valid comparison group since the characteristics of these workers differ from those who completed the training.

The above methodology is not appropriate for estimating effects on productivity since data is only available post-training for all employees. The effect on productivity is estimated using a regression model in which the independent variable is the share of employees trained in a production cell and the dependent variable is an indicator for the proportion of products that fail the quality assurance test being below a specified level (5%, 10%, 15%, 20%, 25% and 50%).

2.2. Qualitative Approach

The qualitative approach was used to understand the effects across all the firms including industry body ECOP. It was a particularly useful approach in this setting because either the number of workers was not sufficient for quantitative analysis or the

access of firm data wasn't possible for quantitative evaluation. Additionally, qualitative aspects of the programme are difficult to capture in a quantitative approach. Qualitative methods are better suited for understanding worker perceptions and expectations of the programme and help determine which mechanisms are driving the effects of the programme.

The qualitative approach was a key attribute in the evaluation process. It was carried out using open-ended questions designed using the OECD DAC Framework.² The framework's parameters involve the broadly defined categories of relevance, coherence, effectiveness, efficiency, impact and sustainability. The interviewees were also asked about any issues that they faced or any suggestions about the training that they might have.

Table 2: Evaluation Categories for Participants

Evaluation Category	Description
Relevance / Coherence	It involved questions surrounding expectations before participating in the training, opinions about training in comparison to other training attended.
Effectiveness / Efficiency	It involved questions on the quality of the training programme -- that is modules and materials provided and language barriers faced. Questions were also asked about preference on method of training - traditional vs activity based.
Impact	It included questions on the effect of training on communication skills, both towards co-workers as well as supervisors. It also included questions on ability to speak up to supervisors directly about issues, effects on teamwork and any effects outside the workplace.
Sustainability	It contained questions on long term takeaways from the programme and any general perceived direct or indirect effects of the training.
Issues / Suggestions	It involved questions on challenges faced during training - timing, duration or language and any improvements or suggestions to improve the training programme.

² Organization for Economic Co-operation and Development's Development Assistance Committee (OECD-DAC) Evaluation Criteria. <https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>

In a few firms, the training was conducted before the COVID-19 pandemic, while other firms completed training during the pandemic. The different post training time periods across different firms allow us to get a mix of long term and short term insights. The above questions were asked to participants at Seagate, Nestle and Firm C. For Seagate, the surveys included several questions on Kaizen suggestions and the ability of participants to communicate suggestions and concerns directly with seniors and supervisors. This was one important way in which the qualitative analysis complemented the quantitative analysis. Insights from direct conversations cannot be captured by quantitative data. Furthermore, the training facilitators in different firms were asked additional questions in order to understand details about the training from the perspective of trainers rather than the participants. In total 27 training participants were interviewed across the three firms with 18, 4 and 5 interviews at Seagate, Nestle and Firm C respectively. In addition, 4 interviews were conducted with ECOP partner firms to understand aspects about the training from a facilitators perspective. This resulted in a total qualitative sample of 31 respondents. The participants from Seagate, Nestle and Firm C were selected at random from the pool of all training participants in each of the firms. However, those from ECOP were chosen directly by ECOP by convenience and availability.

Table 3: Evaluation Categories for Facilitators

Evaluation Category	Description
Relevance / Coherence	It involves questions on comparison of ILO training vs other programmes and reasons to promote and facilitate the training in their respective organizations..
Effectiveness / Efficiency	It involved questions on the quality of the training programme, that is modules and materials provided and language barriers faced. Questions were also asked about preference on method of training - traditional vs activity based, as well as physical vs online.
Impact	Questions on expected impact - communication skills, self-confidence, teamwork and effects outside the workplace
Sustainability	Questions on long term takeaways and general perceived effects of the training.

The interviews were conducted over video conferencing for all firms part of the study. The interviews for Seagate were conducted in Thai and were later translated but for all other firms, the interviews were conducted in English. The first step in the qualitative approach involved transcribing the interview answers from the recorded video conferencing based conversations. Once transcribed and categorized, the primary qualitative evaluation involved a structured keywords based mapping system. Keywords from the participants' responses were mapped to specific questions which allows evaluation of the respective questions.

3. Findings

3.1. Need for ILO In Business Soft Skills Training

Before proceeding to understand the effects of the training, it is important to first ask if the training was necessary? Firms, especially large multinational organizations such as many of those involved with the ILO In Business training programme have a general widespread acceptance towards employee training programmes. Many of these firms already implement many hard and soft skills training programmes for their workers, many of which are compulsory for workers. Hence, it is important to understand the relevance of the ILO In Business training in the context of the needs of the employees in these firms.

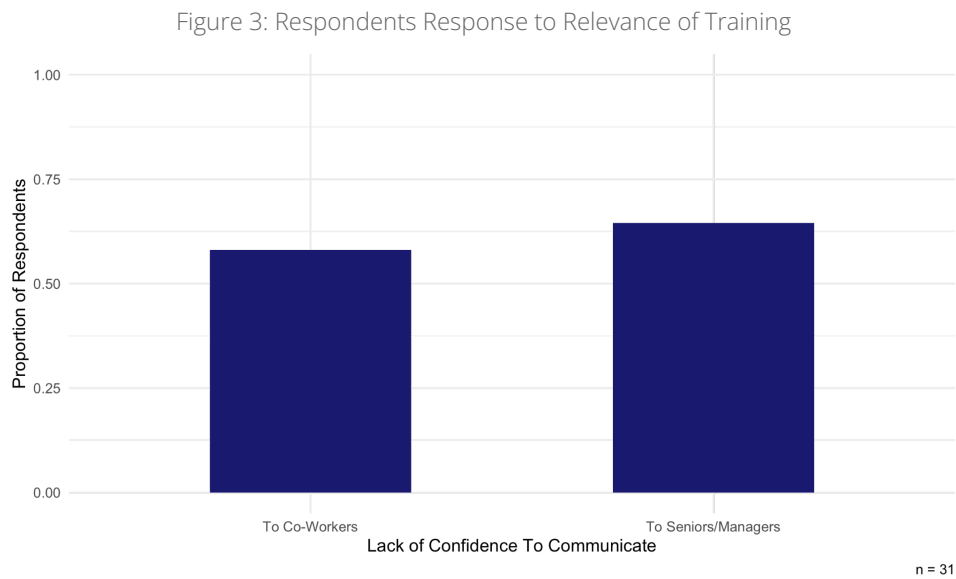
Key Findings

Across all firms, 64% of respondents mentioned that they were not confident to talk to seniors, supervisors or managers.

58% of respondents mentioned that they lacked confidence to talk to other coworkers.

Respondents from Firm C, largely a white collar job, did not suffer from this issue due to higher level of education of employees and the nature of their job.

