

# Understanding State Capacity: Evidence from surveys of public health systems in Bihar, India

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## 1 Background

India needs to invest much more in human capital, the education, health and nutrition of its children, to ensure not only human rights and equity but to sustain high rates of growth in the future. This is the message from several strands of research, echoed by a variety of international development partners.

Research on the complex relationship between health and economic growth shows that India lags other countries in transforming economic growth into improved health outcomes (Dimble and Menon, 2017). Economic growth alone is not going to improve health outcomes sufficiently in India, and growth in turn will be constrained by low productivity of India's future workforce. Despite decades of growth, India still ranks 114 out of 132 countries on under-5 stunting and 120 out of 130 countries on under-5 wasting (Global Nutrition Report, 2016). A third of its children are born with low birth-weight, and seventy percent of the country's districts have stunting rates over 30 percent. Almost 60 percent of children under three are anemic, 62 percent are deficient in vitamin A and over 13 million infants remain unprotected from iodine deficiency disorders.<sup>2</sup> Malnourished children perform two-to-three times worse than their adequately nourished peers, with far-reaching implications for loss of productivity and growth in the country (Gates, 2017).<sup>3</sup> International development agencies, such as the World Bank, have renewed emphasis on the importance of investing in human capital for growth (Flabbi and Gatti, 2018).

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<sup>2</sup>World Bank (2018)

<sup>3</sup>See <https://blogs.timesofindia.indiatimes.com/toi-edit-page/nurture-indias-human-capital-for-rapid-economic-growth-paying-attention-to-health-and-nutrition-is-essential/> (November 16, 2017; accessed June 23, 2018).

Despite this consensus on the need for more investments in human capital, there is greater uncertainty among experts about the specific role governments must play to ensure those investments. What is the comparative advantage of governments, relative to the private sector? What health and nutrition policies should governments pursue, and where should they allocate scarce public resources? Broadly, there is a textbook economics case for government policies to address market failures in health systems and invest in public goods such as infectious disease control and other preventive and promotive health services, especially with regard to children born in poor families. Poor people lack information and capacity to promote health (World Bank 2015). Poor people cannot afford adequate investments in health, or borrow from credit markets to promote health (credit market failures). Health shocks push people into poverty (WHO and World Bank, 2017; Berman et al., 2010).

Yet, there is considerable disagreement among experts about what types of public investments or policies should be pursued. Should governments regulate and direct private providers to address public good objectives? Should governments simply focus on redistribution, by making cash transfers under a basic minimum income scheme, and alleviating credit constraints among the poor, and let the poor invest in their own health? Or should governments take a more active role as direct providers of certain types of services targeted at poor families, such as for maternal and child health, and nutrition and cognitive development of children in their early years?

Productive answers to such policy questions requires understanding first what governments in India are currently doing to invest in human capital, particularly in the health and nutrition of children of poor families. Central and State Governments in India intervene as direct providers of services, with the bulk of public spending going towards hiring, training, and equipping a variety of health personnel who staff different health facilities (Berman et al., 2010). Examples of such publicly funded health personnel include doctors, trained medical specialists and nurses in government-owned facilities such as District Hospitals and Primary Health Centers (PHCs), and Auxiliary Nurse Midwives (ANMs) in sub-centers. Under the National Health Mission (NHM), another cadre of almost one million community health workers, the Accredited Social Health Activists (ASHAs), have been deployed as volunteers at the village level. The incentive payments to ASHA workers for their voluntary work and conditional cash transfer to mothers for institutional deliveries are another prominent component of public spending on health. Separately, the Ministry of Women and Child Development (MoWCD), and its state-level departments, invest in another cadre of community health workers, the Aanganwadi Workers (AWWs), to deliver early childhood development and nutrition programs. In addition to the direct provision of public services, the government, under its recently launched Ayushman Bharat Programme, is pursuing a national health insurance scheme which would leverage private

markets to deliver upon public goals in health. At the same time, another pillar under the Ayushman Bharat Programme is increasing investments in public delivery of basic primary health services through rejuvenated Health and Wellness Centers at the community level. Further, the government has also recently launched the National Nutrition Mission (NNM), which would rely on the AWWs to deliver enhanced nutrition programs.

For the moment, then, the public sector in India is invested in directly providing health and nutrition services for poor children through different cadres of community-embedded health workers who are managed by state bureaucracies. Expert debate over whether these policy choices are optimal, or whether alternate combinations of public policy might have greater potential for increasing human capital in India, needs more evidence to understand incentives and norms within state bureaucracies, because these bureaucracies are ultimately responsible for adopting and implementing all new policies.

What is the problem of bureaucracies or state capacity in India? Kapur, Mehta and Vaishnav (2017) focus on federal institutions and provide evidence of under-staffing, lack of training and qualifications, and low efficiency. Evidence on state capacity (or lack thereof) for health service delivery comes from a recent joint report of NITI Aayog and the World Bank.<sup>4</sup> For example, vacancies of healthcare provider positions are the highest in Bihar, which is also the state with the greatest need to address problems of health and nutrition among children. Of the sanctioned positions for ANMs at sub-centres in Bihar, 59% are vacant; for Medical Officers in PHCs, 64% are vacant. The vacancy rate for staff nurses at PHCs and CHCs was as high as 86% in 2014-15, but is reported to have been substantially reduced to 50% in 2015-16. Other evidence shows that even when public funds are available, such as through the National Health Mission, they are not being utilized in Bihar to recruit and equip frontline health workers, such as the ASHAs (Berman, Bhawalkar and Jha, 2014).

Perhaps the more pernicious problem of state capacity in India is that bureaucracies and the frontline service delivery personnel they manage have weak incentives to deliver.<sup>5</sup> For example, rigorous research on small samples of doctors finds that they systematically under-perform in the public sector compared to in their own private practice (Das et al., 2016). Other qualitative research suggests that the problem of weak incentives is likely to be widespread because bribery and corruption are the norm in human resource management in the public health sector (La Forgia et al., 2015). Earlier research found that absenteeism rates among public health service providers is staggeringly high (Chaudhury et al., 2006). Furthermore, the available research suggests that powerful leaders at upper

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<sup>4</sup>See [http://niti.gov.in/writereaddata/files/document\\_publication/Healthy-States-Progressive-India-Report\\_0.pdf](http://niti.gov.in/writereaddata/files/document_publication/Healthy-States-Progressive-India-Report_0.pdf) (accessed 23 June 2018)

<sup>5</sup>Problem of incentives is more pernicious than things like under-staffing, because filling vacancies would not translate into better service delivery if the new hires are not motivated to deliver.

levels of the government hierarchy, who wield formal power over the humble workers on the frontlines of the state, can be thwarted in their attempts to exact accountability and performance from them. Banerjee, Duflo and Glennerster (2008) and Dhaliwal and Hanna (2014) provide evidence that reformers who tried to use new technology to monitor frontline health workers and strengthen their incentives ultimately failed to implement or sustain these reforms.

What do we know about incentives and norms in health bureaucracies and service delivery points at various levels of a state in India? For example, the logic of economic theory suggests that governments should be direct providers of services when there is a role for attracting intrinsically motivated agents (Francois, 2000), but we have no empirical evidence on integrity and public service motivation among state personnel across different cadres of service delivery. The available research has focused on documenting evidence of weak incentives and low accountability for service delivery in the public sector, and thence on evaluating interventions targeted at strengthening incentives, such as making some part of pay conditional on performance indicators (for example, Singh and Masters, 2017). But what is available is barely scratching the surface of knowledge needed to help reform leaders think about how to structure government bureaucracies and assign tasks to leverage intrinsic motivation and to reduce reliance on high-powered incentives. Even when increasing the power of incentives has been shown to “work”, the authors of those findings concede that implementing optimal incentive contracts at scale can place significant demands on state capacity (Muralidharan and Sundararaman, 2011). There is even less evidence available about the incentives and motivation of mid-level bureaucrats within the health system, compared to a growing body of research on frontline providers such as doctors and community health workers. Finally, the logic of economic theory, and growing international evidence in support of it, further suggests that politics casts a long shadow on culture in the bureaucracy, but we have no rigorous evidence for this claim for India.

To address these knowledge gaps we designed and implemented a complex survey of multiple types of respondents across districts, blocks (administrative sub-units within districts) and village governments (Gram Panchayats or GPs) in Bihar, one of the poorest states of India and with some of the worst statistics of child malnourishment. This report describes the data collected and emerging results from ongoing analysis.

## **2 Geography and timing of the survey**

The survey was undertaken in the state of Bihar in two phases: first, during November-December 2018, and second, during February-March, 2019. At the outset, a data col-

lection strategy was designed to apply the framework for understanding state capacity in Khemani(2019). To that end, it was important to gather data across different layers of government jurisdictions within the state—districts, blocks and Gram Panchayats—and across different types of respondents—politicians, bureaucrats or public officials, frontline service providers—who share interdependent relationships while undertaking their tasks of delivering public health and nutrition services. In the first phase, data was gathered from village-level respondents—Gram Panchayat politicians, frontline health and nutrition workers (ASHAs, AWWs, and ANMs at health sub-centers), citizens and SHG leaders. In the second phase, the survey was implemented to block and district-level respondents. Section 3 below describes the targeted respondents in each of the survey phases.

Budget and implementation constraints required us to select a sample of districts rather than covering all 38 districts of Bihar. At the same time, we needed a large sample to be representative of the diversity within the state, and allow us to capture some variation across district-level institutional characteristics. These constraints led us to determine 16 as the number of districts in which to undertake the survey. The purposive selection of *which* 16 study districts, from among the 38 of Bihar, was made using the following criteria:

- represent the 9 administrative divisions of Bihar: Patna, Tirhut, Darbhanga, Kosi, Purnia, Saran, Bhagalpur, Munger, Magadh
- represent both border and interior districts
- select "old" and "new" districts (those which were created after 1991) because district age might matter in interesting ways for their capacity to deliver (to be discussed further)
- select districts which might vary in historical institutions that shape norms. We first explored an established literature in India which finds that there are persistent effects on current service delivery of the long-gone historical institution of the Zamindari system of land revenue (Pandey, 2010; Banerjee and Iyer, 2005). However, since all of the districts of Bihar are classified as belonging to the Zamindari system, we could not use this established measure of historical institutions in selecting the study districts. We then turned to a newer literature which examines the early construction of railway lines in the late 1800s in the United States and India as a potential source of institutional variation (Donaldson, 2018; Donaldson and Hornbeck, 2016; Attack, Haines and Margo, various). The 16 districts in our study include those through which passed the first railway lines in Bihar, and those that received railway lines a decade or so later. <sup>6</sup>

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<sup>6</sup>Using Hemanshu Kumar's and Rohini Somanathan's April 2009 CDE Working Paper, Mapping Indian Districts Across Census Years, 1971-2001, we have: "New" Districts defined as those that exist in Bihar in

Within each of the 16 districts, 4 blocks were selected using a random number generator, after stratifying by proximity to the main railway line. Within each block, 4 Gram Panchayats (GPs) were selected using a random number generator. However, in one block each in the districts of Lakhisarai and Buxar, 3 GPs instead of 4 were selected because the sampling protocol required a sufficient number of replacement respondents to be available, and these districts only had 3 GPs fulfilling the replacement requirement (more details in section on Respondents below). This yields a sample of respondents drawn from 16 districts, 64 blocks from within those districts, and 254 Gram Panchayats (GPs) from within those blocks.

	<b>New Districts (post-1991)</b>	<b>Old Districts (pre-1991)</b>
<b>Earliest railways</b>	Buxar Lakhisarai	Bhojpur Munger Bhagalpur Muzzaffarpur Darbhanga
<b>Later railways</b>	Aurangabad Banka Madhepura Kishanganj Siwan	Rohtas Gaya West Champaran Purnia

Figure 1: Districts included in the survey by i) whether railway construction happened early on or later; and ii) whether the district was created before or after 1991.

2001, but not in 1991 (hence, created some time between 1991 and 2001): 1. Jamui (carved out of Munger) 2. Lakhisari (carved out of Munger) 3. Sheikhpura (carved out of Munger and Nalanda) 4. Kaimur (carved out of Rohtas) 5. Buxar (carved out of Bhojpur) 6. Sheohar (carved out of Sitamarhi) 7. Banka (carved out of Bhagalpur) 8. Supaul (carved out of Saharsa) 9. Arwal (carved out of Jehanabad in September 2001 as per <http://gov.bih.nic.in/Profile/Districts.htm>, but not mentioned in Kumar and Somanathan (2009) who report 37 districts in Bihar in 2001.)

“Old” Districts defined as those that exist in Bihar in 1971. Most of these were the seats of the Zamindars in colonial times. 1. Gaya 2. Shahabad (split into Rohtas and Bhojpur between 1971-81) 3. Saran 4. Champaran (split into East and West between 1971-81) 5. Munger 6. Muzaffarpur 7. Darbhanga 8. Bhagalpur 9. Saharsa 10. Purnia 11. Patna

Pairs of “old” and “new” districts in our sample (with the new district being carved out of an old one): 1. Bhagalpur (old) and Banka (new): Banka was carved out of Bhagalpur some time between 1991 and 2001, and is the only new district to be carved out of the old district. 2. Bhojpur (created between 1971-81 out of the old Shahabad district) and Buxar (new) 3. Munger (old) and Lakhisarai (new) 4. Purnia (old) and Kishanganj (created between 1981 and 1991)

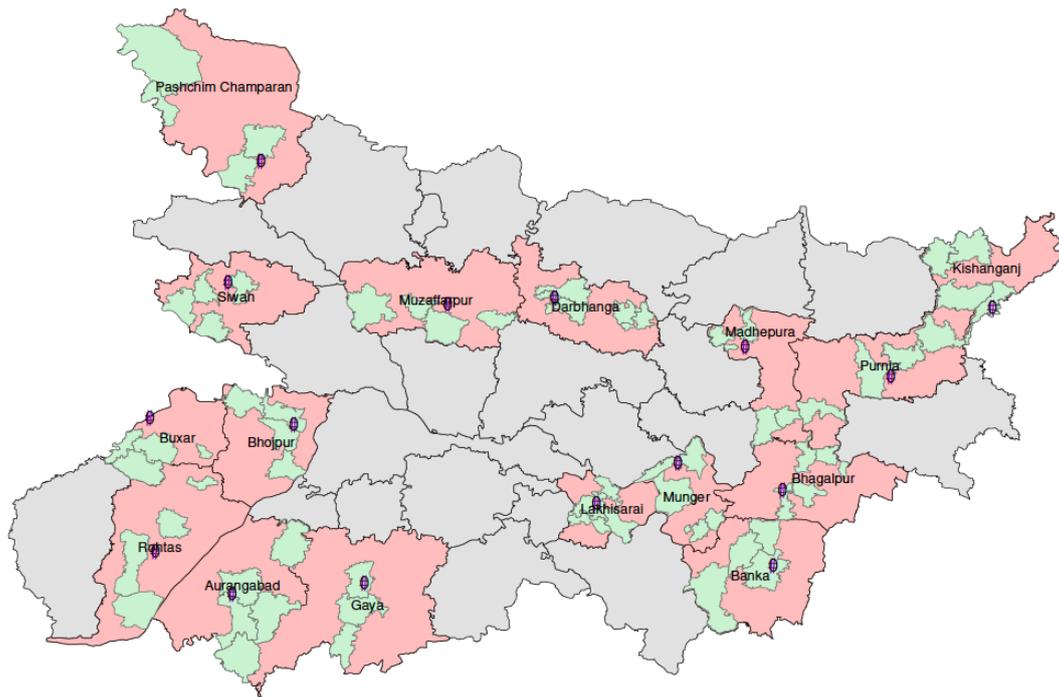


Figure 2: Map of Bihar. Sample districts are colored in red and sampled blocks, within sampled districts, colored in green.

