

Research Statement

I am a development economist interested in health and labor related topics. My dissertation examines the effort, behavior, and performance of employees and job-seekers in urban low income labor markets in developing countries. I also have a set of research projects about health related decisions made by individuals in developing countries. Four of these papers examine the role of risk in decision-making and information-sharing related to HIV. Two of my recently implemented projects examine mental health in the job-seeking process as well as health seeking behaviors among women. While many of my projects utilize variation induced from field experiments, I have also assembled complex datasets from secondary survey and administrative sources for use in projects exploiting natural experiments or policy changes.

Urban Labor Markets in Developing Countries

My job market paper examines the impact of employment risk on performance. To induce exogenous variation in employment risk, I randomize outside options for job seekers undergoing a real recruitment process. I do this by assigning job seekers a 0, 1, 5, 50, 75 or 100 percent chance of alternative employment of the same duration and wage as the jobs for which they are applying. I find that job seeker performance is highest and effort is lowest among those assigned the lowest employment risk (a guaranteed alternative job), and performance is lowest and effort highest among those facing the highest employment risk (those without any job guarantee). My findings are consistent with a framework that ties together insights from economics and psychology; performance is an increasing function of effort and an inverse u-shaped function of stress. The results are not driven by gift-exchange, stereotype threat, or the nutritional efficiency wage hypothesis. These performance improvements have significant welfare implications. In this study, job seekers assigned a high probability of receiving an outside option were twice as likely to be hired in the standard job recruitment process compared to those assigned a low probability of receiving an outside option. More broadly, these results suggest that stress-induced performance reductions are a potential mechanism through which exposure to high employment risk can sustain poverty and unemployment.

The short term employment that resulted from the initial experiment provides exogenous variation in acquired work experience. I follow this experiment by surveying participants nine months after the recruitment process in order to learn about medium-run employment outcomes. I use these data to estimate the returns to short-term work experience in the context of a developing country using an instrumental variables approach. I use the randomized probabilistic outside options to instrument for whether an individual acquired short term work experience.

I find the following key results: First, there is no statistically significant impact of short-term work experience on employment status in the eight months following the intervention. Individuals are not induced to search more for work and are no more (or less) likely to hold multiple concurrent jobs. Second, individuals earn a return to the short-term work experience – those who were randomly assigned to work experience subsequently earn approximately \$3.60-\$5 more per day, a 50 to 70 percent increase. This return to work experience persists across the eight month period following the acquired short-term work experience. Third, I find that the estimated returns to work experience are larger and more persistent among those who performed worst on a high stakes numeracy and literacy test compared to those of higher ability. In contexts with high unemployment, these results suggest large feedback effects from the acquisition of even short-term work experience. They also suggest the importance of work experience in labor market interventions, especially those targeting low-skilled, low-ability workers with little previous work experience.

I incorporated additional elements of randomization into the recruitment process itself in order to facilitate additional, related work about the nature and impact of social interactions on performance. Peer effects have been studied in both educational and work environments but with limited opportunity for randomization, especially in developing countries. In my project, individuals were randomly assigned to training rooms and to partners for some assignments. The data about seating and group-work assignments can be used in conjunction with individual survey data to examine the extent to which job trainees updated beliefs during training, and how performance was impacted by partner assignment for the paired performance task.

In related, published work with Justine Burns and Malcolm Keswell, I examine the role social networks play in the decision to search for employment in South Africa. Social networks are increasingly being recognized as an important influence on labor market outcomes, since they facilitate the exchange of job related information. Access to information about job opportunities as well as perceptions about the buoyancy of the labor market depend critically on the social structures and the social networks to which labor market participants belong. In this paper, we examine the impact of information externalities generated through network membership on labor market status. Using census data from South Africa, a country with high levels of unemployment and worker discouragement, we adopt an econometric approach that aims to minimize the problems of omitted variable bias that have plagued many previous studies on the impact of social networks. Our results suggest that social networks may enhance employment probabilities by an additional three to 12 percent, and that failure to adequately control for omitted variables would lead to substantial over-estimates of the network co-efficient. In contrast, the impact of social networks on reducing worker discouragement is much smaller, at between one and two percent.

I also study the behavior of employees after being hired. In an additional experiment in Malawi, I am studying the impact of monitoring and fines in the workplace. In the third chapter of my dissertation, I examine corrupt behavior by individual employees working on short-term contracts, and utilize exogenous variation in the monitoring rate to produce precise, well-identified measures of *individual* responses to employer monitoring strategies. Specifically, I measure how employees change the extent to which they steal from the firm in response to varying degrees of monitoring. I find that increasing monitoring from zero to ten percent reduces the likelihood that any money is stolen by approximately 24 percentage points. There appear to be non-linearities in the response to monitoring. Individuals' probability of stealing decreases at an increasing rate as the monitoring rate increases between zero and 33.3 percent, beyond which the probability decreases linearly. Interestingly the average amount stolen is relatively constant across the distribution of monitoring rates. Also, there is suggestive evidence that monitoring is differentially effective across the duration of a contract such that it is effective at the beginning of the contract, but by the last week it has no discernible impact.