The employees in all the firms part of the study can enjoy benefits from training and upskilling in several aspects. However with respect to soft skills, respondents in the study mentioned lack of confidence to communicate as a major aspect they would want help with. Qualitative results show that among all firms it was found that close to 64% of the respondents mentioned that they lacked confidence to talk or share opinions with managers or senior employees, while 58% of the respondents mentioned that they lacked confidence to talk to coworkers. The share of respondents is higher in Seagate and Nestle. The lack of confidence stems from several factors most notable is the lack of interaction with other employees or seniors on a regular basis. This was clearly a major factor in the two production firms - Seagate and Nestle.



However, respondents from Firm C did not suffer from the lack of confidence issue. This can be explained by the fact that both Seagate and Nestle are large production firms where employees are often restricted to their departments or production lines so they do not have a chance to interact with coworkers or seniors and managers. This is not the case for employees in Firm C which is largely a white collar job where workers have stronger education backgrounds, lack of confidence hasn't been a hindrance for employees to communicate.

However, there are several other soft skills which are also essential for workers but most workers did not expect to learn as part of a soft skills training programme. Across

all firms, no respondent expected to learn aspects such as critical thinking, career and financial planning as part of the training programme before participating in it. Confidence is usually built through practice and familiarity with other coworkers and teammates and the ILO In Business soft skills training programme is well suited for the purpose. It is an activity based training program that not only covers modules such as public speaking but overall all modules can complement each other to help boost overall confidence of the workers. Also, the training is conducted in groups where groups are made such that members are from different units or production lines. This allows participants an opportunity to interact with other employees and build useful workplace relationships and networks. However, one would have to look at the impact of the programme to understand whether it had actual effects.

The In Business soft skills training programme is also a unique offering compared to other more traditional training programmes. Not only is it a module based training programme, that provides structured modules on different soft skills, it is also an activity based training programme. Activity based, group training programs are unfortunately not a norm in the studied firms except Firm C. Employees at Seagate and Nestle have historically had largely traditional classroom based training. Of course, certain more technical or theoretical training might be more beneficial in a classroom based invigilator led training. Hence, the ILO In Business training can complement such previously implemented programmes with a novel approach to training.

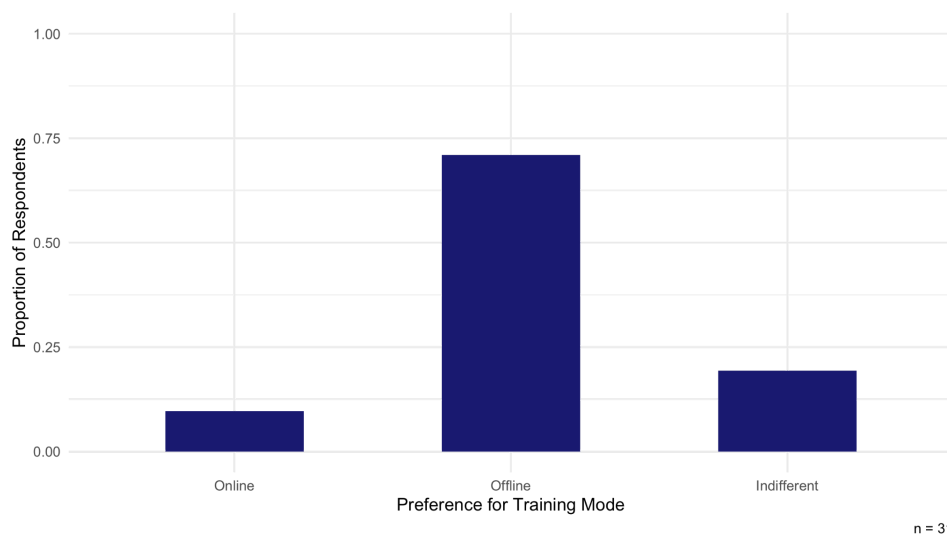
3.2. Efficiency of Training

Mode of delivery is an important factor for the impact of ILO In Business soft skills programme. Initially, the training was conceived to be implemented offline which is the way it was implemented in Seagate. However, firms which participated in the training later, had to move into an online mode of training due to the COVID-19 pandemic. When respondents were asked about their preference for training, close to 70% of respondents mentioned that they would prefer offline training. The high share of preference for offline training is understandable given the group-based activity centric nature of the ILO In Business.

However, in the qualitative surveys it was found that many respondents do understand the trade-offs between online and offline training. This was the case especially with Firm

C and facilitators partnered with ECOP, who strongly recognise the advantages of an online training and hence are largely indifferent between the methods. Due to the COVID-19 pandemic, when firms had to move into an online mode of training, facilitators found out that it was easier to obtain participants for the training. Since several firms made the training optional for employees it is at times tougher to get employees sign up for training in an office setting. More importantly, online training provides access to a larger pool of employees to begin with across the organization at different factory/office locations. It was indeed the case with that of the ECOP partners from the hotel industry who preferred an online training mode since they could get workers and managers from different hotels across Philippines to sign up for the training without worrying about logistics. However, it is important to note that the optimal method for delivery might differ across the participants, the work culture at the firm, the industry and the implementation of the training itself.

Figure 4: Respondents Preference for Mode of Training



In the qualitative survey, respondents were also asked about their preference for training type, that is traditional classroom based training or group based activity training. A significant majority of around 80% of the respondents mentioned that they prefer activity based training over traditional classroom instruction. Soft skills programme especially in the context of the firms part of the study, where employees have low confidence in communication, an activity based learning programme is

well-suited. However, it was also important to understand the reasons driving their choices.

Key Findings

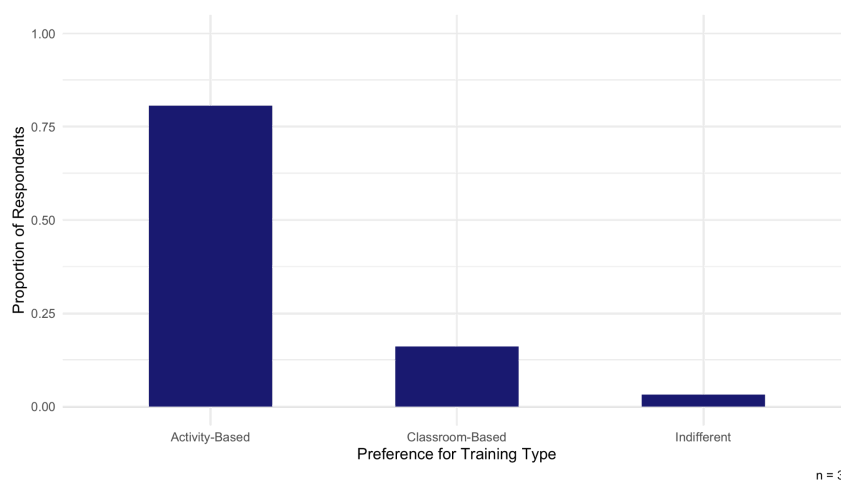
Strong preference for offline training despite recognising the benefits of online mode of training - greater outreach, less logistical challenges.

