

## The Effect of Referrals in an Online Labor Market

**Researchers:**

Amanda (Mandy) Pallais

Emily Glassberg Sands

**Sector(s):** Firms, Labor Markets

**Location:** Philippines and the United States of America

**Sample:** 1,266 referrers, referred workers, and non-referred workers

**Target group:** Job seekers Workers

**Outcome of interest:** Employment Productivity

**Intervention type:** Digital and mobile Information Recruitment and hiring

**AEA RCT registration number:** AEARCTR-0001492

**Data:** Download code only (8 KB)

**Partner organization(s):** Elance-oDesk

Workers without social connections may be disadvantaged in the labor market because employers favor applicants who have been referred. Researchers tested three interventions in an online labor market to investigate why employers are more likely to hire referred workers. First, referrals provide a signal that workers will perform well and have lower turnover. Referred workers outperformed and had lower churn than non-referred workers with the same observable characteristics. This is true even at companies to which they were not referred. Second, being referred makes workers more productive. Referred workers were particularly productive when they work with their referrers. However, workers' concerns about their reputation with their referrer or their referrer's position at the firm did not lead workers to exert more effort.

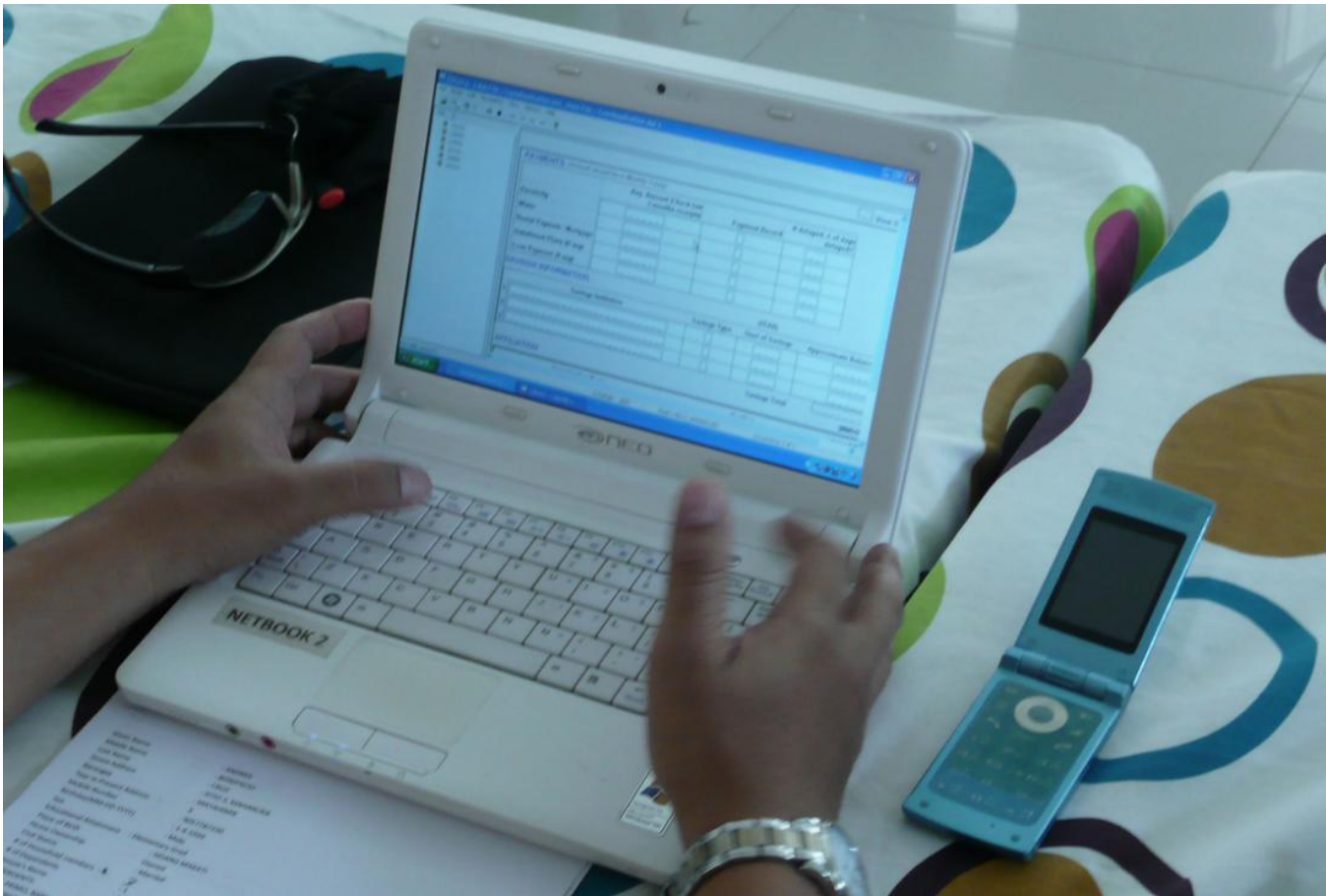
### Policy issue

Job-seekers with limited social connections may be at a disadvantage in the job market. Informal contacts lead to the majority of new hires, firms are more likely to hire referred than non-referred applicants, and some firms even offer bonuses to employees who refer a successful applicant. Yet the reason why employers tend to favor referred applicants is unclear. Is it because referrals contain information about worker productivity and turnover that cannot be gleaned from a resume? Do referred workers work more productively and have lower turnover because they are referred? Or rather, do firms rely on referrals to reduce recruiting costs or because they prefer hiring workers from within closed networks?