My results thus far speak to the importance of employee monitoring. I am extending this work to examine the interaction between monitoring and penalties. I will also examine the differential effects of social and financial penalties. Designing more efficient labor contracts can ultimately increase firm profits, employment, and wages in developing countries, and my research contributes to a nascent literature about how best to address employee-level corruption.

Health Seeking Behavior

I am also interested in health economics in developing countries. While I have primarily worked on projects related to HIV prevention, my new and ongoing projects examine health seeking behavior by women.

In collaboration with Rebecca Thornton, I examine individuals' decisions to learn their HIV status (Godlonton and Thornton, 2010). In particular, we investigate network effects within the rural

communities and measure how neighbors positively or negatively influence individuals to learn their HIV status. We utilize GIS data on the locations of homes and distance to neighbors and randomly offer neighbors monetary incentives to learn their own HIV status. We find positive effects of neighbors learning their HIV status on others living nearby: a 10 point increase in the percentage of an individual's neighbors (approximately 2.4 individuals) who learn their HIV status increases the probability of the individual learning his own HIV status by 1.1 percentage points. This is similar to peer-effects in other settings. The strongest network effects are among closest neighbors; we find no effect among religious social networks. We also find a negative interaction between direct cash incentives and the influence of peers: the effect of their peers doubles among those who were not offered any individual financial incentive to learn their HIV status.

I have also collaborated with Rebecca Thornton on a number of projects related to male circumcision in Malawi. International aid organizations are pushing male circumcision as an important HIV prevention strategy given medical findings that HIV transmission risk is approximately 50 percent lower among circumcised men.

In the first project, among a sample of approximately 900 circumcised and 300 uncircumcised men living in rural Malawi, we randomly disseminated the information about HIV transmission risk and male circumcision across villages. We measure the behavioral response to learning this information among circumcised and uncircumcised men immediately after the information intervention as well as one year later (Godlonton, Munthali, and Thornton, 2010). We find no evidence of dis-inhibition among circumcised men in the treatment group immediately after the information campaign or one year later as measured by condom purchases and self-reported sexual behavior. Uncircumcised men in the treatment group significantly increase their likelihood of purchasing condoms immediately after the information intervention by approximately 10 percentage points, and this is weakly persistent after one year. Consistent with this, we present evidence that uncircumcised men who learn about HIV and circumcision decreased risky sexual behavior.

The second study measures the demand for adult medical male circumcision using an experiment that randomly offered varying-priced subsidies to 1,600 uncircumcised men in urban Malawi. Overall, three percent were circumcised over three months. We find evidence of advantageous selection: men who practiced riskier sex at baseline were significantly less likely to get circumcised; these men were also the least responsive to prices. Low take-up rates and advantageous selection imply substantially fewer infections averted and less savings per HIV infection averted than previous estimates; our results call into question the efficacy of a universal male circumcision roll-out.

Ongoing work in collaboration with Rebecca Thornton examines how the resolution about uncertainty of spousal HIV risk – through voluntary couples counseling and testing – affects marital stability. In high HIV prevalent areas, marriage may not necessarily protect against infection if there is also a high rate of concurrent partnerships. One coping strategy to protect oneself against HIV infection within this setting is divorce. We compare marital outcomes among men and women who were randomly assigned to be counseled, tested, and informed of their HIV results either individually or together as a couple. We find that couples who learned their HIV results together were two percentage points less likely to divorce three to six months after testing, a decrease of 75 percent. Moreover, couples testing significantly reduced worry about HIV risk and beliefs about future HIV infection, as well as increasing overall life satisfaction.

My research agenda on health economics is expanding. I am working on three early-stage projects that examine women's health seeking behavior. The first is a new field experiment with Rebecca Thornton and Abt Associates and relates to long-acting reversible contraception. In the second, I collaborate with Edward Okeke and exploit variation from a policy change that banned and then reversed the ban on

traditional birth attendants in Malawi to identify the impact of attended births on infant and maternal mortality. We use data from the Malawi DHS combined with GPS information about clinic locations and characteristics. I also compile data from the Welfare and Monitoring survey, the DHS, and clinic-month level administrative data from all public and private health clinics in Malawi to study the effect of anti-retroviral drug availability on HIV testing behavior, using variation from staggered roll-out of ARVs in collaboration with Edward Okeke. The data we have assembled for this project will be useful for future work about HIV testing and treatment in Malawi.