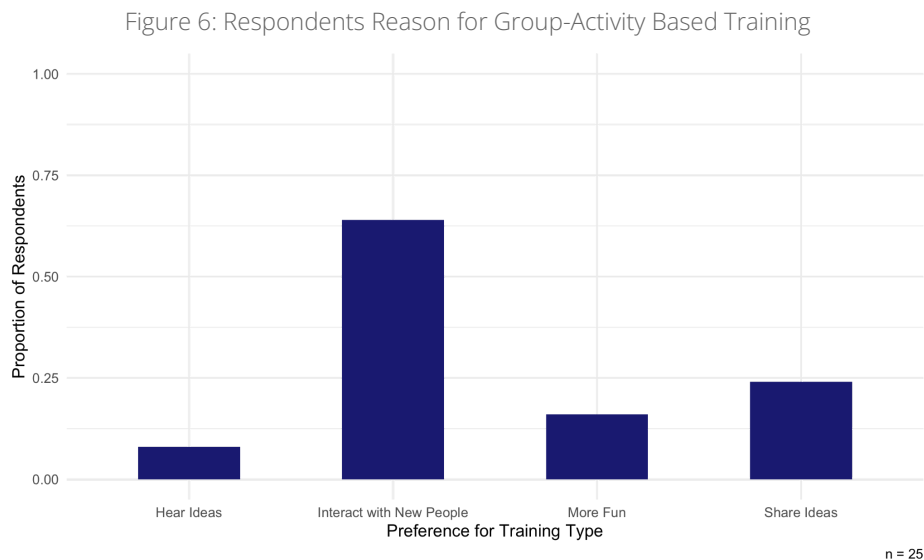
Strong preference for group-activity based training over traditional classroom training.

Preference for group-activity training stems from opportunity to interact with new people and sharing of different ideas and perspectives.

The preference for group-activity based training seems to stem from the fact that it allows interaction with new coworkers. It is closely related to the previously mentioned lack of confidence factor as well, since interacting with new people helps build greater confidence. Also, in a group activity training participants find more opportunities to share and hear ideas and other's perspectives on various issues which makes them more relatable. In a traditional classroom training, most participants may not find the content relatable especially in the case of a soft-skills training. The ILO In Business training programme seems to be well aligned towards the preferences of the respondents both in terms of an easily adaptable online and offline training along with group-activity based approach.

Figure 5: Respondents Preference for Type of Training





The ILO In Business soft skills training is also a low cost training programme that allows for wider adaptability and scale-up. It leverages from a standard activity based learning approach that does not require any additional technical setup. The training material is also standard and can be easily scaled up across various firms and industries without any additional changes. However, a key element that makes it low-cost is the use of within-firm facilitators which saves the cost of using expensive consultants and training facilitators. Initially, mid and senior level employees participate in the training and thereafter they themselves can facilitate training to entry level workers across the firms. Since, there is no additional cost to their use, it saves the firm valuable time and money in recruiting and engaging with external trainers. The only cost is the opportunity cost of these workers who perhaps would have been engaged in some other productive activity in the firm as part of their job.

3.3. Impact of Training

3.3.1. Productivity

Productivity is perhaps the most important performance indicator for all firms across all industries. Previous studies have shown a strong positive impact of soft-skills training on productivity in various contexts and industries (Prada, et al., 2019; Adhvaryu, et al.,

2022; De Grip and Sauermann, 2011). Soft skills such as those in the In Business training programme - public speaking, problem solving, critical thinking, creative thinking - can improve worker participation and coordination between workers thereby increasing productivity. However, it is difficult to define productivity in every context especially considering that the training was implemented across all levels of employees in different firms. Different approaches are combined to evaluate the effect of training on productivity.

Key Findings

Higher share of trained workers in a production cell leads to fewer products failing the quality assurance test.

In Seagate, training of all DL2 & DL3 workers in a production cell reduces the share of goods that fail quality checks by 10 to 30 percent (2 to 4.5 percentage points).

Although training is effective against any failure incident it is more effective in reducing large failure incidents (failure of a large set of products).

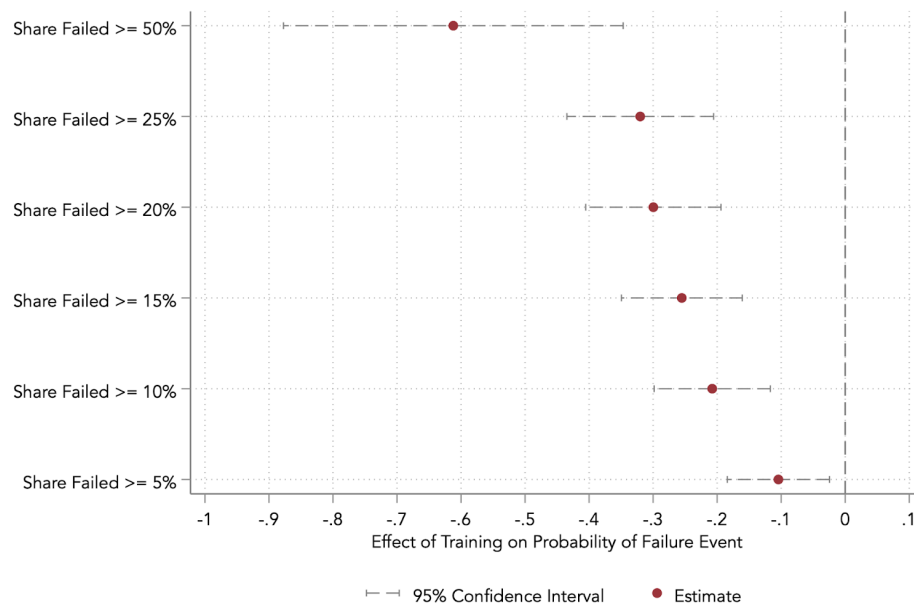
Across all firms, training leads to more collaboration between workers, greater efficiency and better prioritization of work by employees.

Participants from Firm C and ECOP, also found strong positive effects from structured communication in a more formal setup.

First, let's analyze the quantitative effects of training in Seagate. Since access to relevant productivity data is available, a quantitative measure of productivity can be estimated. This is not possible in the case of Nestle and Firm C, where productivity is more generally defined. However, useful insights can still be gained from well-designed interviews. The productivity at Seagate is defined in terms of the number of produced units that passes or fails the quality assurance test per day. Specifically, a share of produced units that failed the testing process is calculated. This metric is defined at the level of a production cell, which is a combination of 15-20 DL1 workers, 4-5 DL2 workers and 2-3 DL1 workers. The trained workers were therefore mapped to their respective production cells, in order for us to calculate the share of DL2 and DL3 that were trained, in each production cell. Using these metrics, the effect of the share of trained workers on the share of goods that failed the quality assurance test can be estimated.