### 3 Respondents of the survey

Following the framework in Khemani (2019), data was gathered from the following types of respondents:

1. **Citizens:**

The citizen survey was aimed at respondents from 16 households residing in each GP area. The survey firm was provided with a list of respondents (with replacements) drawn randomly from the electoral rolls available of all voting-age adults in Bihar’s population. The target sample size is thus 4064 citizens (16 each from 254 GPs).

Within the category of citizens, the survey additionally targeted office-bearing members of women’s Self Help Groups (SHG) under a rural livelihoods program in Bihar known as Jeevika. However, we had no lists available with names of SHG leaders of the village-level organizations across GPs. In the absence of these lists, we relied on the survey firm to ensure that enumerator teams would identify SHG leaders during their field-work. The data from SHG leaders that has been provided to us is thus

subject to a greater than usual caveat: the risk of whether the enumerator teams accurately identified and obtained interviews with the targeted SHG respondents. The instructions provided to the survey teams was to ask the GP Mukhiya and other GP-level respondents (such as the ANM, ASHA and AWW) about the GP-level federated organization of all the SHGs across the GP's communities to identify its President, Secretary and Treasurer. That is, 3 SHG leaders were targeted for each GP, for a total sample of 762 (3 each from 254 GPs) SHG leaders.

## 2. **Politicians:**

- Village level:
  - GP Mukhiya (or head of the elected village council; 1 per GP)
  - Elected village councilors or Ward members: 3 per GP
  - Candidates who contested the Mukhiya position in the last election of 2016, but lost: 3 contenders per GP

Lists were provided to the survey teams of all incumbent Mukhiyas to be interviewed, and a random selection (with replacement) of 3 Ward members and 3 candidates from among those who contested the previous GP elections of 2016.<sup>7</sup> The targeted sample size of GP politicians is thus 1778 (7 each from 254 GPs) respondents.

- Block level:
  - Elected head of block-level government (Panchayat Samiti Chairperson)
  - Elected member of Panchayat Samiti: targeted to be the member who is on a committee related to public health
  - Member of Legislative Assembly (MLA, Bihar state) elected from the MLA constituencies in our study area: approximately 1 per block (57 MLAs across the 64 blocks of the study area)

The survey firm was responsible for identifying the block-level politicians targeted to be interviewed. The targeted sample size of Block-Panchayat (Panchayat Samiti) elected members' is 128 respondents (2 each from 64 blocks). The 57 MLAs across the 64 blocks of the study area were also identified by the survey firm. However, because of problems of reaching politicians at a time that was close to the 2019 elections in India, the survey firm was able to complete

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<sup>7</sup>Across Bihar, on average, 12 candidates per GP contested the Mukhiya elections in 2016.

interviews with only 39 MLAs (of the targeted 57) , and with 119 Panchayat Samiti members (of the targeted 128).

- District level:
  - Member of Parliament (MP, national-level) elected from the MP constituencies in our study area: approximately 1 per district
  - Elected head of district-level government (Zilla Parishad Chairperson)
  - Elected member of Zilla Parishad: targeted to be the member who is on a committee related to public health

The survey firm was responsible for identifying the MPs from constituencies within the 16 study districts, and the 32 respondents of the District-Panchayat (Zilla Parishad). Again, because of problems reaching political leaders at election time, the survey firm was able to interview only 9 MPs, and 28 Zilla Parishad members.

### 3. **Bureaucrats:**

The following district and block-level positions were identified which have supervision and management powers over frontline health service providers.

- Block level
  - Block Medical Officer (typically known as MOIC– Medical Officer in Charge of the Block-level Primary Health Center)
  - Block Programme Manager of the National Health Mission (NHM)
  - Block Programme Officer of Reproductive and Child Health (RCH) and Immunization
  - Block Community Mobilizer (Block-level supervisor of ASHAs)
- District level
  - Civil Surgeon or Chief Medical Officer (CMO)
  - Additional (like a deputy) Chief Medical Officer (ACMO)
  - District Programme Manager of NHM
  - District RCH and Immunization In-Charge
  - District Community Mobilizer (District-level supervisor of ASHAs)

The survey firm was responsible for identifying and interviewing the respondents holding these positions. The final data submitted by the survey firm contains 293 respondents in supervisory or management positions, including: 13 Civil Surgeons, 11 Chief Medical Officers (including 4 who were in Acting capacity), 23 Superintendents (including 13 in Deputy or Acting capacity), 9 District Programme Officers-NHM, 4 District RCH and Immunization In-charge, 7 District Community Mobilizers, 58 MOICs, 58 Acting Facility Incharge, 43 Block Program Managers-NHM, 29 Block RCH Programme officers, and 35 Block Community Mobilizers.

#### 4. **Public providers of health services:**

- Village level:
  - ANM at village health sub-center
  - ASHA
  - AWW

The survey team was provided a list (with replacements) of 3 AWW workers to interview per GP, for a targeted sample of 762 AWW respondents. We did not have population lists of ASHAs and ANMs. Hence, the survey team was instructed to ask the AWW respondents to identify the ASHAs and ANMs in their communities within the GP. The survey teams were to pick 3 ASHAs and all available ANMs to interview in a GP. We describe the shortfalls from these targeted numbers in the data description further below.

- Block level:
  - Doctors at Primary Health Centers (PHC)
  - Nurses at PHCs
  - ANMs at PHC
- District-level:
  - Doctors at District Hospitals or equivalent
  - Nurses at District Hospitals or equivalent

The survey team was provided with a list of randomly selected candidates for the above categories of respondents for all the PHCs and higher-level health facilities (such as District Hospitals) across the 64 blocks of the study area. However, the survey team reports substantial difficulty in adhering to this list because the personnel

were not found at the health facilities. We describe the numbers of respondents that the survey team was able to reach in the sections below, and highlight the fact that we were not able to reach a random sample of providers appointed at these positions.

## 4 Description of the data

The tables and graphs in the sections following below describe the variables on which data was collected, and present the summary statistics from samples of the different types of respondents.

Some of the variables are useful to collect together into indices. All indices are created using Inverse Covariance Weighting (ICW)<sup>8</sup>. This is similar to Principal Component Analysis (PCA), but overweights variables that provide "new information" (i.e. have lower covariance with other variables). All underlying data is coded such that higher value of indices are "more positive" outcomes. The underlying variables in each of the indices created are summarized below:

- **All Surveys:**

1. **Personality Traits Index** (5 items): Questions on grit, carefulness and commitment to work.
2. **Integrity Index** (8 items): Questions on agreement or disagreement with morally disengaged behavior (e.g. it's OK to spread rumors to defend those you care out or it's no big deal to pass someone else's work as your own).
3. **Public Sector Motivation index** (8 items): Questions on commitment to service the public, capacity to resolve conflict among people, faith in government's role in improving society.
4. **Entrepreneurship index** (7 items): Questions on creativity, curiosity and capacity to perform under stress.

As discussed in the Background section, these areas of norms and motivation are at the heart of the problem of state capacity, but are very difficult to measure. The difficulties arise not only because they are intangible and subjective concepts which makes it hard for researchers to design the questions that would go into a survey, but also because it is hard for respondents to understand and answer the questions.

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<sup>8</sup>Michael Anderson. "Multiple Inference and Gender Differences in the Effects of Early Intervention: A Reevaluation of the Abecedarian, Perry Preschool and Early Training Projects. *Journal of the American Statistical Association*. December 2008, Vol. 103, No. 484.

In our extensive field-testing of these survey modules in Bihar we found that the abstract nature of the questions made it difficult for respondents to grasp what we were asking. For example, the module to measure "integrity" comes from literature in psychology and aims to assess the extent of moral disengagement (Moore et al, 2012). In field testing these questions in rural Bihar, we found that respondents struggled to understand what we were asking. The very first question of this module, for example, asks respondents to indicate the extent to which they agree or disagree with the statement "It is okay to spread rumors to defend those you care about." In Bihar, respondents repeatedly asked for concrete examples to understand this question, leading us down a path where the module might differ significantly from how it is administered in other countries and contexts.

In other cases, the problem in using such types of questions about norms is shared across cultural contexts. In many countries in which similar questions have been tried, respondents tend to exhibit what is termed as "social desirability bias"— that is, to answer some of the questions in ways which they think would win social approval even if their true responses would be otherwise. For example, a question like "are you very careful or attentive when undertaking a task?" has been used to measure the personality trait of conscientiousness, but getting sincere responses to it is a problem, as evidenced by 100 percent of some respondents saying they are always careful. As we proceed with the analysis, we will need to evaluate whether/which questions worked as intended, to capture meaningful variation across respondents (even though the "levels" are subject to desirability bias). Part of the contribution of this work is methodological— finding better ways to measure these concepts, that are crucial for state capacity, through trial and error.

- **Public providers' surveys:**

**Professional identity and efficacy** (5 items): whether respondent would have preferred another profession; whether feels a sense of inner pride/fulfillment when doing their work; whether gets social status from being in the profession; whether feel they can improve outcomes through their effort; whether they have to take permission for every little thing.

## 5 Citizens

There are three emerging patterns of interest in the data to highlight at this stage of the ongoing analysis:

One, there is little evidence of "populist" demands from citizens, such as for cash, or subsidies, without regard for the opportunity cost of public spending on health. A clear majority of citizens respond that any additional public spending for their area be allocated to health and nutrition services for their children rather than to cash transfers, job creation programs, or roads.<sup>9</sup> On a simple question about price subsidies that we tried out—whether governments should provide electricity for free— as many as 25 percent of respondents answered no, without any qualification, while 34 percent qualified that subsidies could be targeted to poor people. These responses from the average citizen respondent stand in contrast to the responses from those who were identified in the data as leaders of the village SHG—only 17 percent of SHG leaders answered no, and 52 percent answered with an unqualified yes, compared to only 40 percent of citizens saying yes.<sup>10</sup> This pattern of citizen responses is even more striking when compared with how the higher income and educated respondents, such as doctors, in our sample answered this question. Among doctors, for example, 57 percent answered with an unqualified yes, that governments should provide free electricity, with only 6 percent saying no. Section 21 below compares policy demands across the different types of respondents in our survey.

Citizen responses to another set of questions— on whether they would vote for a candidate for village Mukhiya who offers inducements at the time of elections, such as a gift or cash in exchange for votes—suggest a more sophisticated political way of thinking than one of gullible or cynical voters who are easy prey to vote-buying strategies. Only 10 percent of citizens answer that they would vote for the gift-giving or bribing candidate, with 89 percent saying they would not. It is not easy to dismiss these responses as arising only from social desirability bias because other respondents— those that are identified in the data as leaders of the village SHG, and the village ANMs—who may be equally subject to the possibility of such bias—are twice as likely to respond voting for the bribing candidate (20 percent respond they would vote for the bribing candidate). Furthermore, the pattern of responses to some follow-up questions probing whether the respondent thinks the bribing candidate is more likely to win elections, more likely to be corrupt, and more likely to get work done compared to candidates who don't bribe, provides a critical view of bribing candidates. Across all respondents— the average citizen, the SHG leaders, and the ANMs— more than 75 percent respond that the bribing candidate is more likely to be corrupt, and more than 80 percent respond that the non-bribing candidate would get more work done. Even those who answered that they would vote for the bribing candidate are more likely to respond that the bribing candidate is more likely to be corrupt and less likely to get

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<sup>9</sup><https://www.brookings.edu/blog/future-development/2019/04/08/what-do-poor-people-think-about-direct-cash-transfers/>

<sup>10</sup>The SHG responses are similar to the responses of women in the sample, suggesting that the difference may be entirely due to gender. That is, we do not find that those women who belong to SHGs are less likely to demand free electricity.

work done than a candidate who doesn't bribe. This pattern suggests that citizens may inherently dislike bribing candidates, but nevertheless be compelled to vote for them for other reasons, such as if there is no choice (all candidates bribe), or if the bribing candidate is more likely to win. In our data, those who respond that they would vote for the bribing candidate also tend to respond that the bribing candidate is more likely to win elections.

Two, citizens have political aspirations. When asked whether they would consider running for political office, as many as 31 percent of respondents answer "definitely". Even when we restrict the sample to only the third for which the respondent is a woman, as many as 21 percent respond "definitely" compared to only 5 percent among those women who are frontline public health workers. The average female respondent is only slightly less likely than SHG leaders to report interest in running for office (26 percent of SHG leaders answer "definitely"). This reported interest in running for office in our survey is consistent with the large numbers of candidates actually observed in GP elections in Bihar, with more than 10 on average contesting the Mukhiya position. Other states, such as Andhra Pradesh, in contrast, have 2-3 candidates contesting on average (Afridi et al, 2018).

Of course, the motives behind these aspirations to run for political office is unclear. On the one hand, these high rates of reported interest in running for office could be because holding local political office is lucrative, presenting opportunities to extract rents from state-funded public program. Even without overtly corrupt motives, standing for local elections may be one way to get an income earning position, in an economic environment where jobs are scarce. On the other hand, these responses suggest a highly contestable local political market, with low barriers to entry, which may enable public service motivated individuals to become local leaders. State government policy-makers may be able to leverage this local political contestability to address problems of implementation and delivery.

Three, citizens report greater reliance on publicly provided preventive and promotive health services than on curative health services. For example, in response to a question about how often they use government health facilities when someone in the family falls ill, only 12 percent answer "often", while 47 percent answer "rarely" or "never". This is consistent with the findings from the work of Das et al (2016) that people in rural India tend to rely on private providers for curative health care. In contrast, when women in the sub-sample of households who had experienced a recent pregnancy (within the past 5 years) were asked which type of provider gave them ante-natal care, 85 percent responded by indicating a public provider; only 14 percent indicated a private sector provider.

