

The Impact of a Vocational Training “Plus” Programme on Employment and Income¹

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Abstract

In a Randomised Control Trial (RCT) in northern Bangladesh, this study explores barriers to rural youth migration to urban employment hubs. By implementing a vocational training “plus” programme facilitating apparel sector employment, the study revealed significant and persistent effects of the programme on income and employment, primarily due to the addition of a stipend and on-the-job (OJT) training components. Treated participants experienced significant income and remittance increases, alongside reduced income poverty, attributed to lower job search costs and job–fit risks. Notably, the on-the-job paid apprenticeship offers a benefit-cost ratio of 8.85, demonstrating its cost-effectiveness for programme scalability.

Introduction

Vocational training programmes are widely recognised in development policy literature as essential for building a skilled labour force capable of driving economic growth, enhancing productivity, and fostering prosperity. However, these programmes often fall short of their goals, even in developed countries with favourable institutional environments, primarily because they exclusively focus on the acquisition of job skills.

Through a rigorous Randomised Control Trial (RCT) experiment, this study provides empirical evidence that vocational programmes can be highly effective once critical issues, primarily credit constraints, industry demand, and job linkage, are appropriately addressed.

The experiment for this brief research letter is set in Bangladesh, zeroing in on the country’s booming ready-made garment (RMG) sector, which has fuelled the country’s recent economic growth. The study identifies a puzzling phenomenon whereby the RMG sector (which is concentrated in Dhaka and Chittagong and attracts migrant workers countrywide) has seen disproportionately low migrant inflow from northern Bangladesh—the most poverty-stricken region in the country. Thus, the study addresses an important policy-relevant question: What factors prevent the disadvantaged youth in northern Bangladesh from seizing opportunities in the RMG sector despite several past targeted vocational training programmes?

This study is the first of its kind in Bangladesh and the second in South Asia, rigorously evaluating job training impact through an RCT setting. Evidence of vocational training programmes in developing countries has primarily focused on Latin America until recently.

Method

This study involved a randomised field experiment with the help of a local NGO—*Gana Unnayan Kendra* (GUK)—that targeted seasonally unemployed youth from rural northern Bangladesh and provided interventions to promote formal employment in the RMG sector.

The study sample, selected through a participatory rural appraisal² followed by a short survey, comprised individuals meeting specific eligibility criteria: irregular income, seasonal unemployment, aged 18–30, originating from moderate or ultra-poor households, and willing to change occupations. The baseline survey

¹ This digest is adapted from the authors’ full paper titled *Barriers to Labour Migration for the Rural Poor*.

² Participatory Rural Appraisal is a citizen-centered method of development used by NGOs and agencies to incorporate the knowledge and opinions of rural people in the planning and management of development projects.

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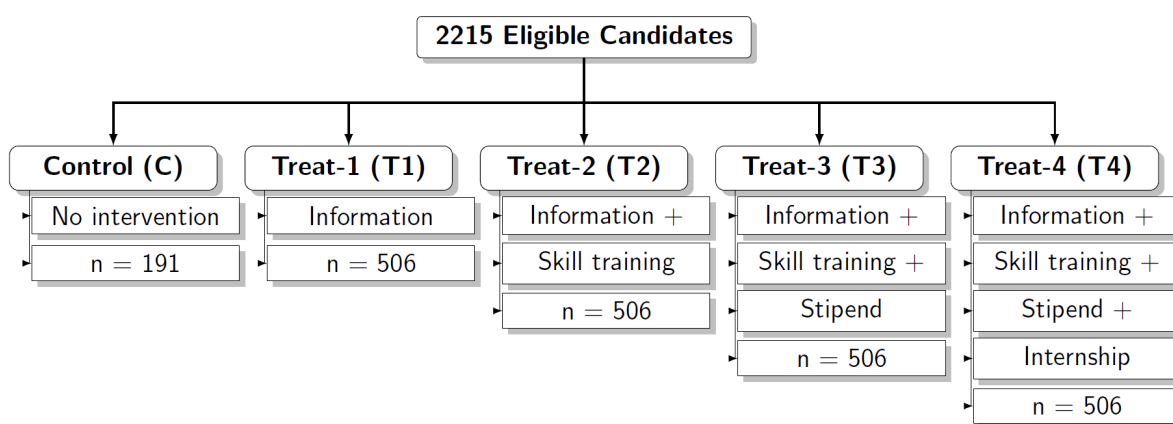
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included 2,215 eligible participants with an average age of 22.42. Notably, approximately 30% of the eligible participants were females, 52% belonged to ultra-poor households, 71% were unemployed, and none had attained education beyond the secondary level.

Sample participants were allocated randomly into an experimental “control” group (with no training related intervention) or one of the following four treatment groups with different job-related interventions: (i) day-long job-related information session (T1, “Information”); (ii) T1 plus a one-month long residential skill training (T2, “Training”); (iii) T2 plus a stipend to cover the migration cost and forgone income (T3, “Stipend”); and (iv) T3 plus an on-the-job training (OJT) programme, where a one-month paid apprenticeship (internship), in a factory located in Dhaka, is included as a part of the training (T4, “OJT”).