It is found that a higher share of trained DL2 and DL3 workers in a production cell leads to a reduction in produced goods that fail the quality assurance test. A greater share of trained workers implies more coordination among workers, which can be attributed to the training modules in interpersonal communication and public speaking. Additionally, modules in problem solving, critical and creative thinking are very useful in the context of production since goods often fail quality tests due to small systematic issues which can be fixed through better communication and critically analyzing the issue. Soft-skills have an important role to play in these aspects of the production process.

Figure 7: Quantitative Effects on Productivity



The regression analysis is performed by creating binary variables that take the value of 1 when the failure rate in a given production cell in a given day is more than a certain threshold percent. Results are then estimated using 5%, 10%, 15%, 20%, 25% and 50% thresholds. A higher percent implies a large failure incident, i.e. for example 50% threshold implies that 50% of goods produced in that production cell on that day failed the quality assurance test. It is specifically found that training of all DL2 and DL3 workers in a cell reduces the share of goods that fail quality checks by 10 to 30 percent (2 to 4.5 percentage points). The training is more successful in reducing the probability of failure in large failure incidents. Specifically, training of all DL2 and DL3 workers reduces the probability of the failure rate exceeding 5% by 10% while it reduces the

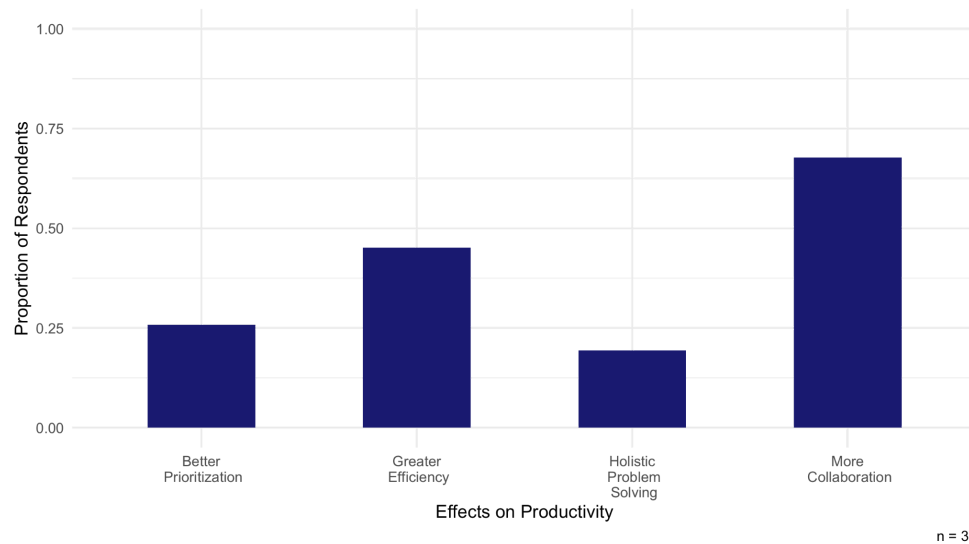
probability of failure rate exceeding 25% by 30%. Large failure incidents are usually caused by systematic mistakes or human error and are often the easiest to fix. Such incidents are likely caused by identifiable attributes such as incorrect machine configuration or specification and miscommunication leading to failures. Greater coordination and effective problem solving due to training can reduce the chances of occurrence of such issues.

The qualitative analysis of respondents from Seagate found that 77.7% (14/18) interviewees responded that they had greater communication and coordination with their co-workers post training. This supports the findings of the quantitative analysis since effective communication across coworkers and supervisors can indeed reduce production failures. Similar responses were also given by participants from other firms. While workers did not attribute their gains from the training to particular modules, the positive effect was largely due to an aggregate effect of participation in training. First, training groups were made in largely a random manner where members in their respective groups were across various departments. Second, the interactive nature of the training meant workers had to participate and engage in the training session. Third, generalized examples and activity based training meant that workers did not have to rely on subject specific knowledge. Collectively, it helped training participants increase their confidence and ability to effectively share information. Also, they made some acquaintances, if not friends during the training thereby increasing their network in the firm. Although difficult to observe directly, on aggregate these changes could have likely had positive effects on productivity through better coordination within and across production cells.

However, the effects on productivity are not limited to just Seagate. We observe similar patterns through qualitative research in other firms. Although, in other firms it isn't possible to estimate the percentage increase in productivity due to training, productivity can be measured using different metrics. Using mapping of keywords from the respondent's responses in the qualitative analysis, it was found that 68% of respondents mentioned that training led to more collaboration with coworkers. 45% respondents mentioned that training led to greater efficiency in their work. Respondents also reported that they were able to prioritize their work better post training. Additionally, respondents mentioned that they were able to incorporate the

problem solving skills learned during the training with a more holistic understanding of different perspectives and ideas.

Figure 8: Qualitative Effects on Productivity



Training participants from Firm C and facilitators from ECOP's partner firms also reported that training led to more structured and effective communication which saved them valuable time. Surprisingly, being concise wasn't the key but communicating at the level of the prospective reader or listener was important. It reduced misinformation and the need for additional clarification leading to increase in productivity. It was an important takeaway for mid and senior employees and managers who have to regularly communicate across various departments and clients. Additionally, ECOP facilitators found that their communication was more engaging upon using learnings from the training.

3.3.2. Absenteeism

Absenteeism is another important performance measure for the firm. It is a metric that often directly translates to productivity as well. The effects of soft-skills on absenteeism in general across other studies have been mixed in general. For example, Adhvaryu, et al., 2018 do not find any impact of soft-skills on absenteeism of participants in a field experiment at a large textile manufacturing firm in India. In order to estimate the effect

of a policy on absenteeism, ideally a precise and consistent data is needed over a very long period.

Key Findings

In Seagate, training on average reduces the probability of being absent for at least a day in a month by any given employee by 10% (7 percentage points) in the year after training.