Among the different frontline workers who could provide maternal and child health/nutrition services—the ASHAs, the AWWs, and the village sub-center ANMs—citizens systematically

report much lower reliance on ANMs than on the quasi-volunteer workers (ASHAs and AWWs). For example, when recently pregnant women in the sample were asked who they most relied upon for advice during their pregnancy, 33 percent responded by indicating the ASHA, followed by 28 percent indicating a family member (such as, their mother-in-law); only 5 percent indicated a nurse or ANM. Similarly, only 5 percent of the women indicated the sub-center nurse as the provider of ante-natal care, compared to 27 percent indicating the ASHA, and 43 percent indicating the AWW.<sup>11</sup> In response to a question about where their last child was delivered, only 27 percent of women indicated the health center (including both the village sub-center and the block-level PHC, where the ANMs are the key personnel assisting with child births), while 17 percent indicated a home-birth, 34 percent indicated the district hospital, and 21 percent indicated private providers. Furthermore, 41 percent of citizens report that the ANMs are rarely or never there to provide health services at the village sub-center, while only 18 percent respond that the ANMs are often there.

The data on other modules of the survey—to measure personality traits of conscientiousness and grit, entrepreneurship, cognitive ability, integrity, public service motivation, and altruism—is in the process of analysis to compare whether/how these traits differ across different types of respondents. For example, do the citizens who report a definite interest in running for public office have higher or lower public service motivation (as measured through our survey module) compared to those citizens who report no interest. We will provide this analysis in the next version. Finally, a remaining module that we will discuss further below—in the section titled "Media Consumption"—pertains to the types of media citizens and other respondents rely on for news.

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<sup>11</sup>The AWWs may be regarded as a significant source of ante-natal care because AWWs may be distributing supplements like folic acid. In answering a question about access to iron folic acid, 40 percent indicated that it was provided by the AWW.

Table 1

	Mean	SD	N
Household head	0.62	0.49	3834
Male	0.71	0.45	3834
Married	0.90	0.29	3834
ST, ST or OBC	0.83	0.38	3834
Age	40.16	13.45	3834
Illiterate	0.26	0.44	3834
Have ration card	0.74	0.44	3834
Have Aadhar card	0.99	0.08	3834
Rural locality	1.00	0.03	3834
Permanent structured house	0.25	0.43	3830
<i>Assets</i>			
Owns car	0.02	0.12	3834
Owns motorcycle	0.32	0.47	3834
Owns computer	0.04	0.20	3834
Owns cooler/electric fan	0.85	0.36	3834
Owns washing machine	0.04	0.19	3834
Owns fridge	0.08	0.27	3834
Owns TV	0.47	0.50	3834
Has bank account	0.94	0.24	3834
Has LPG	0.73	0.44	3834
Owns pumping set	0.07	0.26	3834
Owns tractor	0.03	0.16	3834
Has toilet inside the house	0.69	0.46	3834
Number of items owned (Max=12)	4.28	1.83	3834
Number of goats/sheep owned	0.72	1.55	3834
Number of buffalo/bull owned	0.34	1.66	3834
Number of cows owned	0.72	1.21	3834
Asset Index (ICW)	0.01	1.04	3834

*Note:*

Table 2

	Mean	SD	N
<i>Use of media and computer</i>			
Facebook user	0.22	0.41	3834
Twitter user	0.03	0.17	3834
Whatsapp user	0.24	0.43	3834
Instagram user	0.04	0.19	3834
Watch TV more than once a week	0.42	0.49	3834
Read newspaper more than once a week	0.36	0.48	3834
Get newspapers at least couple of times a month	0.32	0.47	3834
Uses a computer at least sometimes	0.11	0.31	3834
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.27	0.44	3798
Prefers cash for the poor to health investment	0.13	0.34	3794
Prefers jobs for the poor to road investment	0.60	0.49	3800
Prefers cash for the poor to road investment	0.36	0.48	3791
Prefers health to road investment	0.80	0.40	3803
Government should give electricity for free (incl. only poor)	0.75	0.43	3819
Government should waive farmer loans (incl. only poor)	0.90	0.30	3809
Government teachers are very or somewhat good	0.58	0.49	3780
Government doctors and nurses are very or somewhat good	0.62	0.48	3721
Would vote for candidate who bribes	0.10	0.30	3776
Thinks candidate who bribes will win	0.38	0.48	3703
Thinks candidate who bribes more likely to be corrupt	0.82	0.38	3763
Thinks candidate who bribes will do work well	0.08	0.27	3746
<i>Politics</i>			
Has run for office before	0.09	0.29	3834
Ran for local position (Ward or Mukhiya)	0.75	0.43	362
Definitely or Probably will run for office	0.57	0.50	3337
Someone in family held political office	0.08	0.27	3834

Note:

Table 3

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.76	0.43	3834
Always - works hard	0.64	0.48	3834
Always - finishes what starts	0.57	0.49	3834
Always - finishes work on time	0.50	0.50	3834
Always - works without a break	0.29	0.45	3834
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.72	0.45	3834
Fully disagree - it's OK to take others' belongings	0.83	0.38	3834
Fully disagree - that exaggerating own qualities is no big deal	0.83	0.38	3834
Fully disagree - that OK if junior does something wrong under senior's pressure	0.74	0.44	3834
Fully Disagree - that OK if one does something wrong under friends' pressure	0.73	0.44	3834
Fully disagree - it's OK to take credit for others' work	0.79	0.40	3834
Fully disagree - that some people have to be dealt with roughly	0.49	0.50	3834
Fully disagree - that some people only deserve rude behaviour	0.49	0.50	3834
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	2.21	1.37	3834
Share of lottery donated to orphanage	0.36	0.28	3834
Share of tax paid to panchayat	0.28	0.28	3834
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.63	0.48	3834
Fully Applicable - Good at solving problems between other people	0.35	0.48	3834
Fully Applicable - Many public causes are worth fighting for	0.43	0.50	3834
Fully Applicable - Use energy to make society better	0.63	0.48	3834
Fully Applicable - Not afraid to defend others even personal risk	0.43	0.50	3834
Fully Applicable - Public service more important than doing well financially	0.23	0.42	3795
Fully Applicable - Politics is not a dirty word	0.35	0.48	3728
Fully Applicable - Thinks government can do much to make society fair	0.23	0.42	3681
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.58	0.49	3834
Often - very interested in learning new things	0.71	0.45	3834
Often - relaxed during stressful situations	0.45	0.50	3834
Often - tend to worry a lot	0.20	0.40	3816
Often - get nervous easily	0.11	0.31	3809
Very important to rise in life	0.83	0.38	3834
Very important to make a lot of money	0.74	0.44	3834

Note:

Table 4

	Mean	SD	N
Health centre or public hospital when someone is ill	0.33	0.85	3834
Health centre or public hospital when someone hospitalized	0.47	0.75	3834
Uses government health facilities sometimes or often when sick	0.61	0.95	3834
Reason not using public health: doctors/nurses absent	0.32	0.47	3834
Reason not using public health: medicine unavailable	0.60	0.49	3834
Reason not using public health: not given proper care	0.70	0.46	3834
Reason not using public health: no faith in government hospitals	0.22	0.41	3834
Reason not using public health: forced to give money	0.07	0.26	3834
Reason not using public health: other reason	0.04	0.20	3834
ANM usually available at HSC	0.55	0.50	3518
Doctor usually available at PHC	0.56	0.50	3564
Someone in family made formal complaint	0.05	0.22	3738
Existence of committee on health, sanitation and nutrition	0.15	0.36	3595
Existence of self help group (Jeevika)	0.86	0.35	3762
You or family member of Jeevika?	0.42	0.49	3834
Any woman delivered baby (last 5 years)	0.22	0.41	3834
Received any antenatal care check-ups?	0.83	0.37	778
Received 4 or more ANC check-ups	0.11	0.31	631
Received 3 or more ANC check-ups	0.47	0.50	631
ANC check-up in public provider	0.85	0.36	638
ANC check-up provider: ASHA	0.27	0.44	648
ANC check-up provider: AWW	0.43	0.49	648
ANC check-up provider: Sub-centre nurse	0.05	0.21	648
ANC check-up provider: PHC	0.09	0.29	648
ANC check-up provider: Private doctor/clinic	0.15	0.36	648
IFA provider public	0.89	0.32	578
IFA provider: ASHA	0.36	0.48	588
IFA provider: AWW	0.40	0.49	588
IFA provider: Sub-centre nurse	0.06	0.23	588
IFA provider: PHC	0.05	0.22	588
IFA provider: Private doctor/clinic	0.11	0.32	588
Received supplementary food from AWW	0.52	0.50	798
RECODE of M11_Q14 (M11.Q14: Where was your child delivered?)	1.56	0.77	819
Whom relied for pregnancy advice: Government doctor	0.09	0.28	827
Whom relied for pregnancy advice: Nurse	0.05	0.22	827
Whom relied for pregnancy advice: AWW	0.08	0.27	827
Whom relied for pregnancy advice: ASHA	0.33	0.47	827
Whom relied for pregnancy advice: Private doctor	0.14	0.35	827
Whom relied for pregnancy advice: Family member	0.28	0.45	827

Note:

Table 5

	Mean	SD	N
Received post natal care visits	0.30	0.46	805
Sometimes or often received post-natal care: Health sub-centres	0.34	0.47	785
Sometimes or often received post-natal care: PHC	0.41	0.49	783
Sometimes or often received post-natal care: AWW	0.56	0.50	791
Sometimes or often received post-natal care: ASHA	0.60	0.49	792
Sometimes or often received post-natal care: Private doctors	0.61	0.49	798
Sometimes or always interact with ASHA as woman/mother	0.59	0.49	813
Sometimes or always interact with AWW as mother	0.51	0.50	813
Sometimes or always interact with ANM as mother	0.38	0.49	809
Child has been vaccinated	0.96	0.19	821
Vaccine provider: Sub-centre nurse	0.18	0.38	789
Vaccine provider: PHC nurse	0.13	0.33	789
Vaccine provider: AWW	0.51	0.50	789
Vaccine provider: Private doctor	0.05	0.22	789
Vaccine provider: ASHA	0.12	0.33	789
Child received any nutrition supplements	0.53	0.50	800
Nutrition provider: Sub-centre nurse	0.08	0.27	425
Nutrition provider: PHC nurse	0.08	0.26	425
Nutrition provider: AWW	0.61	0.49	425
Nutrition provider: Private doctor	0.06	0.24	425
Nutrition provider: ASHA	0.15	0.35	425
Received counselling about child healthy growth	0.39	0.49	802
Growth advice provider: Sub-centre nurse	0.08	0.27	310
Growth advice provider: PHC nurse	0.08	0.27	310
Growth advice provider: ASHA	0.41	0.49	310
Growth advice provider: AWW	0.33	0.47	310
Growth advice provider: Private doctor	0.09	0.29	310
Diarrhoea treatment: self-treatment with ORS	0.59	0.49	788
Diarrhoea treatment: self-treatment with medicine	0.31	0.46	775
Diarrhoea treatment: visit government doctor/nurse	0.45	0.50	782
Diarrhoea treatment: visit ASHA/AWW	0.47	0.50	779
Diarrhoea treatment: visit private doctor	0.82	0.38	811
Child cough treatment: self-treatment with medicine	0.34	0.47	792
Child cough treatment: private medical provider	0.86	0.35	817
Child cough treatment: government doctor/nurse	0.44	0.50	783
Child cough treatment: ASHA/AWW	0.42	0.49	782
Had to make informal payment to public health facility staff	0.22	0.41	796

