

I am an applied micro-economist with research at the intersection of development economics, personnel economics, and political economy. Broadly, my work focuses on improving the capacity of the state to deliver public services. I also study how societal norms and social networks affect the participation of women in politics. My research can be divided into four interconnected areas, that I describe below.

1- Incentives and Motivations of the State Personnel

This stream of research examines the intrinsic and pro-social motivations of people and contrasts them with private incentives. Economic theory has long argued that economic agents are driven not just by money but also warm glow (Andreoni 1989), altruism (Becker 1974), who they work for (Akerlof and Kranton 2003), and what their employer cares about (Besley and Ghatak 2005). My research in this stream investigates empirically if the intrinsic motivations of public sector workers can be leveraged to improve the selection and performance of service providers.

I have two working papers in this stream. First, in my job market paper, “Mission motivation and public sector performance: experimental evidence from Pakistan”, I study what emphasizing the organizational mission does to the motivation and performance of workers. In partnership with the Department of Health in Pakistan, I randomly introduce health workers to the organizational mission through a video of their manager emphasizing the mission and its importance to them. I benchmark the incentive effect of the mission against financial rewards linked to performance, and track how the two interact. The paper finds that mission motivates workers to improve core performance, measured by home visits, by 16%. Mission also motivates workers to perform multiple tasks – they perform more antenatal checks, discuss disease prevention with more households, screen them for Tuberculosis, and organize more vaccination camps. Financial incentive treatment improve household visits by 27% but does not affect performance on the other tasks. This difference in allocation of effort between one task and multiple tasks leads to financial incentives becoming less effective in improving household visits when the two treatments are combined. Since the mission motivates effort on multiple tasks, workers who receive both treatments do not increase household visits by as much the workers who receive just the financial incentives for visiting more households. More importantly, mission treatment leads to better health outcomes for the client population compared to the financial incentives, suggesting that motivating workers with the mission is a much more powerful strategy compared to providing financial incentives. The paper highlights the effect of mission as an incentive when contracts are incomplete.

My second working paper in this stream, co-authored with Saad Gulzar, is titled “Social Motivation, Political Candidacy, and Performance: Experimental Evidence From Pakistan.” In this paper, we focus on the selection margin of improving the capacity of state personnel. We examine whether the supply of politicians can be improved by highlighting pro-social motivations versus the prestige of political office to a random selection of citizens in a field experiment conducted in the run-up to village council elections in Pakistan. We find that more people run for political office when prosocial motivations linked to political office, such as the ability to help the community, are highlighted. The effect of such messages is particularly stronger for people who may be regarded as high pro-social types. More importantly, these candidacy decisions are meaningful the new politicians win elections

with higher probability and the subsequent village councils are more likely to make policy decisions aligned with the preferences of citizens. This paper adds to the rich literature on political selection (Dal Bó and Finan 2018) by showing that non-financial motivations also influence the decision to enter a political race, and that the supply of good politicians can be improved by portraying politics as prosocial to citizens.

2- Personalities, Preferences, and Performance

Personality traits have been shown to play a role in economic decision-making (Heckman 2011) but their influence on the performance of workers remains understudied. In this stream of research, I explore if personality traits and preferences of workers influence their behavior on the job, and how these preferences can be used in designing contracts.

In the first working paper in this stream, “Personalities and Public Service Performance: Evidence from a Health Experiment in Pakistan” (co-authored with Michael Callen, Saad Gulzar, Syed Ali Hasanain, and Arman Rezae), we collect detailed personality attributes of doctors and supervisors from a representative sample in Punjab, Pakistan. We find that the personality types of doctors and their supervisors are correlated with how they perform on their job, finding three interesting relationships between them: (1) Doctors who score high on the Big Five measures of personality and Perry (1996)’s public service motivation questions are less likely to shirk on the job and are also less likely to collude with supervisors to provide false attendance reports. (2) Inspectors, who are required to monitor doctors through random inspection visits, procrastinate on their job; the more they procrastinate the less likely they are to fulfill their monthly duties. (3) Reforms aimed at removing information frictions interact with the personality traits of principals senior managers with high personality scores are more likely to take action on information pertaining to the under-performance of health staff. This body of work has helped identify several important areas of research most importantly, the role of time preferences of agents in designing contracts, which we explore in the subsequent study.