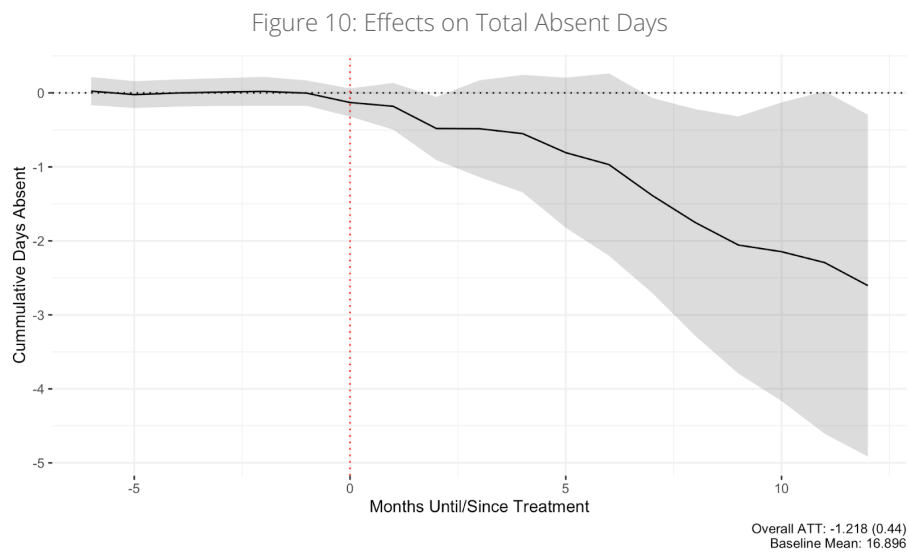
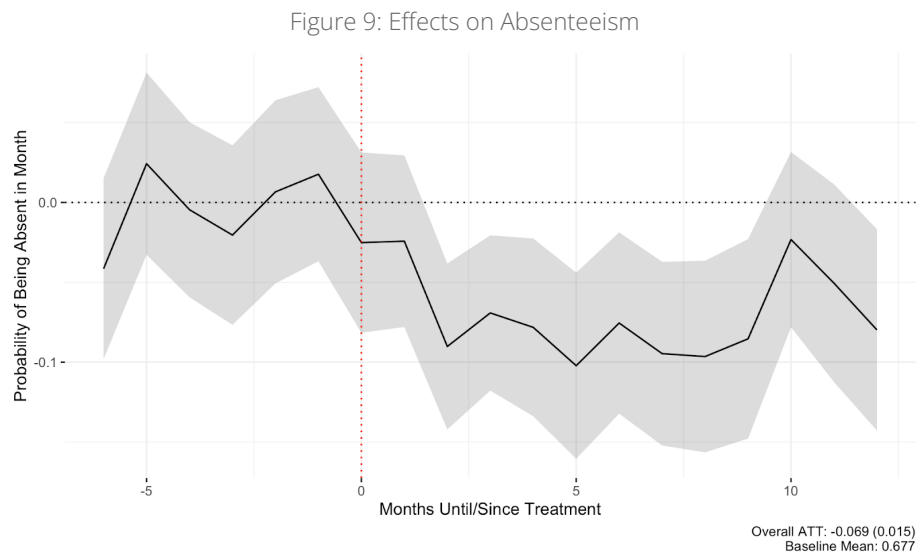
In Seagate, the effect of training on absenteeism is highest in the 2-9 months period after training.

In Seagate, training overall reduces the total absent days for any worker in the 12 month period after training by 7% or 1.2 days.

Effects on absenteeism across other firms is not possible to measure due to lack of consistent quantitative data over a long period of time.

Seagate, like most other manufacturing industries, uses a production line based manufacturing approach. It implies that workers are assigned to specific tasks in each production line. Thus, any absenteeism implies reshuffling of workers across production lines before the start of each shift to balance workers based on experience and expertise in each production line.

It was found that the soft-skill training on average reduces the probability of being absent for at least a day in a month by 10% (7 percentage points) in the year after training with a baseline probability of 0.677. It implies that training reduces the number of workers who remain absent for at least a day in any month. It is found that the effect is largest in the 2-9 months period post training. The mechanism driving this might be a combination of multiple factors. First, working conditions for workers, especially their mental and psychological well-being, would be improved due to better communication and coordination with co-workers and supervisors. Second, simply participating in the training could make workers feel that their employers care about their wellbeing which would increase a sense of belonging to the organization thus having a positive effect on attendance. Qualitative analysis also provides evidence in support of it since workers have mentioned an increase in self-confidence, greater communication and coordination between other workers.



Overall, the training reduces the total absent days for any worker by 7% or equivalently 1.2 days in the 12 months immediately post training. The baseline (pre-training) average absent days for any worker is 16.8 days. The mechanisms driving this are similar to the ones mentioned earlier. This has important implications for the employer. The effect is substantial and clearly demonstrates how investing in the wellbeing of workers can also benefit the employer.

Due to lack of access to quantitative data from other partner firms of the study, the effects of training on absenteeism wasn't possible to estimate. Effects on absenteeism cannot be captured precisely using qualitative data, since self-reported count of absent days is likely to be inaccurate. Hence, the effects of training on absenteeism has only been reported from Seagate.

3.3.3. Promotion

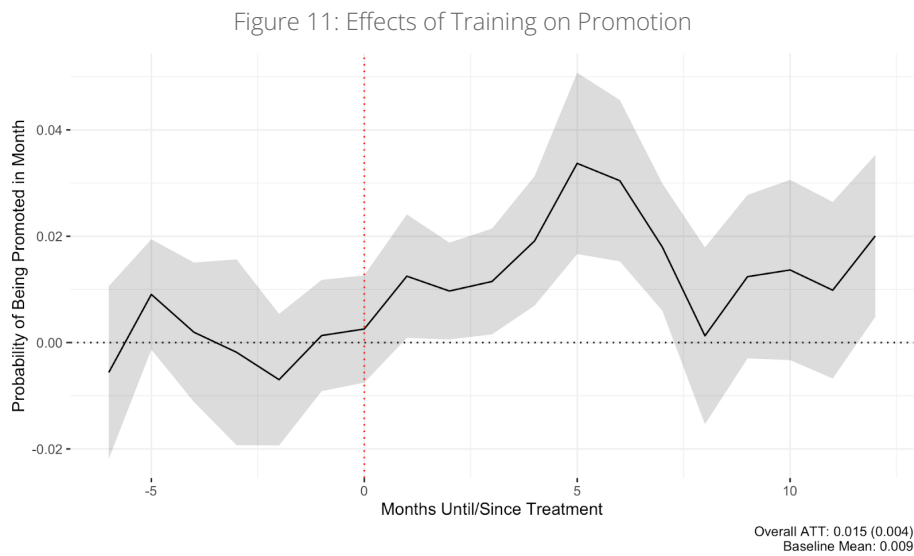
Soft-skills can have significant effects on the career trajectories of workers. They help with effective interpersonal communication not only between co-workers but also with supervisors. Also, by improving one's ability to critically understand issues and come up with inclusive and effective solutions, the skills targeted during the training programme can improve the leadership abilities of a worker. Furthermore, participation in training organized by the employer can lead workers to have a more positive view of the employer and therefore improve general participation in the workplace and related activities. It can also help workers voice their opinions and concerns more effectively and directly. All of these behavioral changes in the worker can lead to more visibility in front of supervisors and other senior staff, which might affect the promotional outcomes of the worker. Hence, soft-skills training may indeed affect promotional outcomes through various channels.

Key Findings

In Seagate, training on average increases the probability of a DL2 or DL3 worker being promoted in a given month by 1.5 percentage points (166% increase). The effect is largest in the 5-6 month period after the training.

In context, the effect is small since the baseline (pre-training) probability of a worker being promoted in a given month is only 0.009.

In qualitative analysis, it was found that across all firms, training leads to more opportunities within the firm in terms of working on new machines, handling more responsibilities and greater say over decisions in the firm.

