Culture and Incentives: Does Performance Pay Impact Productivity, Work Quality, or Firm Profitability in Ghana?

Researchers:

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Sector(s): Finance, Labor Markets

Fieldwork: Innovations for Poverty Action (IPA)

Location: Ghana (Accra), India (Kolkata), Philippines (Cagayan de Oro)

Sample: 294 individuals

Target group: Urban population Workers

Outcome of interest: Earnings and income Productivity

Intervention type: Information Monetary incentives Performance-based pay

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Research Papers: Can "Good" HR Practices Be Exported? Evidence from a Field Experiment in Ghana

Incentive (or performance-based) pay has been shown to increase worker productivity in high-income countries, yet it is uncommon in developing countries and little evidence exists on the impacts of individual- and group-level incentives in these contexts. Cultural norms, such as the desire to stand out or get ahead, may influence how people respond to incentives. In Ghana, researchers found that neither individual nor group incentives impacted productivity, work quality, or firm profitability. The findings suggest that responses to performance pay may differ across contexts.

Policy issue

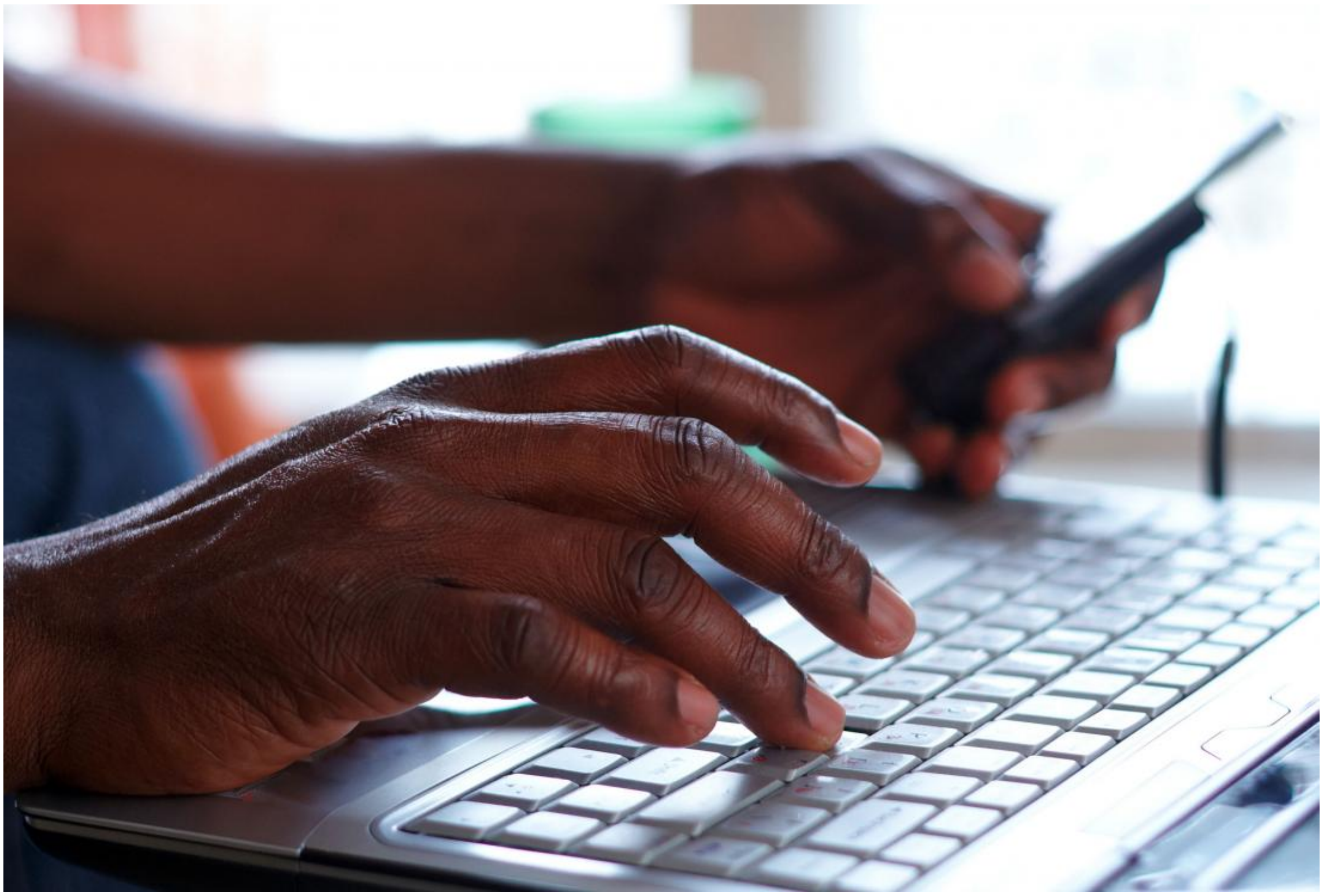
Many profitable firms in high-income countries have adopted personnel policies that link pay to performance, but firms in low-income countries are less likely to use performance pay to motivate workers.[1] Researchers propose two alternative explanations for this divergence in policy. First, the absence of performance pay in low-income settings could be due to informational, institutional, or legal constraints. Second, it may be that performance pay is not effective in low-income countries because of differences in cultural norms. In other words, the level of individualism in a given society may partially determine the extent to which rewards for individual success are laudable or not. This cultural attribute may influence how people respond to individual and group incentives, as well as to public visibility of performance, and if individualism is less culturally valued in many low-income countries, then performance pay would be less effective. This study sought to build on a small, but growing body of evidence on the impact of performance pay in low-income countries.