*Note:*

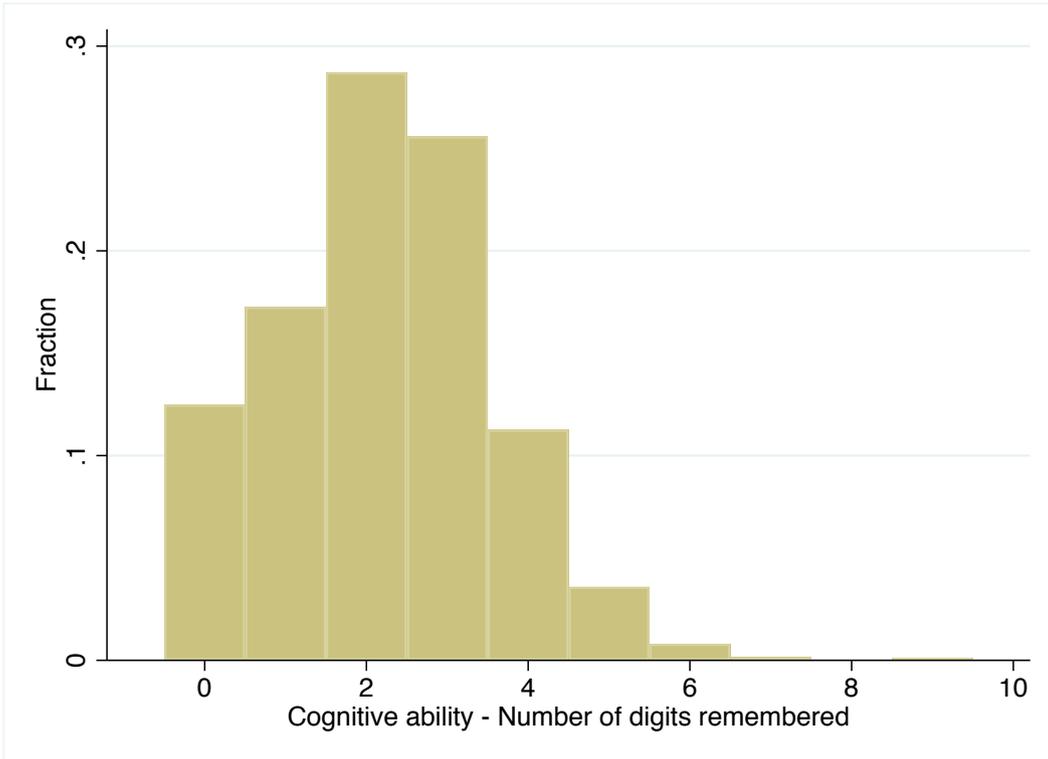


Figure 3

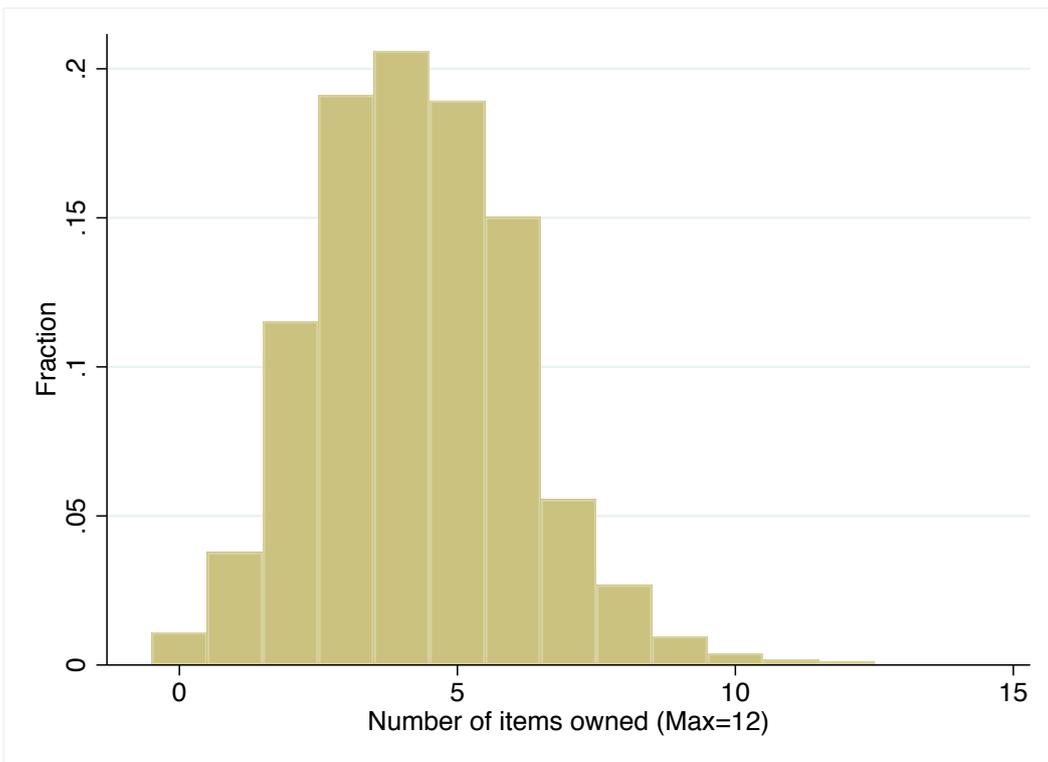


Figure 4

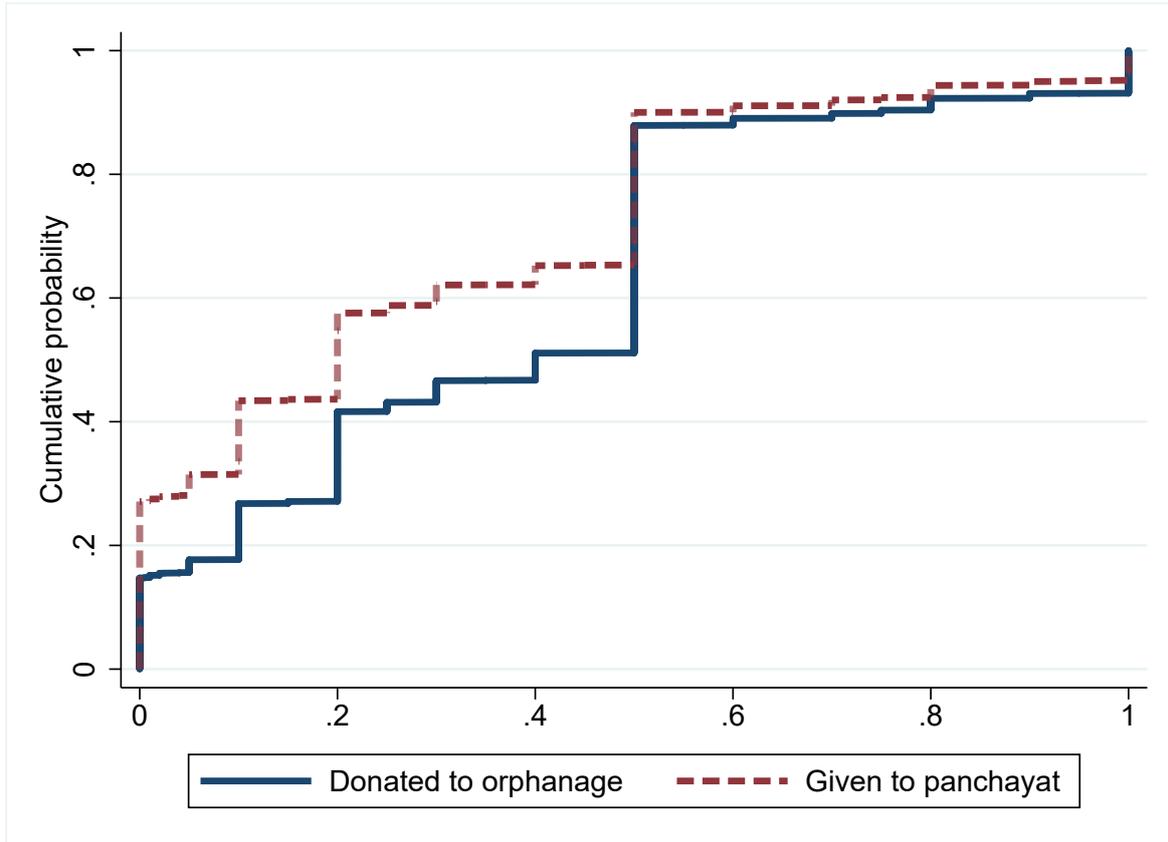


Figure 5

## 6 Self Help Groups

The purpose of administering the same survey modules to SHG leaders as to other respondents (citizens, politicians, bureaucrats, and health service providers) was to examine whether the SHG is a source of leadership in a village to advocate for public health programs. The pattern that has so far emerged suggests that SHG respondents are quite similar in political views, attitudes, motivation, and activism as the average female respondent in the citizen survey. But we are still working to examine this more carefully. The sections further below examines differences in responses of SHG members compared to other types of respondents.

Table 6

	Mean	SD	N
Household head	0.23	0.42	713
Male	0.01	0.10	713
Married	0.97	0.18	713
ST, ST or OBC	0.90	0.30	713
Age	36.64	9.42	713
Illiterate	0.22	0.41	713
Have ration card	0.77	0.42	713
Have Aadhar card	1.00	0.04	713
Rural locality	1.00	0.06	713
Permanent structured house	0.31	0.46	710
<i>Assets</i>			
Owns car	0.01	0.08	713
Owns motorcycle	0.23	0.42	713
Owns computer	0.02	0.15	713
Owns cooler/electric fan	0.89	0.32	713
Owns washing machine	0.02	0.15	713
Owns fridge	0.06	0.24	713
Owns TV	0.46	0.50	713
Has bank account	0.96	0.18	713
Has LPG	0.75	0.43	713
Owns pumping set	0.04	0.20	713
Owns tractor	0.02	0.13	713
Has toilet inside the house	0.67	0.47	713
Number of items owned (Max=12)	4.13	1.54	713
Number of goats/sheep owned	0.77	1.43	713
Number of buffalo/bull owned	0.24	0.72	713
Number of cows owned	0.56	0.86	713
Asset Index (ICW)	-0.06	0.77	713

*Note:*

Table 7

	Mean	SD	N
<i>Use of media and computer</i>			
Facebook user	0.04	0.21	713
Twitter user	0.01	0.08	713
Whatsapp user	0.07	0.25	713
Instagram user	0.01	0.11	713
Watch TV more than once a week	0.39	0.49	713
Read newspaper more than once a week	0.14	0.35	713
Get newspapers at least couple of times a month	0.27	0.45	713
Uses a computer at least sometimes	0.05	0.22	713
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.36	0.48	709
Prefers cash for the poor to health investment	0.17	0.38	704
Prefers jobs for the poor to road investment	0.72	0.45	708
Prefers cash for the poor to road investment	0.45	0.50	700
Prefers health to road investment	0.82	0.38	704
Government should give electricity for free (incl. only poor)	0.83	0.37	712
Government should waive farmer loans (incl. only poor)	0.94	0.23	710
Government teachers are very or somewhat good	0.70	0.46	705
Government doctors and nurses are very or somewhat good	0.70	0.46	696
Would vote for candidate who bribes	0.22	0.41	705
Thinks candidate who bribes will win	0.51	0.50	684
Thinks candidate who bribes more likely to be corrupt	0.80	0.40	689
Thinks candidate who bribes will do work well	0.12	0.33	692
<i>Politics</i>			
Has run for office before	0.09	0.28	713
Ran for local position (Ward or Mukhiya)	0.80	0.40	61
Definitely or Probably will run for office	0.54	0.50	624
Someone in family held political office	0.08	0.27	713

Note:

Table 8

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.75	0.43	713
Always - works hard	0.62	0.49	713
Always - finishes what starts	0.57	0.50	713
Always - finishes work on time	0.51	0.50	713
Always - works without a break	0.37	0.48	713
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.68	0.47	713
Fully disagree - it's OK to take others' belongings	0.82	0.38	713
Fully disagree - that exaggerating own qualities is no big deal	0.81	0.39	713
Fully disagree - that OK if junior does something wrong under senior's pressure	0.73	0.44	713
Fully Disagree - that OK if one does something wrong under friends' pressure	0.69	0.46	713
Fully disagree - it's OK to take credit for others' work	0.77	0.42	713
Fully disagree - that some people have to be dealt with roughly	0.43	0.50	713
Fully disagree - that some people only deserve rude behaviour	0.41	0.49	713
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	2.11	1.29	713
Share of lottery donated to orphanage	0.36	0.24	713
Share of tax paid to panchayat	0.26	0.26	713
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.65	0.48	713
Fully Applicable - Good at solving problems between other people	0.29	0.45	713
Fully Applicable - Many public causes are worth fighting for	0.48	0.50	713
Fully Applicable - Use energy to make society better	0.66	0.47	713
Fully Applicable - Not afraid to defend others even personal risk	0.31	0.46	713
Fully Applicable - Public service more important than doing well financially	0.17	0.38	703
Fully Applicable - Politics is not a dirty word	0.35	0.48	692
Fully Applicable - Thinks government can do much to make society fair	0.22	0.41	687
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.62	0.49	713
Often - very interested in learning new things	0.74	0.44	713
Often - relaxed during stressful situations	0.33	0.47	713
Often - tend to worry a lot	0.24	0.43	707
Often - get nervous easily	0.15	0.36	707
Very important to rise in life	0.88	0.33	713
Very important to make a lot of money	0.82	0.39	713

Note:

Table 9

	Mean	SD	N
Health centre or public hospital when someone is ill	0.31	0.83	713
Health centre or public hospital when someone hospitalized	0.44	0.75	713
Uses government health facilities sometimes or often when sick	0.59	0.93	713
Reason not using public health: doctors/nurses absent	0.39	0.49	713
Reason not using public health: medicine unavailable	0.66	0.47	713
Reason not using public health: not given proper care	0.71	0.46	713
Reason not using public health: no faith in government hospitals	0.33	0.47	713
Reason not using public health: forced to give money	0.07	0.26	713
Reason not using public health: other reason	0.03	0.18	713
ANM usually available at HSC	0.59	0.49	663
Doctor usually available at PHC	0.58	0.49	680
Someone in family made formal complaint	0.04	0.20	680
Existence of committee on health, sanitation and nutrition	0.19	0.39	654
Existence of self help group (Jeevika)	0.96	0.19	712
You or family member of Jeevika?	0.95	0.23	713
Any woman delivered baby (last 5 years)	0.31	0.46	713
Received any antenatal care check-ups?	0.88	0.33	216
Received 4 or more ANC check-ups	0.07	0.26	187
Received 3 or more ANC check-ups	0.44	0.50	187
ANC check-up in public provider	0.90	0.30	188
ANC check-up provider: ASHA	0.19	0.39	189
ANC check-up provider: AWW	0.52	0.50	189
ANC check-up provider: Sub-centre nurse	0.11	0.31	189
ANC check-up provider: PHC	0.09	0.29	189
ANC check-up provider: Private doctor/clinic	0.10	0.29	189
IFA provider public	0.95	0.23	168
IFA provider: ASHA	0.35	0.48	168
IFA provider: AWW	0.40	0.49	168
IFA provider: Sub-centre nurse	0.16	0.37	168
IFA provider: PHC	0.04	0.20	168
IFA provider: Private doctor/clinic	0.05	0.23	168
Received supplementary food from AWW	0.59	0.49	217
RECODE of M11_Q14 (M11.Q14: Where was your child delivered?)	1.54	0.80	218
Whom relied for pregnancy advice: Government doctor	0.09	0.28	218
Whom relied for pregnancy advice: Nurse	0.08	0.27	218
Whom relied for pregnancy advice: AWW	0.06	0.23	218
Whom relied for pregnancy advice: ASHA	0.42	0.50	218
Whom relied for pregnancy advice: Private doctor	0.10	0.30	218
Whom relied for pregnancy advice: Family member	0.25	0.44	218

Note:

Table 10

	Mean	SD	N
Received post natal care visits	0.39	0.49	218
Sometimes or often received post-natal care: Health sub-centres	0.39	0.49	209
Sometimes or often received post-natal care: PHC	0.38	0.49	208
Sometimes or often received post-natal care: AWW	0.52	0.50	213
Sometimes or often received post-natal care: ASHA	0.63	0.48	213
Sometimes or often received post-natal care: Private doctors	0.48	0.50	212
Sometimes or always interact with ASHA as woman/mother	0.68	0.47	217
Sometimes or always interact with AWW as mother	0.55	0.50	218
Sometimes or always interact with ANM as mother	0.43	0.50	216
Child has been vaccinated	0.97	0.18	218
Vaccine provider: Sub-centre nurse	0.26	0.44	211
Vaccine provider: PHC nurse	0.12	0.33	211
Vaccine provider: AWW	0.50	0.50	211
Vaccine provider: Private doctor	0.01	0.12	211
Vaccine provider: ASHA	0.09	0.29	211
Child received any nutrition supplements	0.56	0.50	215
Nutrition provider: Sub-centre nurse	0.12	0.33	120
Nutrition provider: PHC nurse	0.07	0.26	120
Nutrition provider: AWW	0.59	0.49	120
Nutrition provider: Private doctor	0.04	0.20	120
Nutrition provider: ASHA	0.17	0.37	120
Received counselling about child healthy growth	0.47	0.50	216
Growth advice provider: Sub-centre nurse	0.13	0.34	101
Growth advice provider: PHC nurse	0.05	0.22	101
Growth advice provider: ASHA	0.49	0.50	101
Growth advice provider: AWW	0.30	0.46	101
Growth advice provider: Private doctor	0.04	0.20	101
Diarrhoea treatment: self-treatment with ORS	0.67	0.47	212
Diarrhoea treatment: self-treatment with medicine	0.42	0.50	208
Diarrhoea treatment: visit government doctort/nurse	0.45	0.50	210
Diarrhoea treatment: visit ASHA/AWW	0.43	0.50	209
Diarrhoea treatment: visit private doctor	0.77	0.42	214
Child cough treatment: self-treatment with medicine	0.46	0.50	211
Child cough treatment: private medical provider	0.87	0.33	215
Child cough treatment: government doctor/nurse	0.46	0.50	212
Child cough treatment: ASHA/AWW	0.44	0.50	210
Had to make informal payment to public health facility staff	0.20	0.40	213

*Note:*

## 7 Politicians- GP-level

The survey of GP-level politicians—incumbent Mukhiya and 3 elected ward members per GP, plus 3 contenders for the Mukhiya position in the 2016 elections—provides us with data to examine:

One, the quality of local political leaders on the dimensions of public service motivation, integrity, altruism, entrepreneurship, conscientious and grit, cognitive ability, and education.