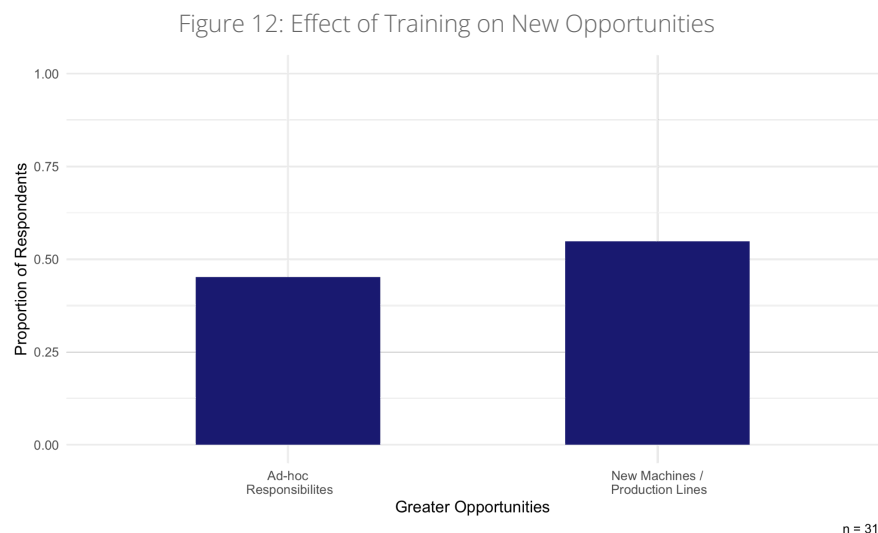


First, using quantitative data from Seagate, it was found that the soft-skills training increases the probability of a DL2 or DL3 worker being promoted on average in a given month by 1.5 percentage points (166% increase). While the effect may seem very large, it is important to note that the baseline (pre-training) probability of a worker being promoted in a given month is only 0.009. Therefore, soft-skills training does have a statistically significant effect on promotion but in the context of the total chances of promotion, it is not a very large effect.

It is also found that the effect is largest in the 5-6 month period after completion of training. Because it takes a while for workers to implement or incorporate the new knowledge and skills from the training into their daily work, the delayed effect on promotions makes sense. It could also be the case that supervisors take a while to notice visible changes in a participant's work. However, the key factor that is likely to have influenced the low effect on training, is the way the training programme was implemented in Seagate. Since the training was made compulsory for all employees, and as a result the benefits of training was received by all workers, it was difficult for managers to identify workers to promote on the basis of attributes exhibited by workers. As a result, the causal effect of training on worker promotion is very low.

Although the chances of explicit promotion of employees to a higher rank due to training is low, it would be a limited characterisation of the effects. Training may have indirect effects which may lead to promotion after a period of time. These indirect

effects may be due to changes in behavior of workers such as increased confidence to interact, communicate and network with coworkers and supervisors. This leads to managers handing over greater responsibilities and opportunities to work on new products and machines. Employees are also given ad-hoc responsibilities to head within firm social activities and other social cause events. These factors may eventually lead to a positive effect on promotion of workers. In qualitative research it was found that 55% of respondents received an opportunity to work on new machines/production lines or new tasks due to training. 45% of respondents also received greater ad-hoc responsibilities within the firm which increased their visibility within the firm. In fact one worker from Firm C mentioned that better communication led her to receive an ad-hoc role for conducting few social cause events within the firm which has in turn strongly strengthened her case for a promotion.



3.3.4. Salary

Key Findings

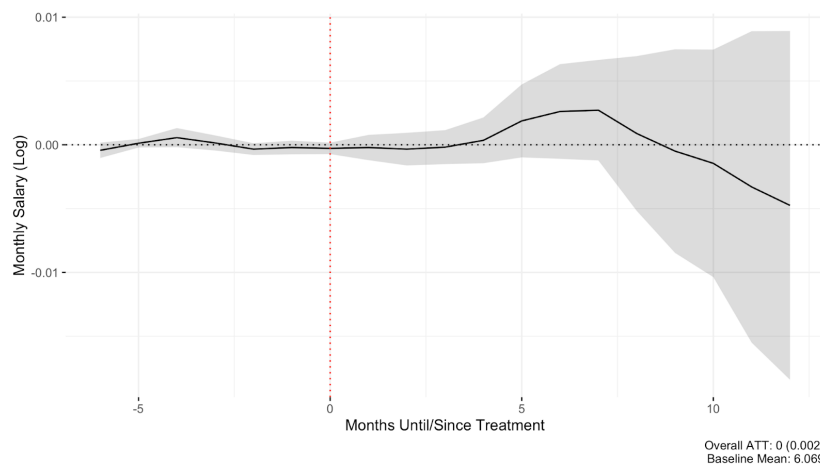
Training did not lead to any significant effect on salary across any firm.

One of the most important indicators for studying the effects of the training is that of salary. It can be considered as the direct impact of training on workers or the indirect

result of other effects brought about by the training. For example, improvements in networking, communication, efficiency and productivity of workers might have resulted in salary hikes for trained workers. The effect can be studied using quantitative data on monthly salary from Seagate along with self-reported impact of salary noted within the qualitative interview.

In Seagate, we do not find a statistically significant effect of the training programme on salary. Since the promotion effects were small in magnitude, they do not reflect in salaries. Also, since the training programme was implemented in Seagate at scale, it might have been difficult for managers and supervisors to identify particular individuals to promote or give a raise in salary. As a result, at the time of the review cycle at Seagate, almost everyone, irrespective of their participation in the training programme received a raise in salary. Thus, the effect on salary cannot be attributed to the participation in training.

Figure 13: Effect of Training on Salary



In qualitative surveys, respondents from Nestle, Firm C and ECOP didn't mention that participation in the training led to any increases in salary. It could be that training in all the organizations mentioned was conducted in and around the pandemic where businesses were significantly affected hence salary hikes were very limited in general. Another reason could be that, despite many positive effects brought about by the soft skills training, employers weren't able to quantify and estimate a direct impact on production and profits. Since profits can be volatile and are affected by several factors, it is difficult to precisely estimate the effects of training on profits. Salary in blue collar

jobs and other medium skilled jobs are generally very sticky so a perceivable effect on salary is difficult to obtain.

3.3.5. Continuous Improvement Suggestions

This analysis in this section is specific to Seagate since other firms do not have a similar Kaizen or continuous improvement suggestions mechanism. In Seagate, all workers have access to a portal where they can make extensive suggestions or report issues. The suggestions can be on any technical or quality-of-life improvement in the production process or generally in the factory. The suggestions range from fixing labels on machines and buttons, to opening electrical wiring, and can include any complaints about malfunctioning equipment. The portal is used extensively by workers and is a means to voice concerns or make suggestions.

Key Findings

Post training, on average the probability of a worker submitting an improvement suggestion was 2 times lower.

The large effect is due to a significant decrease in suggestions by trained workers while suggestions for untrained workers remained relatively constant.

