

**How Information on Local Labor Market Conditions Affects Search and Employment:  
Experimental Evidence from India**  
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Information frictions are a common feature of the job search process. Recent evidence shows that these frictions may be especially severe in lower-income countries, contributing to lower employment rates and higher churn (Carranza et al., 2022; Donovan et al., 2023). Rapidly proliferating Internet-based job search tools in these contexts can reduce search and application costs and have the potential to enable more or better matches. Yet, these tools also present workers with new choices about where, when, and how to search and workers may require guidance in leveraging these tools to improve their employment prospects (e.g. Wheeler et al., 2022; Kelley et al., 2022).

This paper studies the search and employment impacts of providing job seekers with information about their *local* labor market conditions on a job portal. To do this, I partner with an online job portal operating in urban India (hereafter, “the portal”), to generate objective information about local labor markets— e.g. the number of new vacancies or searchers in their desired city and occupation on the portal— using their administrative data. I then randomize the provision of this information (or of general job search advice) to job seekers recruited from the portal. The key result is that providing job seekers with this information leads to higher employment rates among the treated group six months after treatment.

In the experiment, job seekers are invited to participate in the study through advertisements posted on the portal or sent via email. 6,155 individuals successfully complete the baseline survey and are randomly assigned to a placebo group offering general job search advice or one of three different types of information about their local labor markets: *Demand*, *Supply*, or *Tightness*. The *Demand* group receives information about the number of new vacancies, the average minimum monthly salary, and fraction of vacancies of requiring zero experience. The *Supply* group receives information about the number of other searchers applying to jobs and either their educational distribution or the fraction of searchers applying to more than 1 job. Lastly, the *Tightness* group receives information about the number of new vacancies, searchers, and applications; a subset also receive information about the likelihood of employer contact, determined by employer click data to access contact details of applicants on the portal. The information is delivered directly on the screen upon completion of the baseline survey and shared via email; respondents also receive updated versions of the information for an additional two months via email.

Treated job seekers—i.e. those who receive any of the three types of information on local labor market conditions— are 10.2% (4.1 percentage points) more likely to report being employed roughly six months later during the follow-up survey. The *Tightness* group shows the most clear evidence of employment increases (5.4 p.p.,  $p\text{-val} < 0.05$ ); the *Demand* and *Supply* groups show positive effects of 3.0-3.4 p.p., but these are not statistically significant and we cannot reject that they are the same as the effects for the *Tightness* group. Along the search dimension, I find differences in the composition of search methods used by job seekers, but not overall search. Treated job seekers are 7.4% (4.5 p.p.) more likely to report

using the portal, but reduce their use of non-web job search methods, such as networks.

To understand the overall effects, I estimate how search and employment decisions vary by baseline priors about job finding. Half of job seekers believe that their likelihood of finding a new job through the portal is 75% or higher. As a benchmark, among the unemployed at baseline in the control group, only 35% are in fact employed six months later. This suggests that a large fraction of individuals in our setting might be too optimistic about their employment prospects. I interact this prior belief by treatment status and find striking impacts. Treated individuals with priors below the median are significantly more likely to be employed at follow-up relative to similar individuals in the control group. This is accompanied by evidence of higher likelihood of search through non-portal search methods.

This paper primarily contributes to the experimental literature on search frictions in labor markets in lower-income countries. This literature spans interventions that aim to improve signaling of skills (Abel et al., 2020; Bassi and Nansamba, 2021; Carranza et al., 2022); to reduce search costs through job fairs, transport subsidies, or psychologically-motivated tools (Beam, 2016; Abebe et al., 2021; Bandiera et al., 2021); or to provide better information on worker preferences to intermediaries (Banerjee and Chiplunkar, 2023). Two closely related papers offer information on *specific* jobs to vocational training participants or graduates in India. Kelley et al. (2022) randomize text message job alerts from a portal and find that these messages *decrease* the likelihood of employment. Meanwhile, Chakravorty et al. (2021) provide information about specific job placement opportunities in group training sessions and do not find significant impacts on employment. I extend this literature by showing that informing job seekers about their labor market *conditions*— as opposed to specific jobs— can change search behavior and increase employment rates.

This focus on information about labor market conditions is similar to the information interventions evaluated as active labor market policies in high-income countries (Altmann et al., 2018; Belot et al., 2018; Altmann et al., 2022; Belot et al., 2022; Dhia et al., 2022). These papers typically concentrate efforts on unemployed individuals and aim to broaden the geographic and occupational scope of search. I show that when search tools can be used by unemployed *and* employed job seekers, the effects of information provision can vary.

Finally, this paper is related to the literature on understanding the impacts of and improving the effectiveness of job portals. Kuhn and Mansour (2014) and Bhuller et al. (2021) argue that improvements in search technologies in high-income countries may have enabled faster re-employment and lower unemployment rates. In a similar context to ours, Wheeler et al. (2022) show that training workers in South Africa to use LinkedIn increases employment by 10%. Other papers have studied how managing competition for individual vacancies— through revealing or restricting the number of applications submitted— on job platforms can change the composition of applications, but either do not measure or find no changes in employment (Gee, 2019; Horton and Vasserman, 2021; Bhole et al., 2021). In contrast to the existing evidence, our results highlight the potential of making broader labor market data from portals publicly available to job seekers, especially in lower-income settings where information about labor market conditions through government data sources might be limited.