Two, their political experience and views of issues that matter in local electoral contestation.

Three, how these local political leaders view and experience health services.

On one: the data show that GP politicians are distinct from other GP-level respondents (citizens, ANMs, ASHAs, AWWs, SHG) in having higher measures of public service motivation and integrity. (Figure 21). This could be because politicians tend to answer the questions related to these characteristics less sincerely, and hence these measures may not be capturing real differences in public service motivation or integrity among GP politicians. However, we report some evidence further below (Tables 59-63) that the public service motivation measure tends to be positively correlated with health service delivery reported by citizens—that is, citizens are more likely to receive maternal and child health services in GPs where the average politician is measured as having higher public service motivation.

On two: Further evidence of low barriers to entry for local political leadership<sup>12</sup> comes from politicians' responses to questions about their family political history. As many as 35 percent of incumbent Mukhiyas, 80 percent of Mukhiya contenders and 62 percent of Ward members report that no one in their family has ever held political office. The majority of these politicians, including those who come from non-political families, report that they would definitely run again for office.

We designed two questions to elicit politicians' views of the issues that matter for their election or re-election. The first asked what factors could jeopardize their election/re-election: lack of campaign finance; caste considerations; dissatisfaction among the public; corruption charges; opposition candidates being powerful/rich. The factor cited by the most number of politicians (that is, the modal response), at 38 percent, is "dissatisfaction among the public". Caste considerations are next in line, with 29 percent of politicians citing it. Among incumbent Mukhiyas, an even higher percentage than average cite public

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<sup>12</sup>Recall that in the section on Citizens we described the data on aspirations to run for political office as suggestive of low barriers to entry.

dissatisfaction (48 percent), while the same percentage as other politicians, 30 percent, cite caste. This pattern is perhaps surprising in that prior research in Bihar might have led us to predict that "caste considerations" would be cited by the large majority of respondents; but it is not. From this data, there appear to be multiple factors that matter in local elections, beyond caste.

The second question asked respondents to name which area of service delivery or performance matters most for improving their chances of getting elected to the GP council or Mukhiya position. The modal response is "maintaining or promoting social harmony" (translated in Hindi as "brotherhood" or bhaichara in the population), with 35 percent of politicians citing it as the most important area of their work which matters for elections. Health services are cited by 14 percent of politicians.

On three: Section 20, Table 64, examines whether those respondents who have greater political power (as measured by indicators of them being politicians, or holding political positions) are more or less likely to use public health facilities.

Table 11

	Mean	SD	N
Elected politician (Ward member or Mukhiya)	0.58	0.49	1603
Household head	0.60	0.49	1603
Male	0.66	0.48	1603
Married	0.96	0.19	1603
ST, ST or OBC	0.82	0.38	1603
Age	42.27	10.51	1603
Illiterate	0.09	0.28	1603
Have ration card	0.70	0.46	1603
Have Aadhar card	1.00	0.04	1603
Rural locality	1.00	0.02	1603
Permanent structured house	0.51	0.50	1602
<i>Assets</i>			
Owns car	0.10	0.30	1603
Owns motorcycle	0.63	0.48	1603
Owns computer	0.13	0.34	1603
Owns cooler/electric fan	0.90	0.30	1603
Owns washing machine	0.09	0.29	1603
Owns fridge	0.21	0.40	1603
Owns TV	0.69	0.46	1603
Has bank account	0.98	0.14	1603
Has LPG	0.85	0.36	1603
Owns pumping set	0.19	0.39	1603
Owns tractor	0.09	0.29	1603
Has toilet inside the house	0.89	0.32	1603
Number of items owned (Max=12)	5.75	2.20	1603
Number of goats/sheep owned	0.61	1.59	1603
Number of buffalo/bull owned	0.42	2.44	1603
Number of cows owned	0.98	1.32	1603
Asset Index (ICW)	-0.00	1.00	1603

*Note:*

Table 12

	Mean	SD	N
Facebook user	0.25	0.44	1603
Twitter user	0.03	0.18	1603
Whatsapp user	0.31	0.46	1603
Instagram user	0.03	0.17	1603
Watch TV more than once a week	0.63	0.48	1603
Read newspaper more than once a week	0.62	0.48	1603
Get newspapers at least couple of times a month	0.60	0.49	1603
Uses a computer at least sometimes	0.12	0.33	1603
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.21	0.41	1595
Prefers cash for the poor to health investment	0.11	0.32	1593
Prefers jobs for the poor to road investment	0.57	0.50	1595
Prefers cash for the poor to road investment	0.27	0.45	1589
Prefers health to road investment	0.82	0.38	1594
Government should give electricity for free (incl. only poor)	0.66	0.47	1589
Government should waive farmer loans (incl. only poor)	0.90	0.29	1597
Government teachers are very or somewhat good	0.58	0.49	1589
Government doctors and nurses are very or somewhat good	0.62	0.49	1560

*Note:*

Table 13

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.83	0.37	1603
Always - works hard	0.74	0.44	1603
Always - finishes what starts	0.67	0.47	1603
Always - finishes work on time	0.58	0.49	1603
Always - works without a break	0.37	0.48	1603
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.86	0.35	1603
Fully disagree - it's OK to take others' belongings	0.90	0.30	1603
Fully disagree - that exaggerating own qualities is no big deal	0.89	0.31	1603
Fully disagree - that OK if junior does something wrong under senior's pressure	0.79	0.40	1603
Fully Disagree - that OK if one does something wrong under friends' pressure	0.83	0.38	1603
Fully disagree - it's OK to take credit for others' work	0.88	0.33	1603
Fully disagree - that some people have to be dealt with roughly	0.46	0.50	1603
Fully disagree - that some people only deserve rude behaviour	0.49	0.50	1603
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	2.52	1.34	1603
Share of lottery donated to orphanage	0.52	0.32	1603
Share of tax paid to panchayat	0.45	0.35	1603
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.74	0.44	1603
Fully Applicable - Good at solving problems between other people	0.56	0.50	1603
Fully Applicable - Many public causes are worth fighting for	0.63	0.48	1603
Fully Applicable - Use energy to make society better	0.79	0.40	1603
Fully Applicable - Not afraid to defend others even personal risk	0.59	0.49	1603
Fully Applicable - Public service more important than doing well financially	0.38	0.49	1603
Fully Applicable - Politics is not a dirty word	0.49	0.50	1603
Fully Applicable - Thinks government can do much to make society fair	0.22	0.41	1603
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.72	0.45	1603
Often - very interested in learning new things	0.81	0.39	1603
Often - relaxed during stressful situations	0.59	0.49	1603
Often - tend to worry a lot	0.19	0.39	1603
Often - get nervous easily	0.05	0.22	1603
Very important to rise in life	0.84	0.37	1603
Very important to make a lot of money	0.53	0.50	1603

Note:

Table 14

	Mean	SD	N
Health centre or public hospital when someone is ill	0.36	0.64	1603
Health centre or public hospital when someone hospitalized	0.51	0.62	1603
Uses government health facilities sometimes or often when sick	0.62	0.67	1603
Reason not using public health: doctors/nurses absent	0.36	0.48	1603
Reason not using public health: medicine unavailable	0.59	0.49	1603
Reason not using public health: not given proper care	0.67	0.47	1603
Reason not using public health: no faith in government hospitals	0.23	0.42	1603
Reason not using public health: forced to give money	0.05	0.21	1603
Reason not using public health: other reason	0.07	0.25	1603
ANM usually available at HSC	0.53	0.50	1471
Doctor usually available at PHC	0.60	0.49	1507
Someone in family made formal complaint	0.13	0.34	1581
Existence of committee on health, sanitation and nutrition	0.12	0.32	1534
Existence of self help group (Jeevika)	0.94	0.24	1592
You or family member of Jeevika?	0.39	0.49	1603
Any woman delivered baby (last 5 years)	0.24	0.43	1603
Received any antenatal care check-ups?	0.89	0.32	300
Received 4 or more ANC check-ups	0.19	0.39	260
Received 3 or more ANC check-ups	0.63	0.48	260
ANC check-up in public provider	0.80	0.40	262
ANC check-up provider: ASHA	0.28	0.45	266
ANC check-up provider: AWW	0.33	0.47	266
ANC check-up provider: Sub-centre nurse	0.09	0.29	266
ANC check-up provider: PHC	0.09	0.28	266
ANC check-up provider: Private doctor/clinic	0.20	0.40	266
IFA provider public	0.82	0.38	256
IFA provider: ASHA	0.37	0.48	257
IFA provider: AWW	0.34	0.47	257
IFA provider: Sub-centre nurse	0.06	0.24	257
IFA provider: PHC	0.05	0.21	257
IFA provider: Private doctor/clinic	0.18	0.38	257
Received supplementary food from AWW	0.53	0.50	318
Baby delivery: Health centre or district hospital	0.57	0.50	335
Baby delivery: Private hospital or clinic	0.28	0.45	335
Baby delivery: Home	0.16	0.36	335
Whom relied for pregnancy advice: Government doctor	0.07	0.26	374
Whom relied for pregnancy advice: Nurse	0.04	0.20	374
Whom relied for pregnancy advice: AWW	0.05	0.21	374
Whom relied for pregnancy advice: ASHA	0.31	0.46	374
Whom relied for pregnancy advice: Private doctor	0.16	0.36	374
Whom relied for pregnancy advice: Family member	0.23	0.42	374

Table 15

	Mean	SD	N
Received post natal care visits	0.36	0.48	321
Sometimes or often received post-natal care: Health sub-centres	0.23	0.42	342
Sometimes or often received post-natal care: PHC	0.30	0.46	339
Sometimes or often received post-natal care: AWW	0.46	0.50	344
Sometimes or often received post-natal care: ASHA	0.54	0.50	345
Sometimes or often received post-natal care: Private doctors	0.53	0.50	345
Sometimes or always interact with ASHA as woman/mother	0.61	0.49	322
Sometimes or always interact with AWW as mother	0.53	0.50	322
Sometimes or always interact with ANM as mother	0.34	0.47	322
Child has been vaccinated	0.97	0.17	335
Vaccine provider: Sub-centre nurse	0.21	0.41	325
Vaccine provider: PHC nurse	0.16	0.36	325
Vaccine provider: AWW	0.44	0.50	325
Vaccine provider: Private doctor	0.07	0.26	325
Vaccine provider: ASHA	0.11	0.32	325
Child received any nutrition supplements	0.59	0.49	328
Nutrition provider: Sub-centre nurse	0.09	0.28	195
Nutrition provider: PHC nurse	0.04	0.19	195
Nutrition provider: AWW	0.54	0.50	195
Nutrition provider: Private doctor	0.10	0.30	195
Nutrition provider: ASHA	0.20	0.40	195
Received counselling about child healthy growth	0.43	0.50	326
Growth advice provider: Sub-centre nurse	0.06	0.23	141
Growth advice provider: PHC nurse	0.02	0.14	141
Growth advice provider: ASHA	0.50	0.50	141
Growth advice provider: AWW	0.29	0.46	141
Growth advice provider: Private doctor	0.11	0.32	141
Diarrhoea treatment: self-treatment with ORS	0.54	0.50	350
Diarrhoea treatment: self-treatment with medicine	0.23	0.42	341
Diarrhoea treatment: visit government doctort/nurse	0.36	0.48	343
Diarrhoea treatment: visit ASHA/AWW	0.37	0.48	349
Diarrhoea treatment: visit private doctor	0.69	0.46	355
Child cough treatment: self-treatment with medicine	0.20	0.40	343
Child cough treatment: private medical provider	0.74	0.44	361
Child cough treatment: government doctor/nurse	0.33	0.47	337
Child cough treatment: ASHA/AWW	0.37	0.48	338
Consumed iron folic acid (IFA) for 100+ days	0.14	0.35	328

*Note:*

Table 16

	Mean	SD	N
Years fighting elections	6.32	5.49	1603
Number of times running for office	1.82	1.74	1602
Probably or definitely running for office in the future	0.90	0.30	1551
Someone in family held political office	0.33	0.47	1603
Salary range: Rs 2,500/month	0.20	0.40	931
Salary range: Rs 500/month	0.61	0.49	931
Salary range: other	0.01	0.11	931
Salary range: no salary	0.17	0.37	931
How many months of salary not received	8.76	3.48	743
Supposed to receive other allowances	0.09	0.29	931
How many months of allowance not received	3.30	3.76	83
Important election issue: health	0.14	0.35	1603
Important election issue: education	0.14	0.34	1603
Important election issue: roads	0.15	0.36	1603
Important election issue: MNREGA	0.04	0.20	1603
Important election issue: water/sewage	0.15	0.35	1603
Important election issue: electricity	0.01	0.11	1603
Important election issue: Maintained social harmony	0.35	0.48	1603
Crucial topic since election: made roads	0.32	0.46	1603
Crucial topic since election: laid sewage line	0.03	0.16	1603
Crucial topic since election: provided water lies/taps	0.19	0.40	1603
Crucial topic since election: electricity related work	0.02	0.14	1603
Crucial topic since election: implemented govt scheme	0.16	0.37	1603
Crucial topic since election: health related work	0.07	0.26	1603
Crucial topic since election: education related work	0.09	0.29	1603
Crucial topic since election: other	0.06	0.23	1603
Second Crucial topic since election: made roads	0.16	0.36	1603
Second Crucial topic since election: laid sewage line	0.03	0.16	1603
Second Crucial topic since election: provided water lies/tap	0.22	0.42	1603
Second Crucial topic since election: electricity related wor	0.05	0.21	1603
Second Crucial topic since election: implemented govt scheme	0.18	0.38	1603
Second Crucial topic since election: health related work	0.10	0.30	1603
Second Crucial topic since election: education related work	0.11	0.31	1603
Crucial topic since election: other	0.04	0.21	1603

*Note:*

Table 17

	Mean	SD	N
Main health-related activity: open dispensary	0.04	0.20	931
Main health-related activity: ASHA/AWW posted	0.11	0.32	931
Main health-related activity: opened medical clinic	0.03	0.16	931
Main health-related activity: provided ambulance	0.04	0.19	931
Main health-related activity: organised medical camp	0.12	0.33	931
Main health-related activity: no health related work	0.12	0.33	931
Main health-related activity: other	0.06	0.24	931
Jeopardize elections: Campaign limitations (money)	0.25	0.44	1603
Jeopardize elections: Caste considerations	0.29	0.45	1603
Jeopardize elections: Dissatisfaction among public	0.38	0.49	1603
Jeopardize elections: Corruption charges	0.13	0.34	1603
Jeopardize elections: Opposition candidate powerful	0.28	0.45	1603
HSC sometimes or always working	0.61	0.49	1131
ANM sometimes or always come to work	0.63	0.48	1118