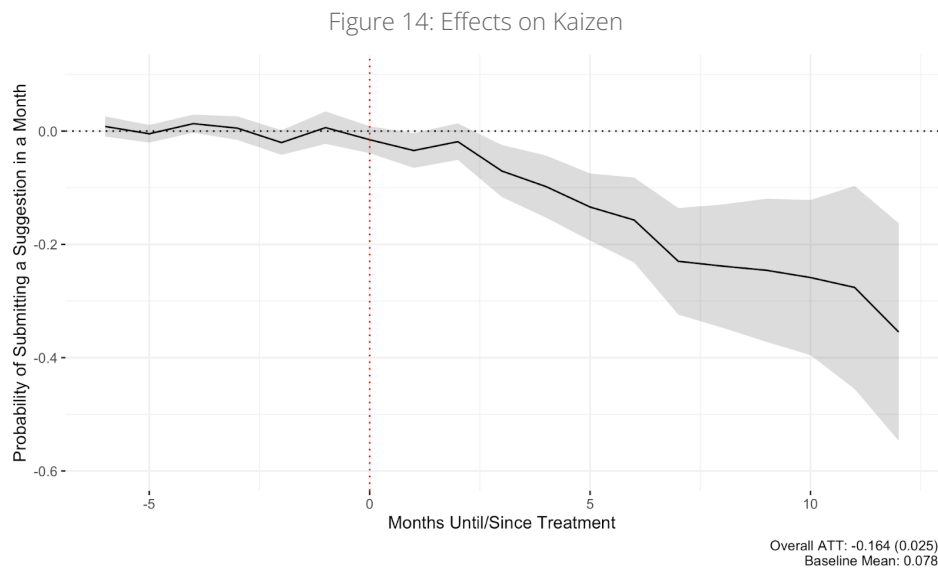
The probability of trained workers submitting an improvement suggestion also declines over time.

The effect can be explained by increased direct communication with managers and supervisors which has replaced formal Kaizen suggestions.

One might expect soft-skills training to have a positive impact on workers' ability and willingness to make suggestions through the tool due to training on interpersonal communication, critical thinking and problem solving skills. However, it was found that on average the probability of a worker submitting an improvement suggestion in a given month was more than 2 times lower after the training. The mechanism driving this counterintuitive results is likely greater in-person interaction with supervisors, co-workers and administrative staff. Workers who became better at communicating their concerns or suggestions in-person could have reduced the use of the suggestions portal as a result. It is interesting to note that we find a large effect due to a decrease in

the use of the suggestions portal for trained workers while the level of suggestions for untrained workers stays relatively constant.

We also find that the probability of a trained worker submitting an improvement suggestion post-training declines over time. There are multiple factors driving this effect. First, workers may initially make only a few suggestions in-person but as they become more comfortable with it, they are likely to make more improvement suggestions in-person than through the portal. Second, as more workers start making in-person suggestions, other trained workers might follow suit, thereby reducing the use of the portal even further.



The effects on Kaizen suggestions can be confirmed through direct questions asked as part of the qualitative interviews. Participation in the soft-skills training essentially led to increased self-confidence as well improved communication skills. 78% (14/18) of interviewees at Seagate mentioned that training had led them to be more comfortable in conversations with supervisors and that they are able to communicate suggestions directly to supervisors. Additionally, sessions were facilitated and sometimes participated by supervisors and managers which led better networks within the organization and greater familiarity with them. Hence, workers mentioned specifically that they were more comfortable in explaining issues or making suggestions to their immediate supervisors. This wasn't the case pre-training, where workers were often reluctant to directly communicate with supervisors. Furthermore, a few trained workers

also mentioned that supervisors themselves asked them for their opinions and suggestions about specific tasks or challenges.

3.3.6. Personal Growth

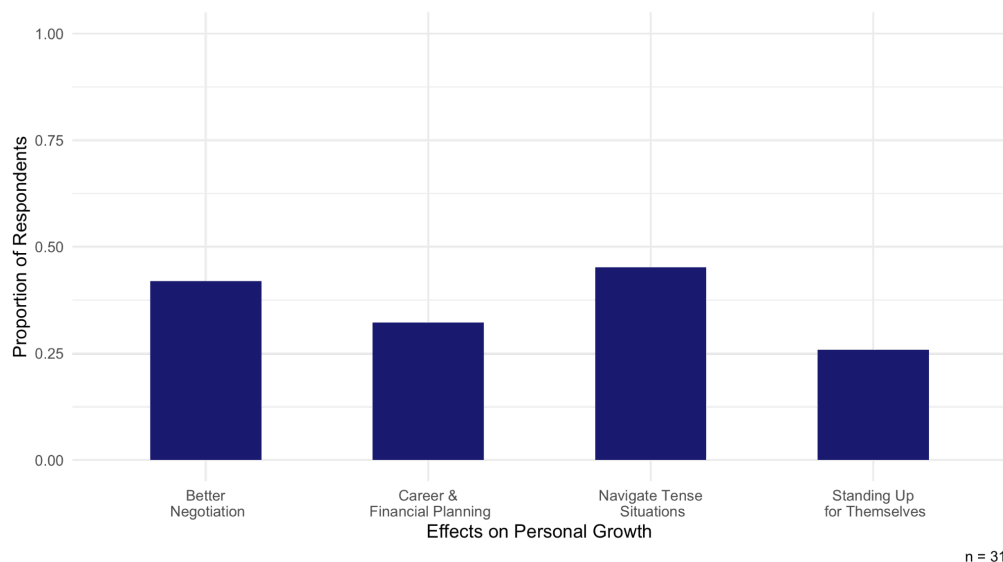
Although the soft-skills training programme was primarily designed for workplace growth, there have been some significant spillovers towards personal development and growth outside the workplace. Increased confidence due to training is not just expressed in the workplace but has also reflected on their personal lives outside it.

Key Findings

Training helped participants actively undertake retirement and financial planning especially among those who are closer to their retirement date.

Participants were also able to stand up for themselves at home because of greater self-confidence gained as a result of training.

Figure 15: Effects on Personal Growth



Modules on future planning and negotiation have especially come handy in these situations. Across all firms, 32% of respondents mentioned that they had given more thought to financial and retirement planning, post training. Financial and retirement

planning is an essential process in the later stage of one's career and it is imperative that workers pay attention to it. While the training is not designed to give specific financial plans, it certainly makes workers actively consider financial and retirement planning in a manner suitable to their interests. For example, some workers registered for retirement savings funds that keep a share of their monthly wages for retirement.