Context of the evaluation

The research project took place in Accra, Ghana among secondary-school educated Ghanaians who applied for data entry jobs in a firm established precisely for this study. Researchers chose Ghana as the study location because it scores very low on the Hofstede individualism scale, suggesting a particularly collectivist, non-individualistic culture.[2]

Researchers chose data entry for two main reasons. First, data entry is a common economic activity in low-income countries, including Ghana, and one that will likely continue to grow as companies continue to outsource back office tasks. Second, data entry is highly measureable. Researchers were able to use data entry interfaces, along with statistical analysis programs, to measure worker productivity over time in key strokes per hour, granting them an extremely accurate and precise overview of worker behavior over time.

This project aims to provide evidence on what drives worker productivity by implementing a series of identical, carefully controlled field experiments in a range of countries. By establishing identical firms in these countries and creating identical work tasks within those firms, the project is exploring the cultural determinants of worker productivity in the developing world. Exploring the interactions between culture and labor practices is a key step in understanding persistent productivity differences across countries and in providing practical, evidence-supported tools to help span the gap.



Researchers hired workers for short-term data entry positions. Photo: Shutterstock.com

Details of the intervention

Innovations for Poverty Action worked with researchers to evaluate the impact of individual- and group-level incentives on productivity, work quality, and firm profitability.

The research team set up a data-entry firm ("IPA Data Services") and hired workers for short-term data entry positions to enter real data. Of 855 total applicants, 294 individuals were selected and ultimately attended either one, or two, two-day contracts. Researchers randomly assigned workers to one of the following five contracts:

1. **Flat wage:** Workers received a fixed rate for two days of work, regardless of the quantity or quality of data entered.

2. **Individual piece rate:** Workers received a fixed piece rate based on the total number of key strokes entered over two days.
3. **Individual piece rate with rank:** Same as above, but managers also ranked workers based on their productivity and publicly displayed rankings with full names three times a day to provide public visibility of relative and absolute performance.
4. **Group piece rate:** Workers were divided into two groups and paid a salary equal to the total number of key strokes entered by all group members over two days.
5. **Group piece rate with rank:** Same as above, managers also ranked workers based on their productivity and publicly displayed rankings with full names three times a day to provide public visibility of relative and absolute performance.

Results and policy lessons

The incentives offered—whether individual- or group-level, public or private—had no significant impact on productivity, work quality, or overall firm profitability. The lack of response to incentives did not differ by sex, ability, or experience either. These results suggest that neither financial nor social incentives had any impact on worker productivity in this setting, which is consistent with the theory that firms do not implement such incentives because they are rationally making profit-maximizing decisions.

Future research should explore whether this pattern holds in other countries with similar cultural norms as it concerns individualism versus collectivism, and whether, in contrast, incentives are more effective in countries in which individualism scores are closer to those measured in countries like the United States and the United Kingdom, where performance pay is more common. Future research should also explore alternative methods to motivate workers and increase their productivity in settings where performance pay is not effective.

Bandiera, Oriana, and Greg Fischer. "Can 'Good' HR Prectices be Exported? Evidence from a Field Experiment in Ghana." IGC Working Paper, January 2013. http://www.theigc.org/wp-content/uploads/2015/02/Bandiera-Fischer-2013-Working-Paper.pdf

1. Bloom, Nicholas, and John Van Reenen. "Why do management practices differ across firms and countries?." The Journal of Economic Perspectives 24, no. 1 (2010): 203-224.; Bloom, Nicholas, Raffaella Sadun, and John Van Reenen. The organization of firms across countries. No. w15129. National Bureau of Economic Research, 2009.
2. Hofstede, Geert. "National Culture". http://geert-hofstede.com. Accessed 29 August 2016.