In the second working paper under this theme, “Using Preference Estimates to Customize Incentives: An Application to Polio Vaccination Drives in Pakistan” (co-authored with James Andreoni, Michael Callen, Karrar Jaffar, and Charles Sprenger), we take forward the lessons about procrastination by health staff observed in the previous study and attempt to address them through personalized contracts. This paper uses estimates of time preferences measured in real tasks to customize incentive contracts for polio vaccinators in Pakistan. The experiment follows a convex time budget design of Andreoni and Sprenger (2012); Augenblick et al. (2015) to first elicit incentivized decisions of workers on intertemporal work. We first confirm the vaccinators are present-biased. Then we use their decisions to obtain structurally tailored contracts for each worker for subsequent work. The individually tailored contracts move performance 30% closer to the policy goal overall, and 50% closer to that goal when present bias in decision-making is relevant. We test this policy against several alternatives, including atheoretic, random and broadly tailored contracts, and find it does best in achieving the policy goal compared to all other alternatives. This paper demonstrates the existence of present bias in public service delivery and provides empirical evidence it can be addressed by designing incentives that use preference parameters. The paper is at the revise-and-resubmit stage at a general interest journal.

I am in the process of developing a third project in this stream, which employs personality traits to form better-performing teams. Many public services are provided through teamwork; however, very little attention has been paid to how these teams are formed. Along with co-authors Karrar Hussain and Zain Chaudhry, I am working with police in Pakistan to develop a project that uses personality traits to form patrolling teams. We will compare this strategy to the status quo, which relies on the supervisor's decisions to allocate personnel to teams. This project is at the fundraising stage and will go through iterations of research design.

3- Information Frictions and Moral Hazard

I study the problem of information frictions in the delivery of public services using mobile-based information-gathering and dissemination technologies. My research in this stream sheds light on why eliminating information frictions in public-service delivery will not always address moral hazard.

The first paper in this stream, "Data and Policy Decisions: Experimental Evidence from Pakistan" (co-authored with Michael Callen, Saad Gulzar, Syed Ali Hasanain and Arman Rezae) was published in the Journal of Development Economics. We evaluate a large-scale phone-based monitoring system of a provincial health department, which encompasses nearly 3000 clinics that provide healthcare to a province of 100 million in Pakistan. In this paper we show that the monitoring system increases inspection rates of health facilities overall but only improves the attendance of doctors if the worst-performing clinics are flagged to senior managers. We identify political economy reasons as potential explanations for the weaker-than-expected effect on moral hazard when information frictions were eased through a monitoring system. In a working paper, titled "The Political Economy of Public Employee Absence: Experimental Evidence from Pakistan," we argue that the monitoring system had a stronger positive impact in constituencies with higher political competition and weaker impact in areas where politics is captured, potentially creating a patronage channel between workers and politicians that saves the staff from sanction if the monitoring system finds them shirking. In the second paper, "No bulls: Experimental evidence on the impact of veterinarian ratings in Pakistan¹" (co-authored with Syed Ali Hasanain and Arman Rezae), we provide information to citizens, instead of managers, on the performance of public workers. We use a mobile-based system to gather information about the quality of service provided by livestock technicians to farmers, and send back aggregated ratings about the best service providers in their area. Farmers equipped with this information received better-quality service the next time. We find suggestive evidence that the effect is driven by changes in the effort of workers rather than farmers switching, ex-ante, to higher-quality technicians.