### Context of the evaluation

oDesk<sup>1</sup> is an online labor market where employers, mostly from the United States, hire independent contractors from around the world for jobs that can be completed remotely. The company contracts with over 2.5 million workers who perform tasks ranging from computer programming and software development to less skill-intensive jobs such as data entry, internet research, or administrative support. Unlike other online labor marketplaces, oDesk allows employers complete discretion in whom they hire, and employers have direct relationships with their oDesk contractors. The contractors are generally relatively young and well

educated, and the lower-wage workers are disproportionately female. While there is no official referral mechanism, oDesk allows employers to solicit referrals for new hires from their current workers and for workers to refer people they know to their employers.



At work in the Philippines

## Details of the intervention

Researchers conducted a series of randomized evaluations to test the impact of referrals for new hires on workers' job performance and turnover. First, researchers invited a randomly-selected group of oDesk jobseekers to apply for an administrative job. Hired workers were subsequently asked if they wanted to refer other oDesk workers. Those who did became "referrers." Their referrals were then hired; these workers formed the "referred worker" sample. Researchers also hired a random sample of non-referred applicants, who formed the "non-referred worker" sample.

Researchers tested three interventions to investigate why employers tend to favor referred applicants:

### **Intervention 1: Monitoring by one's referrer:**

This intervention tests whether referred workers work harder because they think their performance will affect either their referrer's position at the firm or their relationship with their referrer. Some referrals were randomly-selected to be monitored by their referrer, in addition to their manager. After every working day, their referrer received an update on their performance. These referrers were told that they were being considered for a promotion and the researchers implied that this promotion would depend on their referrals' performance. Referrals in the comparison group were told that their referrer would not see their performance statistics. Comparison group referrers were told that a promotion would depend only on their own merit, not on their referral's performance. All referrals completed the same task, which involved visiting an airline website daily and

answering questions. Researchers compared the groups on the completeness and accuracy of their work, the timely submission of work products, and their turnover.

### **Intervention 2: Being referred:**

To test whether referrals contain information about worker quality, researchers offered a different job under another firm's name to all of the referred and non-referred workers from the first intervention, but did not contact any of the referrers. 173 referred workers and 92 non-referred workers accepted the offer. Similar to the first intervention, workers performed a task which measured individual diligence over time, visiting three Twitter feeds daily, and answering questions about the content.

Researchers compared referred versus non-referred workers' again on the completeness and accuracy of their work, the timely submission of work products, and their turnover. In this intervention, referred and non-referred workers both complete the same job at a firm to which neither was referred.

### **Intervention 3: Working with one's referrer**

To test whether referrals perform better when working directly with their referrers, researchers hired a new batch of 282 referrers, their 282 referrals, and 94 non-referred workers (selected as above) for a job to be done in pairs. In each of three rounds, workers were assigned a different partner and tasked with coming up with a slogan for a public service announcement. In each round, workers participated in a different type of team: (A) a referrer and her referral, (B) a referrer and someone else's referral, or (C) a referrer and a non-referred worker. Researchers compared workers' performance on the task, satisfaction with the partnership, and willingness to continue working in each type of team. Comparing performance in team types B and C, researchers measured performance differences of referred and non-referred workers when both were working with people they did not know. Comparing performance in team types A and B, researchers determined whether referred workers perform better when working directly with their referrers than when working with an equivalent worker they did not already know (someone else's referrer).

## **Results and policy lessons**

Referrals act as a signal of worker quality. Referred workers outperformed and had lower turnover than non-referred workers with similar resumes. Being referred also makes workers more productive: referrals performed even better when they worked directly with their referrers. However, workers' concerns about their relationship with their referrer or their referrer's position at the firm did not cause workers to exert more effort.

Referrals and information about worker quality: Referred workers outperformed non-referred workers and had lower turnover. Referred workers did better even when working at a job for which they had not been referred and when they were not monitored by their referrers. Over the course of the experiment, referred workers were approximately 11 percentage points more likely than non-referred workers to submit their work and to do it on time. While both types of workers became less diligent over time, non-referred workers demonstrated a steeper drop-off in diligence over time, causing the performance gap to grow over the course of the job. Referred workers were also 20 percentage points more likely to continue the job. Referrals contained information about workers' performance and likelihood of continuing in the job which was not available to hiring managers otherwise. The most information about worker quality came from referrals made by high-performing referrers and referrals of workers with strong ties to their referrers.

Consistent with the idea that hiring referred workers reduces recruitment costs, referred workers were also more likely to accept a job offer than non-referred workers.

Referrals and on-the-job interactions with referrers: Being referred made workers more productive. Referred workers performed much better when working directly with their referrers. However, referrer monitoring did not have a detectable effect on the referred worker's job performance.

Pallais, Amanda and Emily Sands. "Why the Referential Treatment: Evidence from Field Experiments on Referrals." NBER Working Paper No. 21357, July 2015.

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1. Elance-oDesk changed its name to Upwork as of 2015