*Note:*

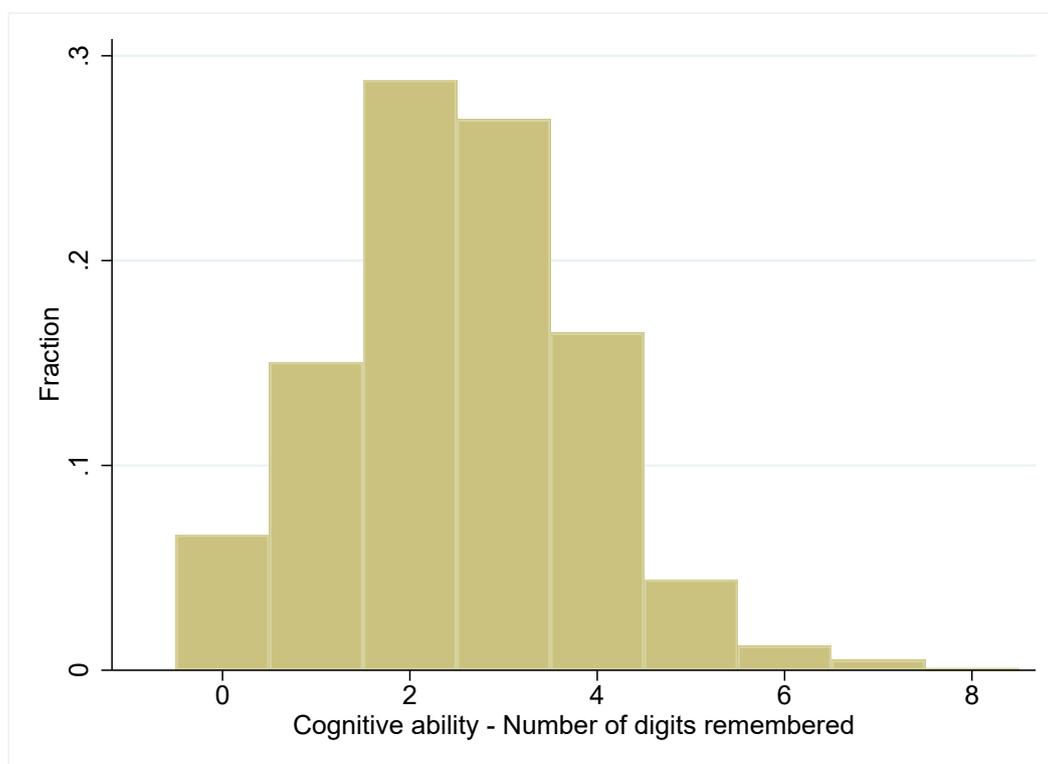


Figure 6

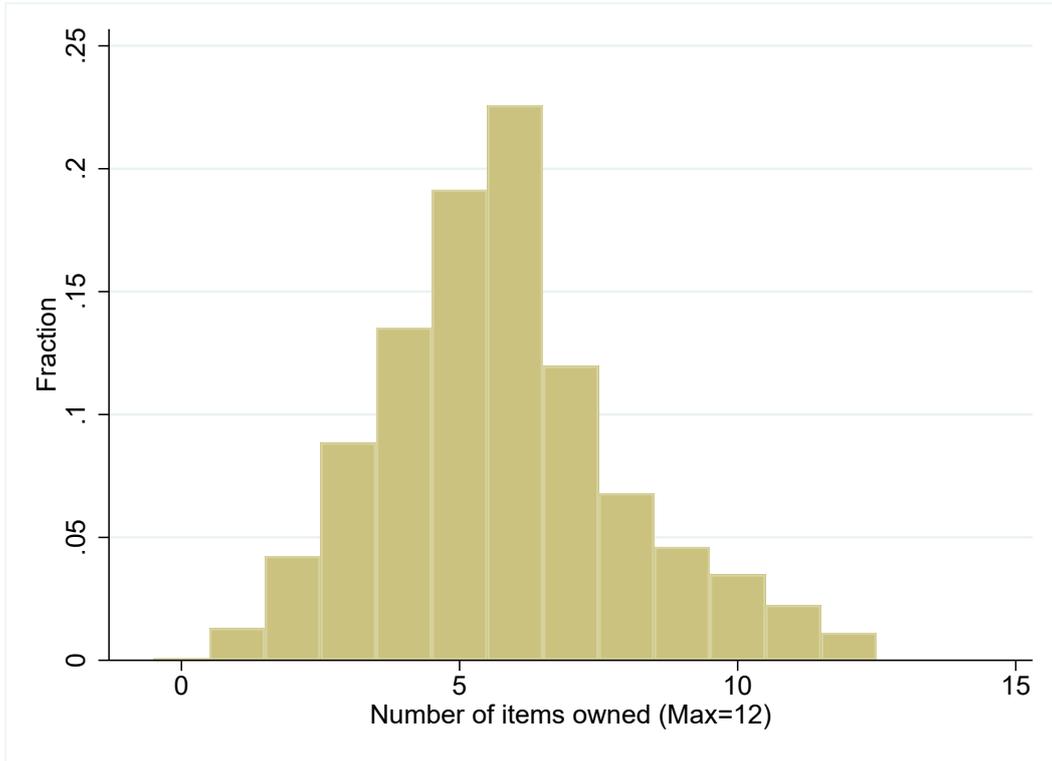


Figure 7

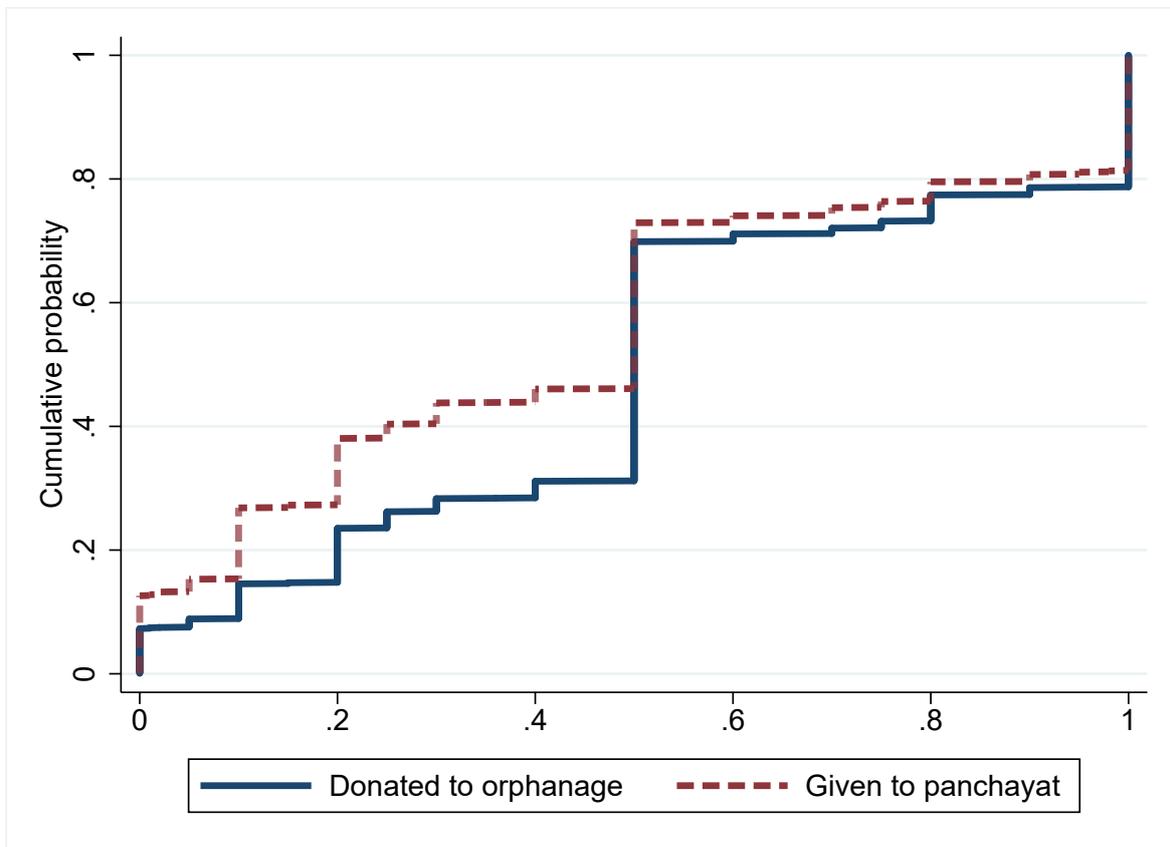


Figure 8

## 8 Politicians- District/Block-level

Summary statistics in tables below. Section 20 provides analysis of how higher-tier politicians are more likely to use government hospitals for curative care. Section 21 provides some interesting findings on how higher-tier politicians systematically differ from citizens and lower-level GP politicians in their policy demands or priorities.

Table 18

	Mean	SD	N
Male	0.70	0.46	195
Married	1.00	0.00	195
ST, ST or OBC	0.76	0.43	195
Age	44.56	9.70	195
Illiterate	0.00	0.00	195
Facebook user	0.71	0.45	195
Twitter user	0.24	0.43	195
Whatsapp user	0.88	0.32	195
Instagram user	0.11	0.31	195
Watch TV more than once a week	0.89	0.31	195
Read newspaper more than once a week	0.92	0.27	195
Get newspapers at least couple of times a month	0.96	0.19	195
Uses a computer at least sometimes	0.39	0.49	195
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.35	0.48	194
Prefers cash for the poor to health investment	0.13	0.34	195
Prefers jobs for the poor to road investment	0.65	0.48	195
Prefers cash for the poor to road investment	0.22	0.41	194
Prefers health to road investment	0.91	0.29	195
Government should give electricity for free (incl. only poor)	0.91	0.29	193
Government should waive farmer loans (incl. only poor)	0.67	0.47	195
Government teachers are very or somewhat good	0.48	0.50	195
Government doctors and nurses are very or somewhat good	0.58	0.49	195

Note:

Table 19

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.94	0.24	195
Always - works hard	0.92	0.27	195
Always - finishes what starts	0.92	0.27	194
Always - finishes work on time	0.91	0.28	195
Always - works without a break	0.83	0.37	193
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.91	0.29	190
Fully disagree - it's OK to take others' belongings	0.93	0.26	192
Fully disagree - that exaggerating own qualities is no big deal	0.93	0.26	193
Fully disagree - that OK if junior does something wrong under senior's pressure	0.88	0.32	194
Fully Disagree - that OK if one does something wrong under friends' pressure	0.91	0.28	193
Fully disagree - it's OK to take credit for others' work	0.92	0.28	191
Fully disagree - that some people have to be dealt with roughly	0.33	0.47	193
Fully disagree - that some people only deserve rude behaviour	0.34	0.47	191
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	3.59	1.72	195
Share of lottery donated to orphanage	0.53	0.32	195
Share of tax paid to panchayat	0.38	0.33	195
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.80	0.40	195
Fully Applicable - Good at solving problems between other people	0.65	0.48	195
Fully Applicable - Many public causes are worth fighting for	0.72	0.45	194
Fully Applicable - Use energy to make society better	0.75	0.44	194
Fully Applicable - Not afraid to defend others even personal risk	0.52	0.50	193
Fully Applicable - Public service more important than doing well financially	0.72	0.45	195
Fully Applicable - Politics is not a dirty word	0.62	0.49	194
Fully Applicable - Thinks government can do much to make society fair	0.35	0.48	193
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.85	0.36	195
Often - very interested in learning new things	0.90	0.30	195
Often - relaxed during stressful situations	0.76	0.43	195
Often - tend to worry a lot	0.15	0.36	194
Often - get nervous easily	0.05	0.21	193
Very important to rise in life	0.88	0.32	193
Very important to make a lot of money	0.42	0.50	194

Note:

Table 20

	Mean	SD	N
Health centre or public hospital when someone is ill	0.66	0.72	195
Health centre or public hospital when someone hospitalized	0.75	0.87	195
Uses government health facilities sometimes or often when sick	0.74	0.69	195
Reason not using public health: doctors/nurses absent	0.26	0.44	195
Reason not using public health: medicine unavailable	0.57	0.50	195
Reason not using public health: not given proper care	0.77	0.42	195
Reason not using public health: no faith in government hospitals	0.46	0.50	195
Reason not using public health: forced to give money	0.06	0.23	195
Reason not using public health: private clinic they use is better	0.10	0.30	195

*Note:*

Table 21

	Mean	SD	N
Probably or definitely running for office in the future	0.96	0.20	195
Jeopardize elections: Campaign limitations (money)	0.26	0.44	195
Jeopardize elections: Caste considerations	0.51	0.50	195
Jeopardize elections: Dissatisfaction among public	0.70	0.46	195
Jeopardize elections: Corruption charges	0.26	0.44	195
Jeopardize elections: Opposition candidate powerful	0.27	0.44	195
Main health-related activity: open dispensary	0.12	0.32	195
Main health-related activity: ASHA/AWW posted	0.41	0.49	195
Main health-related activity: opened medical clinic	0.10	0.30	195
Main health-related activity: provided ambulance	0.21	0.40	195
Main health-related activity: organised medical camp	0.43	0.50	195
Main health-related activity: no health related work	0.11	0.32	195
Main health-related activity: other	0.07	0.25	195
RECODE of M10_Q9 (M10_Q9)	0.67	0.47	175
RECODE of M10_Q9a (M10_Q9a)	3.58	3.83	175
Important election issue: health	0.12	0.32	195
Important election issue: education	0.08	0.28	195
Important election issue: roads	0.27	0.44	195
Important election issue: MNREGA	0.08	0.27	195
Important election issue: water/sewage	0.10	0.30	175
Important election issue: electricity	0.01	0.11	175
Important election issue: Maintained social harmony	0.38	0.49	175
M10_Q5== 8.0000	0.02	0.15	175
Crucial topic since election: made roads	0.28	0.45	195
Crucial topic since election: laid sewage line	0.04	0.19	195
Crucial topic since election: provided water lies/taps	0.22	0.41	195
Crucial topic since election: electricity related work	0.03	0.17	195
Crucial topic since election: implemented govt scheme	0.28	0.45	195
Crucial topic since election: health related work	0.04	0.20	175
Crucial topic since election: education related work	0.04	0.20	175
Crucial topic since election: other	0.05	0.21	175
Second Crucial topic since election: made roads	0.16	0.37	195
Second Crucial topic since election: laid sewage line	0.02	0.12	195
Second Crucial topic since election: provided water lies/tap	0.18	0.39	195
Second Crucial topic since election: electricity related wor	0.08	0.27	195
Second Crucial topic since election: implemented govt scheme	0.30	0.46	195
Second Crucial topic since election: health related work	0.08	0.27	195
Second Crucial topic since election: education related work	0.10	0.30	195
Crucial topic since election: other	0.04	0.20	175
Money needed to win the election (Rs. Lakhs)	427940.83	729704.30	169

