The Impact of Offering Awards on Health Worker Learning in Zambia

Sector(s): Health, Political Economy and Governance

Fieldwork: Innovations for Poverty Action (IPA)

Location: Zambia

Sample: 314 community health assistants from 162 rural communities

Initiative(s): Governance Initiative (GI)

Target group: Civil servants

Outcome of interest: Social service delivery Productivity

Intervention type: Training Pedagogical innovation

Research Papers: Awards Unbundled: Evidence from a Natural Field Experiment

Partner organization(s): Government of Zambia, Ministry of Health, International Growth Center (IGC)

Awards are a common tool for motivating performance and can thus play an important role in training programs for civil servants. Researchers in Zambia introduced different kinds of awards and information on performance rankings into a year-long training for community health workers to evaluate their impact on how much trainees learned. They found that awards focused on offering recognition and improving trainees' status and visibility in their home communities improved performance, while those that highlighted comparisons with other trainees actually harmed performance. Both these effects were greatest among low-ability trainees.

Policy issue

Many organizations use non-monetary awards to incentivize performance. Depending on how they are designed, these awards may work in various ways: by conferring employer recognition, by offering improved visibility among one's peers, or by fostering comparison and competition between individuals. The effect these awards have on performance may vary, depending on either the type of award or individuals' different levels of ability. For example, awards might motivate some employees to exert effort in order to gain recognition, but might also demotivate other employees who are concerned about unfavorable comparisons within their cohort.

To better understand these variations, researchers partnered with the health ministry in Zambia to examine the impact of different award types on the performance of rural health workers in a training program.

Context of the evaluation

In 2010, the Zambian government created a new cadre of community health assistants (CHAs) to provide a range of basic medical services in the most underserved rural communities. CHAs were recruited locally from these communities and had no previous medical training, but their role would be to provide basic medical care, health education and counseling, and referrals to nearby health facilities as needed. Because they play this role with little supervision and without the review of trained physicians, providing effective training was critical to accomplishing the health ministry's goal of improving access to quality medical services for rural communities.

Following recruitment, the 314 trainees moved to Ndola, Zambia's second largest city, to complete a year-long training program organized by the Ministry of Health. CHAs were not paid a salary during the course but their tuition and living allowances were covered by the Ministry. The training material was divided into four different course modules of between two and twelve weeks. All participants took a baseline exam at the beginning of the year and then sat exams after each of the four courses measuring what they had learned in the module.



A health worker checks a patient's blood pressure.

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Details of the intervention

In collaboration with the Ministry of Health, researchers conducted a randomized evaluation to test the impact of different types of awards on motivation and learning among community health worker trainees engaged in a one-year training program.

Trainees were randomly assigned to one of five classes of 60 students: four intervention classes which received various information and awards for performance, and a fifth comparison class which did not. Students remained in these same classes throughout the year-long course in order to minimize information sharing about the different awards and information being provided to each class.

All trainees received a letter at the end of each course module that included his or her individual score on the exam as well as an indication of their improvement over the baseline exam. Those who were assigned to one of the four intervention classes received further information in their letters and the possibility of earning awards as follows.

- *Private rank:* the letter reported a student's rank within the class on two different measures—absolute score on the exam and improvement over the baseline exam.
- *Public rank:* the letter included rank information as above and also indicated the names of the two trainees in the class with the highest scores and the two with the greatest improvement.
- *Employer recognition award:* trainees received the letter with both rank information and the names of the best performers. These four best performers additionally received a personal, handwritten letter addressed to them from the program director at the Ministry of Health congratulating them on their achievement.
- *Social visibility award*: trainees also received the letter with rank information and the names of the best performers. One of the top four best performers was randomly selected to be profiled in a newsletter sent to the student's home community.

Trainees in each class were told at the beginning of the first course what kind of information would be provided in the letters they would receive. Students in the third and fourth classes were shown samples of the employer recognition letters they might receive and the community newsletters, respectively.

Results and policy lessons

Offering information on rank and offering awards had opposite effects on trainees' performance: providing rank information lowered scores while awards boosted them. Both effects were greatest among trainees whose understanding of the material was weakest at the start of the program.

Trainees in the private and public rank classes performed on average 0.31 standard deviations and 0.38 standard deviations worse on the tests, respectively, than those in the comparison group. Students' performance worsened in anticipation of receiving rank information; they performed worse on the first exam, even before any information on relative rank was revealed. Researchers believe this outcome may reflect the value that individuals place on beliefs about their high relative ability, and concerns that the test results may contradict those beliefs. By decreasing their effort, they can ensure that receiving a low ranking relative to their peers does not impact their own perceptions of ability.

In contrast, offering awards boosted performance. Those in the employer recognition award class outperformed their public and private rank peers by 0.38 standard deviations, while those in the social visibility award class did better by 0.44 standard deviations. The overall effect of receiving both rank information and awards together was nil: there was no difference in performance among trainees in these two classes and the comparison group because the two effects cancelled one another out.

The effects of sharing information on rank were greatest among poorer performers. These negative effects were significant for the bottom seventy percent of performers and greatest among those who scored lowest on the baseline exam. The same was true of the positive effects of awards on performance: they produced the strongest effects on the weakest trainees. The researchers suggest this is likely because those with the lowest ability had a good chance of earning awards for displaying the most improvement.

These results suggest that offering awards in public service trainings can motivate a significant improvement in performance, but that facilitating interpersonal comparisons between trainees can have offsetting negative effects, particularly among the poorest performers. The implications of these results may be greatest for training programs in roles where the potential for harm is high, such as in health services, and thus poor performance by weaker staff is more costly. Eliminating measures that facilitate interpersonal comparisons may produce better performance among weaker staff.