4- Social Networks and Gender Gap in Politics

In this stream of work, I study the norms that may prevent women from participating in politics in patriarchal societies. This stream of research is an attempt to study if misperception

¹Old title: "Coordinating Farmers with Cell Phones: Technology Innovation in Livestock Extension in Pakistan"

of social norms exist in the realm of politics (Bursztyn et al. 2020) and whether correcting it can help bridge the gender gap in political participation.

The first paper, titled “Norms, Beliefs, and Networks: Descriptive Findings on Women’s Political Participation in Pakistan” (co-authored with Saad Gulzar and Luke Sonnet), argues that one reason for the gender gap in political participation is a discrepancy between what people believe others think about women’s political participation and what those people think themselves. We survey women and men from households in 37 communities in Peshawar, Pakistan. In the survey, we collect information about respondents social and political networks and their beliefs regarding female participation in politics and also what they think others in their community believe about women in politics. Using this data, we first show that expectations of norms around women’s political participation are more pessimistic than actual beliefs, for both women and men. Second, despite previous evidence that the household primarily structures women’s behavior in patriarchal societies, we find (1) that women’s social networks are distinct from those of men in their households and (2) that women’s pessimistic expectations about others beliefs are more strongly correlated with the beliefs of socially proximate women than men in their households. We argue that efforts to reduce the gender gap in political participation may therefore benefit from targeting pessimistic expectations of norms and focusing on women’s distinct social networks.

In a follow-up to this paper, we plan to implement a field experiment in the same communities that provides correct information about the beliefs of others to a random selection of women. We will test whether the provision of correct information about others influences the political behavior of recipient women. The experiment will be implemented just before the next local government election (which has been delayed due to Covid-19) allowing us an opportunity to study behavior in a real high-stakes political activity. Further, we will study whether expectations about beliefs of men matter more than women. We will provide correct information about both men and women, however, the order will be randomized. After the first correct information is provided, we will ask the respondent again to tell us their second-order beliefs about women in politics in an incentivized manner. This will allow us to understand which gender’s beliefs are more likely to influence the perception of norms. The project will provide evidence for an additional channel through which the gender gap in politics, particularly in conservative societies, persists.

References

- Akerlof, George A and Rachel E Kranton, “Identity and the Economics of Organizations,” *Working Paper*, 2003.
- Andreoni, James, “Giving with Impure Altruism: Applications to Charity and Ricardian Equivalence,” *Journal of Political Economy*, 1989, 97 (6), 1447–1458.
- and Charles Sprenger, “Estimating time preferences from convex budgets,” *American Economic Review*, 2012, 102 (7), 3333–56.

- Augenblick, Ned, Muriel Niederle, and Charles Sprenger**, “Working over time: Dynamic inconsistency in real effort tasks,” *The Quarterly Journal of Economics*, 2015, *130* (3), 1067–1115.
- Becker, Gary S**, “A theory of social interactions,” *Journal of political economy*, 1974, *82* (6), 1063–1093.
- Besley, Timothy and Maitreesh Ghatak**, “Competition and incentives with motivated agents,” *American Economic Review*, 2005, *95* (3), 616–636.
- Bursztyn, Leonardo, Alessandra L González, and David Yanagizawa-Drott**, “Misperceived social norms: Women working outside the home in saudi arabia,” *American Economic Review*, 2020.
- Dal Bó, Ernesto and Frederico Finan**, “Progress and Perspectives in the Study of Political Selection,” *Annual Review of Economics*, 2018, (0).
- Gneezy, Uri, Stephan Meier, and Pedro Rey-biel**, “When and Why Incentives (Don ’ t) Work to Modify Behavior,” *Journal of Economic Perspectives*, 2011, *25* (4), 191–210.
- Heckman, J**, “Integrating Personlaity Psychology into Economics,” 2011.
- Kamenica, Emir**, “Behavioral Economics and Psychology of Incentives,” *Annual Review of Economics*, 2011, *4* (1), 427–452.
- Perry, James L.**, “Measuring Public Service Motivation: An Assessment of Construct Reliability,” *Journal of Public Administration Research and Theory*, 1996, *6* (1), 5–22.