

Screening and Signaling Non-Cognitive Skills: Experimental Evidence from Uganda

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Labor productivity and wages remain far lower in developing countries. This is particularly true in Africa, where the number of workers earning less than \$3.10 per day is growing by almost 4 million a year (ILO 2017). Understanding which factors contribute to keeping productivity and wages low in developing countries is thus of primary importance for informing development policies.

In Bassi and Nansamba (2018), we report the findings from a field experiment we designed to study how urban labor markets in developing countries are affected by information problems. In particular, we test whether lack of information on the *soft skills* of workers during recruitment reduces productivity, employment and wages by limiting the ability of firms to hire the right workers. In doing so, we contribute to a growing literature on active labor market policies in developing countries (McKenzie 2017).

The intervention

The intervention was implemented with the NGO BRAC Uganda. The sample included about 400 small firms that reported needing additional workers, in sectors such as welding or hairdressing, and about 800 young workers about to graduate from vocational training institutes and looking for work.

All participating trainees were pre-screened on a number of soft skills identified as important but difficult to observe by our sample of firm owners, such as trustworthiness. The trainees were then randomly divided into a Treatment and a Control group: upon graduation, trainees in Treatment were matched to the small firms for job interviews, and a certificate with the results of their skills assessments was shown to both the trainee and the firm owner during the interview. The trainee then kept a copy of the certificate and was free to use it in his later job search activities. Trainees in Control were also matched to the small firms for job interviews, but no certificate was disclosed, neither to the worker nor to the firm.

All eligible trainees were made aware that information on their soft skills could be disclosed to firm owners. About 80% of them agreed to participate, and we document that participating trainees had higher soft skills than non-participating ones. This suggests that trainees understood that those with higher soft skills had more to benefit from this type of intervention.

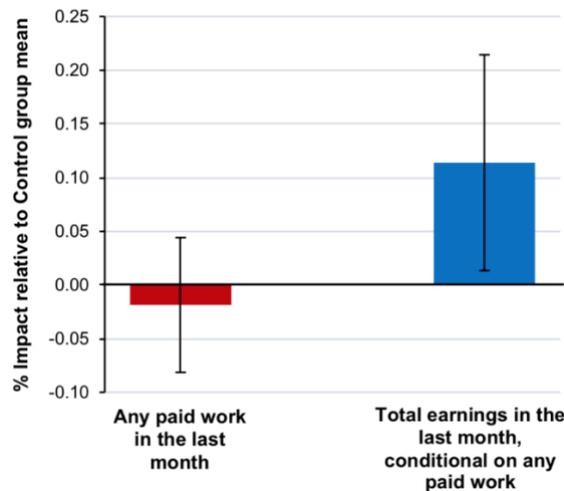
Impacts on expectations, employment and earnings

Both firms and workers revised their beliefs after seeing the certificates. We find that some managers were more positively impressed by the skills of the job candidates, while other managers were not influenced at all by the certificates. The managers reacting to the information were the ones who valued soft skills more and were more profitable.

At the same time, the certificates led workers to believe they could get better jobs: for example, Treatment workers reported higher expected earnings and higher intentions to bargain for wages in the two years after the intervention.

As shown in Figure 1, the intervention did not lead to changes in overall employment probability for Treatment workers over the two years post intervention. However, we show that the intervention improved the allocation of labor by allowing workers to better signal their soft skills to those firms where their skills were most valued. In line with the intervention having improved the allocation of labor and productivity, workers with a certificate earned \$7 more per month while employed, corresponding to an 11% increase.

Figure 1: Impacts of the soft skills certificates on paid employment and earnings



Notes: The histograms report the estimated impacts averaged over the two years post intervention and expressed in terms of percentage increase over the control mean. The black bars correspond to 95% confidence intervals of the impacts.

The results on beliefs help explain the impacts on employment and earnings: the fact that earnings increased without a reduction in employment is in line with at least some managers realizing that workers with a certificate were more productive than they initially thought, so that they were willing to pay them more. Also, the certificates allowed workers to demand and obtain higher earnings as a result of their increased opportunities in the labor market.

Cost-effectiveness

The certification intervention was relatively low-cost at \$19 per worker, and so was cost-effective at raising the labor market earnings of participating workers, even if we assume that the earnings benefits lasted only for the two-year post-intervention period.

Policy Recommendations

Why are soft skills certificates not already provided by the market, given that this information is valued by at least some workers and firms? We consider the following potential explanations:

1. *Is there lack of demand for the certificates?* We can rule out lack of demand by workers: we find that workers in Control - who never saw the results of their assessments - were willing to pay on average \$18 (or 44% of their monthly earnings) for the certificates, which is very close to the cost of the certificates.
2. *Why are the certificates not provided by a private enterprise?* Risk is likely to be an important factor, as the profitability of this activity relies on building a reputation for providing truthful information. We were able to overcome credibility concerns since BRAC is the largest NGO in Uganda and has a strong reputation, but a new market entrant might take years to establish credibility.
3. *Why are these certificates not provided by vocational institutes?* This might not be profit maximizing: as discussed, about 20% of the eligible trainees opted out of the intervention, and this is consistent with them realizing they would not have benefited from it. So the provision of certificates on soft skills might affect the enrolment decision of students in the first place, potentially reducing the profits of training institutions.

Should the government intervene? This depends on what extent the benefits for the group of participating trainees would generalize to all eligible ones. As discussed, those who opted out had lower soft skills, and so it is plausible that they would have experienced lower earnings gains – or even a reduction in earnings – in a mandatory certification intervention. So while more information on skills is likely to improve the allocation of labor and overall productivity, it is possible that some workers with low skills might lose out from this. Policymakers would then have to consider this potential trade-off between efficiency and equity in the labor market in deciding whether to implement this type of information policies.

References

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