The cost per person in USD for each treatment intervention varied as follows: T1: \$2, T2: \$100, T3: \$145, and T4: \$185.

Figure 1: Trial Design



Results

The study found that skills training uptake and completion rates are higher when the training is combined with a stipend.

Interestingly, men showed a drop in programme uptake and completion rates when offered only the training treatment (T2), forgoing training for immediate income opportunities in the local area. Conversely, women experienced significant drops in uptake and completion rates when the OJT treatment was added to training and stipend, mainly due to conflicting family obligations and pressures to not leave the home.

Notably, the 6-month follow-up survey showed that the stipend treatment (T3) boosted RMG sector employment by an additional 8.4 percentage points, and the OJT treatment (T4) increased it by a further 14 percentage points. Conversely, the information campaign (T1) and standard vocational training (T2) had no significant impact on employment, echoing past findings on vocational training programme limitations (Bloom et al., 1997; Card et al., 2017; Fox & Kaul, 2017; Kluve et al., 2016; LaLonde, 1995; McKenzie, 2017; Ryan, 2001; Schochet et al., 2008).

The study also revealed that about 25% of those receiving OJT were employed during the 6-month follow-up survey—the highest rate among all treatment groups. Additionally, participants in stipend and OJT groups also saw positive impacts on income, remittance flow, household assets, and income poverty reduction. These findings persisted even after 18 months.

These results suggest that supplementing vocational training programmes with stipends and OJT components could boost their effectiveness by reducing forgone income and job-fit risks, potentially leading to significant improvements in programme outcomes.

Table 1: Treatment Uptake Decision of Participants

Dependent Variable: Treatment Uptake (dummy)	(1)	(2)	(3)
(T1) [Information]	0.762*** (0.024)	0.771*** (0.025)	0.760*** (0.033)
(T2) [T1 + Skill training]	0.584*** (0.026)	0.594*** (0.026)	0.579*** (0.034)
(T3) [T2 + Stipend]	0.760*** (0.029)	0.770*** (0.029)	0.766*** (0.037)
(T4) [T3 + On-the-job training]	0.614*** (0.025)	0.624*** (0.025)	0.621*** (0.036)
Observations	2,215	2,215	2,215
R-squared	0.183	0.196	0.321
Mean of the control group	0	0	0
P-value for joint significance	0.00	0.00	0.00
Skill-Training effect: S = T2 - T1 (beta)	-0.178	-0.177	-0.181
Skill-Training effect: S = T3 - T2 (p-value)	0.00	0.00	0.00
Stipend effect: C = T3 - T2 (beta)	0.176	0.176	0.187
Stipend effect: C = T3 - T2 (p-value)	0.00	0.00	0.00
OJT effect: A = T4 - T3 (beta)	-0.146	-0.146	-0.145
OJT effect: A = T4 - T3 (p-value)	0.00	0.00	0.00
Control for Phase	Yes	Yes	Yes
Control for observables		Yes	Yes
Control for village			Yes

Discussion

This study found evidence that merely offering skills training, as vocational programmes do, is inadequate. Additional barriers beyond skills shortage can impede the realisation of desired outcomes from these programmes, notably credit constraints and the perceived risk of not finding suitable employment after programme completion.

The study offered key “plus” components to enhance vocational training programmes’ efficacy as a policy initiative. It presents a robust framework for aligning skills training initiatives with industry demands by demonstrating the impact of adding stipend and OJT components to purely skills-focused vocational programmes. The study found that groups receiving stipend and OJT treatments showed significant increases in job acquisition and retention: 6.2 percentage points and 17.1 percentage points, respectively, compared to the control group.

The study further highlighted the positive impact of the stipend and OJT treatments on continued employment, remittance flow, household assets, and income poverty reduction.

Policymakers can thus enhance vocational training programmes by incorporating stipend and OJT components. This integration helps mitigate uncertainties surrounding employment outcomes by acclimating trainees to the demands and dynamics of the intended employment settings while offering financial stability during the OJT phase. Additionally, the OJT treatment allows employers to assess trainees’ technical abilities, helping meet industry demand more efficiently.

The study also highlighted the strong social barriers facing females, hindering their participation in training programmes and labour markets. These include the traditional view of women as primary caregivers, religious practices like *purdah*, and encumbering societal expectations. These barriers persist, underscoring the need for targeted policy efforts.

Conclusion

This study offers policymakers a framework to enhance the effectiveness of vocational training programmes. It highlights two critical yet typically overlooked barriers to employment that render such programmes largely ineffective: namely credit constraints and uncertainty in job prospects/fit.

The study suggests that vocational training programmes can be significantly improved by integrating two key components: a stipend to cover forgone income and job search expenses; and a short-term, paid on-the-job apprenticeship, facilitating future employment.

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Biography



Abu S. Shonchoy is an Associate Professor of Economics at Steven J. Green School of International and Public Affairs, Florida International University (FIU). His current research interests are on financial inclusion, skills training, infrastructure, and education. He was awarded the Albert Berry Prize at the Canadian Economic Association (CEA) Conference for the best Paper in Development Economics in 2016. He recently published an edited book titled "Seasonality and Micro-credit" from Springer. He is currently a J-PAL affiliate professor and a fellow of IZA and GLO.



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