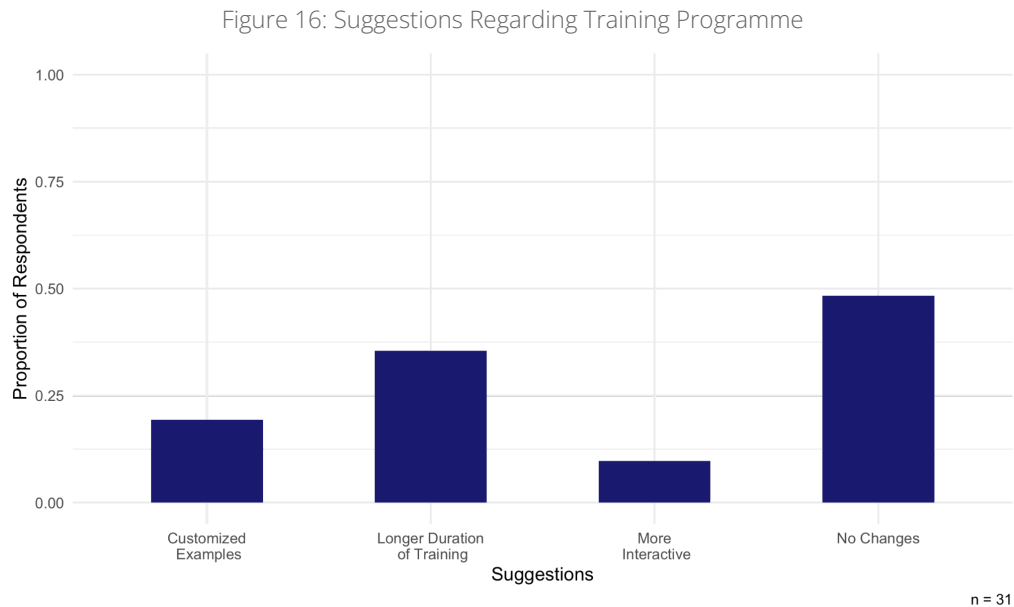
Additionally, improvements in communication skills also reflect outside the workplace. It also strengthens their self-confidence and ability to stand up for themselves and negotiate in tense situations. Training also helps the ability of participants to prioritize work and plan better. Across all firms, 45% of respondents mentioned that training helped them negotiate and navigate tense situations in a calm and composed manner. The effects are not just restricted to the workplace but also in the personal lives outside the workplace. 42% mentioned that they were better at negotiation and 25% felt that they were able to stand up for themselves due to training. It was also found that the effects are stable across firms and employees from all firms in the study seem to gain from the training.

The positive effects of training on the personal lives of participants shows that the gains from training are not due to a particular module or skill. It is the overall holistic growth in self confidence and courage to speak up, think and rethink situations which significantly helps the participants. Additionally, gaining confidence is a gradual process that happens over time as the workers become more aware and familiar about conversations with managers and coworkers.

3.4. Suggestions for Improvement of Training

The soft skills training despite its many advantages, still has areas which can be improved upon. Improvements can be general as well as more specific, perhaps restricted to a firm or industry. Across all firms, close to 52% respondents in the qualitative survey, reported that they liked the training as it is and don't have any suggestions that they would like to make to the training programme. However, a significant share of respondents also reported few suggestions that they think would improve the training. The most common suggestion was that the training should be longer. Around 35% respondents across all firms mentioned that they would like the

modules to be longer than the current three hours. As mentioned earlier, participants reported that they gained the most while interacting and participating in the activities with other employees from a different team or department. Hence, over 35% of respondents in the qualitative interviews across all firms report that they would prefer a longer duration of the training as they felt that some parts of the training were rushed due to the time constraints.



Apart from time constraints of the training, a significant albeit smaller share of respondents reported that they think the examples used in the modules of the training could have been more customized to the work that they perform or generally what their firm performs. The training material used in the modules is standard across all firms since it allows ILO to have a ready-to-go training programme that can be applied across firms/industries without incurring significant additional costs. However, in the qualitative analysis it was found that around 19% of respondents across all firms would have preferred the use of more customized examples and activities. A small share, around 10% of the respondents also reported that they would like the training to be more interactive. For example, a respondent from Firm C mentioned that they would want the training to be more gamified with an element of competition which would encourage more engagement from the participants.

4. Conclusion

The ILO In Business soft-skills training is an innovative, activity-oriented training programme that is not only cost-effective but also scalable across firms and industries. The training of mid-level workers at Seagate as shown by the report provides significant benefits both to the worker as well the firm. The training was found to be relevant to the needs of the workers across all the firms. Through the qualitative analysis, it was found that 64% of respondents were not confident to talk to seniors, supervisors or managers. Also, 58% of respondents mentioned that they lacked confidence to talk to other coworkers. This was consistent across all firms except Firm C which is largely a white collar job and did not suffer from this issue due to higher level of education of employees and the nature of their job. The interactive activity based training approach of the In Business training is quite relevant to the needs of the workers.

The qualitative analysis also reveals a strong preference for offline mode of training with over 80% respondents preferring offline training over online mode of training. In addition, respondents reported a strong preference for group-activity based training over traditional classroom training. The preference for group-activity training stems from opportunity to interact with new people and sharing of different ideas and perspectives.

The training led to significant positive improvements across different performance indicators. In Seagate, the higher share of trained workers in a production cell leads to fewer products failing the quality assurance test. Training of all DL2 & DL3 workers in a production cell reduces the share of goods that fail quality checks by 10 to 30 percent (2 to 4.5 percentage points). It was also found that across all firms training leads to more collaboration between workers, greater efficiency and better prioritization of work by employees. Participants from Firm C and ECOP, also found strong positive effects from structured communication in a more formal setup. The cumulative effects of the training translates into higher productivity among trained workers.

Furthermore, training also reduced worker absenteeism in Seagate by 7 percent, which could further increase productivity. The results provide evidence that investing in worker well-being can be beneficial to the firm not just in terms of job satisfaction of workers but in terms of productivity and profits.

Additionally, small effects of training on promotion were also found, though these do not translate to any effects on salary. In Seagate, a significant reduction in continuous improvement suggestions made by trained workers was also found. This appears to be due to workers becoming more capable of directly communicating their suggestions to supervisors, co-workers or administration. Workers appear to rely less on the formal suggestions portal and more on direct communication due to the soft-skills training. Modules in public speaking, interpersonal communication and critical thinking played an important role in improving the ability of workers to communicate effectively.

Improvement in communications skills and, subsequently, self-confidence also translate to personal growth of workers outside the workplace. However, across all firms, training leads to more opportunities within the firm in terms of working on new machines, handling more responsibilities and greater say over decisions in the firm. Trained workers are more involved in their financial and retirement planning, and can truly stand up for themselves. They are better negotiators in tense situations and can navigate their lives better.

The results also complement the other studies conducted by GBL in the context of textile manufacturing firms (Adhvaryu, et. al., 2022). It was found that soft-skills training for female garment workers increased productivity by around 20% compared to those that did not receive training. It was also found that the gains were highest for those workers who had the lowest educational skills but greatest technical skills. Furthermore, similar to In Business only a marginal increase in wages was observed.

The report provides evidence of strong positive effects of the ILO In Business soft-skills training for both workers and the participating firms. Soft-skills are complementary to improvements in hard-skills, better leadership and a better workplace culture. Having established its effectiveness, the path forward is to scale up the program across other firms across different industries.

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