Note:

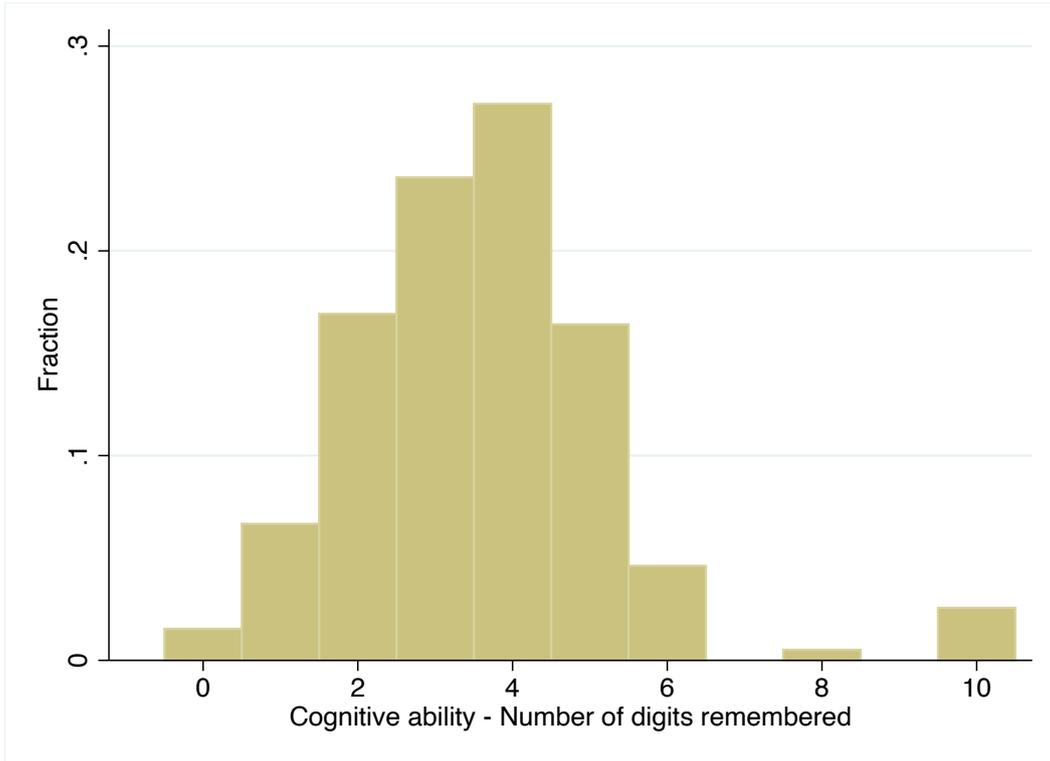


Figure 9

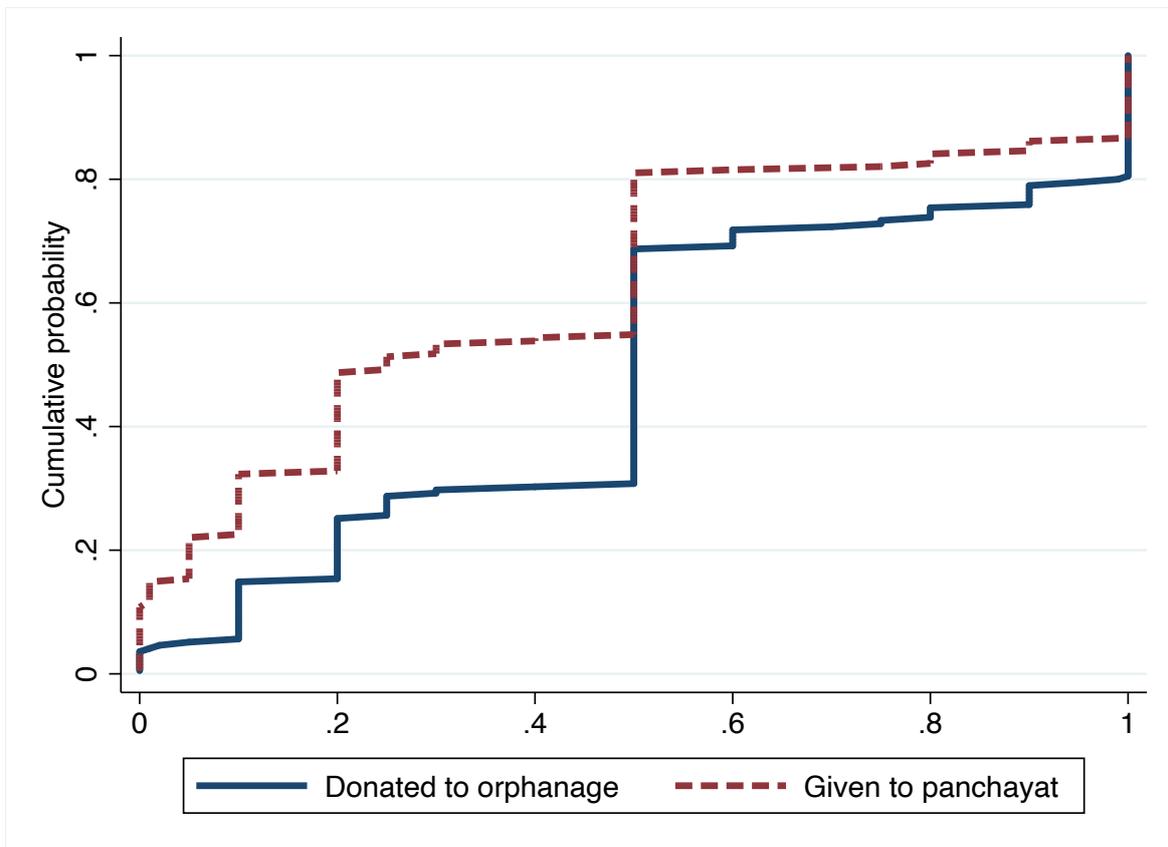


Figure 10

## 9 ANMs - GP-level

The survey team encountered problems in locating ANMs at the GP-level health sub-centers. Among the 254 targeted GPs, 226 health sub-centers were found, and out of these, 145 sub-centers (or 64 percent) were closed. The survey teams were able to interview ANMs at the 81 open sub-centers and located 28 others, resulting in an available sample of 109 ANMs.

The problem of lack of availability of ANMs at the health sub-centers is corroborated in responses by citizens and local politicians. When asked whether the ANM is usually available at the health sub-center, 73 percent of both citizens and GP politicians responded "sometimes", "rarely", or "never". Our survey thus confirms what seems to be widely regarded as a fact—that village-level health sub-centers are often dysfunctional, and ANMs are not usually available. Interestingly, in this regard, when comparing responses of citizens, ASHAs, AWWs and politicians at the GP level on the modules to measure norms and motivation, the ANM respondents stand-out as having the lowest measures on Integrity and Public Service Motivation (Figures 20 and 21).

In contrast to the responses of citizens and local politicians, when the ASHAs and AWWs were asked this question about the availability of ANMs, only 35 percent responded "sometimes", "rarely" or "never". This pattern is consistent with reluctance on the part of health workers to speak ill of their peers. Other survey questions targeted at asking health workers about their view of peers is likely to suffer from this same reluctance to answer the question objectively. One such question posed to ANMs was to think about all the ANMs they knew or had worked with and tell us out of those how many were hardworking, and how many were honest. Among the ANMs who answered these questions, 80 percent indicated that all (100 percent) of the ANMs they know are hardworking, and 88 percent indicated that all (100 percent) are honest.

Several issues of interest emerge from the data on the working environment reported by ANMs:

ANMs, as well as, it turns out, other cadres of health personnel at the block and district-level, feel they are regularly scolded for bad performance and rarely recognized for good work. In response to a module of questions asked about meetings with their peers and supervisors, the ANMs report that issues about bad performance are often raised— 48 percent respond "always", and 44 percent "sometimes"; only 8 percent say "rarely" or "never". In contrast, when it comes to the question of how often good work is praised or recognized, 47 percent of the ANMs respond "rarely" or "never". As many as 30 percent of ANMs say that their supervisors always scold people at meetings for bad performance. (Similar pat-

terns are reported by higher-level cadres of health personnel interviewed at block PHCs and district hospitals– there is a lot of bunching of respondents at "always" when asked about discussion of bad performance and "scoldings" at meetings, and at "never" when asked whether good work gets recognized or praised).

While the regular "scoldings" and discussion of problems of poor performance in management meetings is consistent with the evidence of lack of availability of ANMs on the job, it also suggests a vicious cycle of low expectations sustained by lack of trust among colleagues and peers. This can feed a lack of professional motivation among health workers as we find in responses to another module of questions on whether ANMs feel attached to their profession, and a sense of efficacy. Half of the ANMs respond that they agree it would have been better if they had taken-up another profession (in contrast, only 16 percent of doctors respond that they would have taken-up another profession). Lack of professional agency or efficacy is demonstrated by 72 percent of ANMs saying they agree with the following statement "Irrespective of my efforts, the system will not allow health outcomes to improve" (As comparison, 76 percent of doctors also agree with this statement). Lack of professional authority or discretion is demonstrated by 76 percent of ANMs responding that they agree with the statement that "In my work, I have to take permission for every little thing." (As comparison, 69 percent of doctors say they agree, suggesting that while doctors may have more discretion than village-level ANMs, there continues to be a widely reported perception of lack of professional discretion across the different cadres of health workers). When asked whether good workers are transferred because others feel threatened by their good performance, 19 percent of ANMs respond that this happens often, with another 47 percent saying "sometimes". (Aside: this question–about good performers getting transferred precisely because they are good, and thus a threat to rent-seeking by others–is peculiar to the Indian context. We came-up with this question on the basis of conversation with others who have done field-work in India, and found during piloting that respondents understood what we were asking.)

Table 22

	Mean	SD	N
Household head	0.63	0.49	107
Male	0.00	0.00	109
Married	0.96	0.19	107
ST, ST or OBC	0.81	0.39	107
Age	42.51	9.02	107
Illiterate	0.00	0.00	107
Have ration card	0.50	0.50	107
Have Aadhar card	0.99	0.10	107
Rural locality	0.96	0.19	107
Permanent structured house	0.76	0.43	103
<i>Assets</i>			
Owns car	0.07	0.25	107
Owns motorcycle	0.79	0.41	107
Owns computer	0.21	0.41	107
Owns cooler/electric fan	0.98	0.14	107
Owns washing machine	0.23	0.43	107
Owns fridge	0.49	0.50	107
Owns TV	0.90	0.31	107
Has bank account	0.99	0.10	107
Has LPG	0.95	0.21	107
Owns pumping set	0.15	0.36	107
Owns tractor	0.07	0.25	107
Has toilet inside the house	0.95	0.21	107
Number of items owned (Max=12)	6.78	1.74	107
Number of goats/sheep owned	0.02	0.19	107
Number of buffalo/bull owned	0.04	0.23	107
Number of cows owned	0.42	0.90	107
Asset Index (ICW)	0.57	1.00	107

*Note:*

Table 23

	Mean	SD	N
<i>Use of media and computer</i>			
Facebook user	0.18	0.38	107
Twitter user	0.02	0.14	107
Instagram user	0.04	0.19	107
Whatsapp user	0.39	0.49	109
Watch TV more than once a week	0.78	0.42	107
Read newspaper more than once a week	0.89	0.32	107
Get newspapers at least couple of times a month	0.86	0.35	107
Uses a computer at least sometimes	0.21	0.41	107
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.21	0.41	106
Prefers cash for the poor to health investment	0.07	0.25	104
Prefers jobs for the poor to road investment	0.61	0.49	105
Prefers cash for the poor to road investment	0.35	0.48	106
Prefers health to road investment	0.84	0.37	105
Government should give electricity for free (incl. only poor)	0.67	0.47	106
Government should waive farmer loans (incl. only poor)	0.89	0.32	106
Government teachers are very or somewhat good	0.86	0.35	106
Government doctors and nurses are very or somewhat good	0.95	0.21	107
Would vote for candidate who bribes	0.20	0.40	106
Thinks candidate who bribes will win	0.52	0.50	105
Thinks candidate who bribes more likely to be corrupt	0.80	0.40	103
Thinks candidate who bribes will do work well	0.04	0.19	104
<i>Politics</i>			
Has run for office before	0.07	0.26	107
Ran for local position (Ward or Mukhiya)	0.50	0.53	8
Definitely or Probably will run for office	0.17	0.38	104
Someone in family held political office	0.07	0.25	107

Note:

Table 24

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.91	0.29	107
Always - works hard	0.78	0.42	107
Always - finishes what starts	0.64	0.48	107
Always - finishes work on time	0.61	0.49	107
Always - works without a break	0.40	0.49	107
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.68	0.47	107
Fully disagree - it's OK to take others' belongings	0.80	0.40	107
Fully disagree - that exaggerating own qualities is no big deal	0.79	0.41	107
Fully disagree - that OK if junior does something wrong under senior's pressure	0.68	0.47	107
Fully Disagree - that OK if one does something wrong under friends' pressure	0.71	0.46	107
Fully disagree - it's OK to take credit for others' work	0.71	0.46	107
Fully disagree - that some people have to be dealt with roughly	0.36	0.48	107
Fully disagree - that some people only deserve rude behaviour	0.31	0.46	107
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	2.16	1.37	114
Share of lottery donated to orphanage	0.52	0.29	107
Share of tax paid to panchayat	0.32	0.33	107
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.69	0.46	107
Fully Applicable - Good at solving problems between other people	0.26	0.44	107
Fully Applicable - Many public causes are worth fighting for	0.47	0.50	107
Fully Applicable - Use energy to make society better	0.71	0.46	107
Fully Applicable - Not afraid to defend others even personal risk	0.30	0.46	107
Fully Applicable - Public service more important than doing well financially	0.17	0.38	107
Fully Applicable - Politics is not a dirty word	0.36	0.48	107
Fully Applicable - Thinks government can do much to make society fair	0.14	0.35	107
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.67	0.47	107
Often - very interested in learning new things	0.81	0.39	107
Often - relaxed during stressful situations	0.48	0.50	107
Often - tend to worry a lot	0.19	0.39	107
Often - get nervous easily	0.05	0.21	107
Very important to rise in life	0.79	0.41	107
Very important to make a lot of money	0.71	0.46	107

Note:

Table 25

	Mean	SD	N
Position tenure in years	11.83	9.70	102
Job tenure in years	11.24	10.45	107
Number of times transferred in the job	1.61	2.35	109
Number of trainings received: 1 - 2	0.21	0.41	109
Number of trainings received: 3 - 5	0.24	0.43	109
Number of trainings received: More than 5	0.55	0.50	109
Last training: previous month	0.27	0.44	109
Last training: 2 - 3 months ago	0.13	0.34	109
Last training: 6 months - 1 year ago	0.13	0.34	109
Last training: 2 years ago	0.17	0.37	109
ANM supervisor has good or very good management skills	0.97	0.16	109
Frequency meetings with supervisor: weekly	0.75	0.43	109
Frequency meetings with supervisor: bi-monthly	0.14	0.35	109
Frequency meetings with supervisor: monthly	0.06	0.25	109
Frequency meetings with supervisor: two or more months	0.05	0.21	109
Previous meeting supervisor: previous week	0.70	0.46	109
Previous meeting supervisor: previous month	0.26	0.44	109
Previous meeting supervisor: 2 months before	0.04	0.19	109
Previous meeting supervisor: 6 months before	0.01	0.10	109
Sometimes or always interact with peers in BPHC meetings	0.86	0.35	109
Sometimes or always issues on bad performance are raised	0.92	0.28	109
Sometimes or always supervisor scold peers who don't perform	0.87	0.34	109
Supervisor report employees who don't work and they lose job	0.48	0.50	107
Sometime or always there is recognition for good work	0.53	0.50	108
Issues raised in interaction with peers: daily work	0.82	0.39	109
Issues raised in interaction with peers: lack of supplies	0.46	0.50	109
Issues raised in interaction with peers: supervisors	0.22	0.42	109
Issues raised in interaction with peers: salary and non-payment	0.40	0.49	109

*Note:*

Table 26

	Mean	SD	N
Quite a few or all ANM known are hardworking	0.98	0.14	107
Quite a few or all ANM known are honest	0.95	0.21	106
Owens smartphone	0.39	0.49	109
Uses whatsapp	0.39	0.49	109
Participates whatsapp group with health workers	0.98	0.16	41
Participates whatsapp group with other workers without supervisor	0.29	0.46	41
Share ANM colleagues hardworkers	0.95	0.13	91
Share ANM colleagues honest	0.97	0.09	93
It would have been better to work in other profession	0.50	0.50	107
Feels sense of inner pride/fulfillement at work	0.94	0.23	107
Gets status from being in profession	0.93	0.26	107
The system will not allow peoples' health to improve	0.72	0.45	107
I have to get permission for every little thing	0.76	0.43	107
Job satisfaction index	0.46	1.00	107
Politicians often/sometimes create work difficulties	0.25	0.44	107
Politicians often/sometimes support work	0.79	0.41	107
Good workers transferred due others feel threatened	0.67	0.47	105
Work somewhat or often hampered by delay of funds release	0.69	0.46	107
Reason for delay of funds: bureaucrats are lazy	0.75	0.44	104
Reason for delay of funds: bureaucrats are corrupt	0.66	0.48	103
Reason for delay of funds: insufficient funds	0.58	0.50	104
Reason for delay of funds: bureaucrats mismanaged by politicians	0.38	0.49	102
Reason for delay of funds: political leaders not improving the system	0.35	0.48	99
Reason for delay of funds: politicians are corrupt	0.36	0.48	98
Had to use money or connections to get job	0.21	0.41	105
Important to get transfer or promotion: political connections	0.14	0.35	107
Important to get transfer or promotion: informal payments	0.20	0.40	107
Important to get transfer or promotion: both	0.08	0.28	107
Important to get transfer or promotion: neither	0.52	0.50	107
How many months of salary not received	2.72	2.73	100
Days not coming to work previous week	1.14	2.30	91
When absent provides explanation to: health supervisor	0.62	0.49	106
When absent provides explanation to: colleagues	0.69	0.47	103
When absent provides explanation to: officer in charge	0.93	0.25	107
When absent provides explanation to: beneficiares	0.45	0.50	103

*Note:*

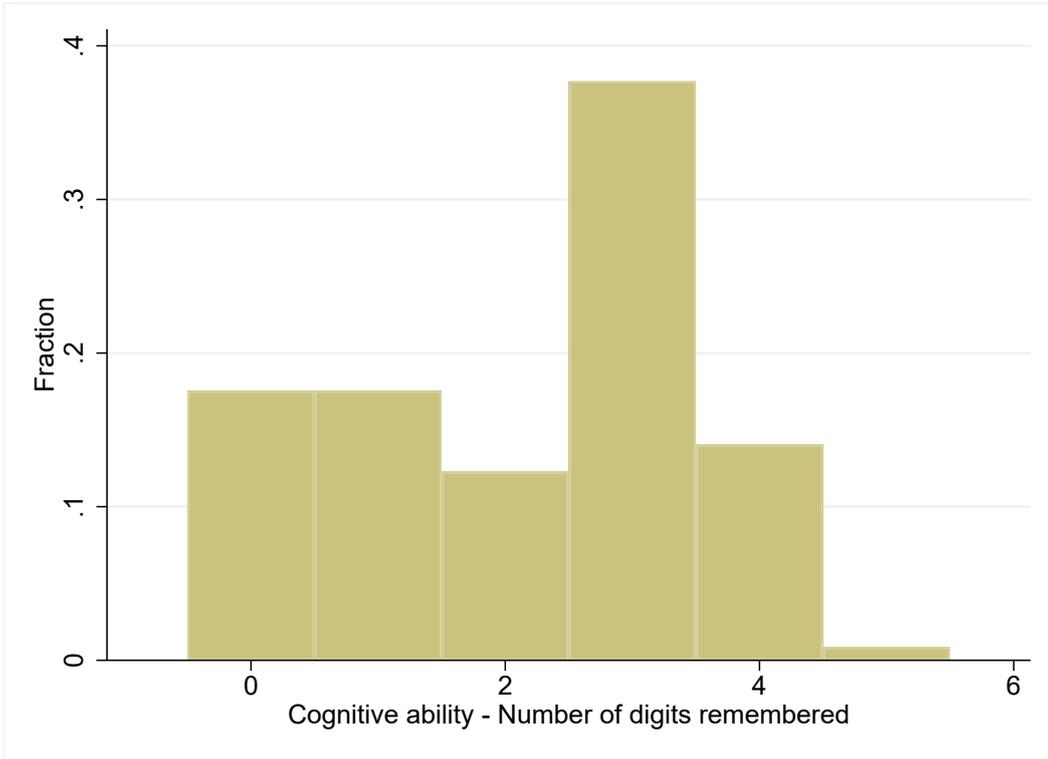


Figure 11

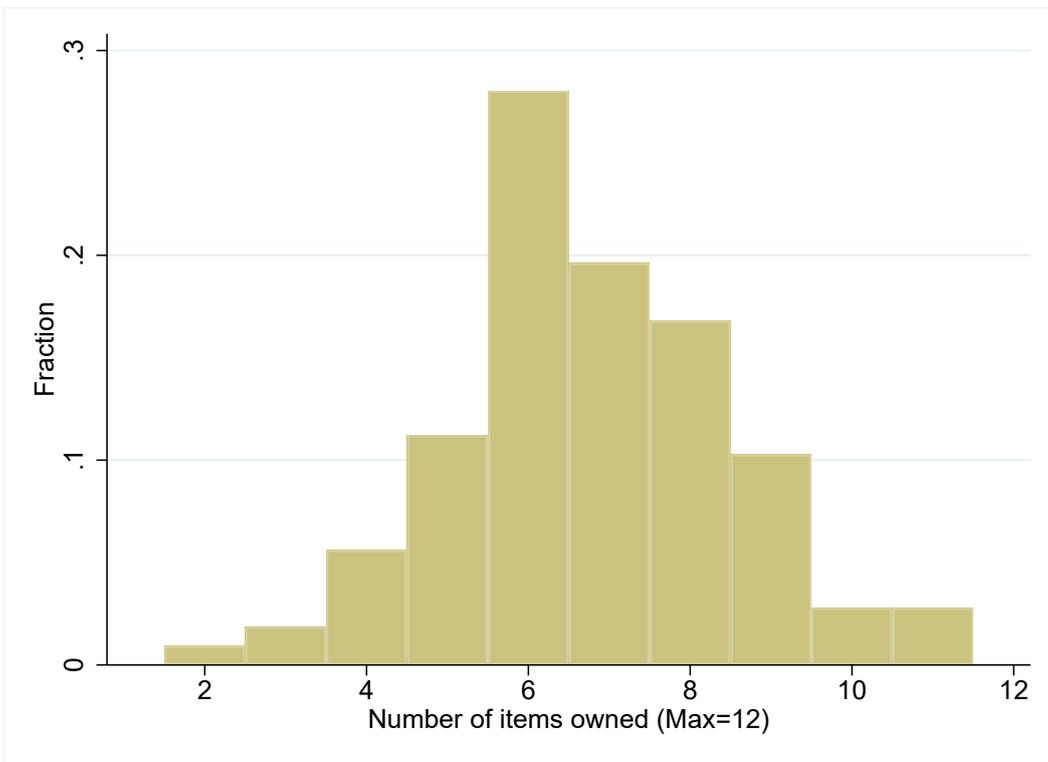


Figure 12

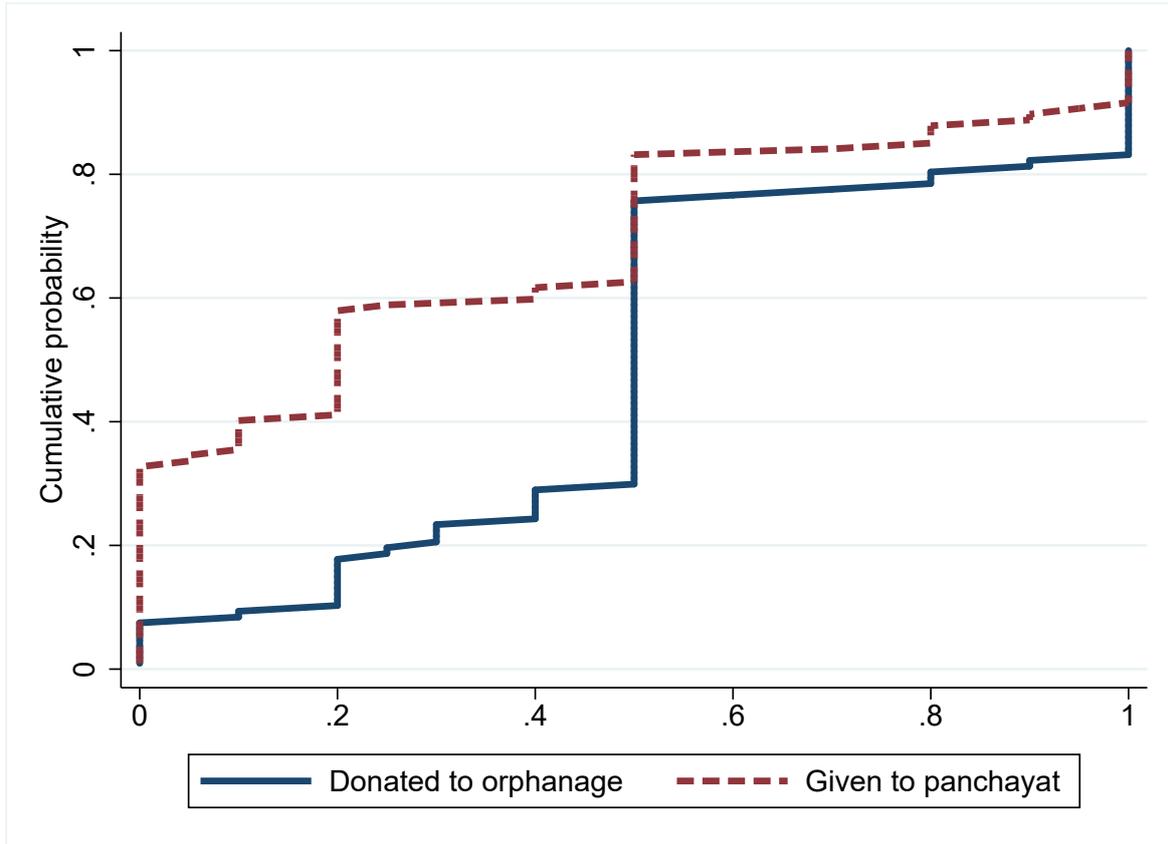


Figure 13

## 10 ASHA & AWW

As described in section 5, citizens tend to rely on ASHAs and AWWs– who together belong to the cadre of community health workers– for maternal and child health and nutrition services. Yet, these providers are the least resourced, according to other studies of health service delivery in Bihar and beyond (Berman et al). In our survey, we find that CHWs report that salaries and incentive payments that are due to them have not been paid for more than 6 months in the past year before the survey. In contrast, the village health sub-centre ANM, who seems to be generally unavailable to citizens, reports less than 3 months of salary arrears. Furthermore, we find that CHWs have higher integrity and public service motivation compared to ANMs, as shown in the figures comparing selection traits across respondents in sections 15 and 17. One module of the survey asked health workers what factors they considered most important in accounting for these delays, not only in their salaries but other equipment and resources as well. The pattern of responses shows that CHWs are more likely than other health workers to blame bureaucrats for laziness or incompetency, and corruption, as opposed to blaming lack of funds or political mismanage-

ment and political corruption. Overall, the picture that emerges is one of distrust within the health bureaucracy between higher-tier supervisors and the frontline health workers they manage.

Additional interesting results reported in Section 22 on the correlates of professional identity and efficacy among these community health workers.

Table 27

	Mean	SD	N
Household head	0.38	0.48	1314
Male	0.00	0.00	1314
Married	0.95	0.21	1314
ST, ST or OBC	0.83	0.37	1314
Age	38.38	7.28	1314
Illiterate	0.00	0.00	1314
Have ration card	0.73	0.44	1314
Have Aadhar card	1.00	0.03	1314
Rural locality	1.00	0.03	1314
Permanent structured house	0.47	0.50	1313
<i>Assets</i>			
Owns car	0.02	0.14	1314
Owns motorcycle	0.51	0.50	1314
Owns computer	0.06	0.24	1314
Owns cooler/electric fan	0.94	0.24	1314
Owns washing machine	0.06	0.23	1314
Owns fridge	0.13	0.34	1314
Owns TV	0.68	0.47	1314
Has bank account	0.99	0.10	1314
Has LPG	0.87	0.33	1314
Owns pumping set	0.06	0.24	1314
Owns tractor	0.03	0.17	1314
Has toilet inside the house	0.88	0.32	1314
Number of items owned (Max=12)	5.25	1.58	1314
Number of goats/sheep owned	0.37	0.95	1314
Number of buffalo/bull owned	0.21	1.18	1314
Number of cows owned	0.69	2.37	1314
Asset Index (ICW)	0.00	1.00	1314

*Note:*

Table 28

	Mean	SD	N
<i>Use of media and computer</i>			
Facebook user	0.06	0.25	1314
Twitter user	0.01	0.10	1314
Instagram user	0.01	0.11	1314
Uses whatsapp	0.16	0.36	1312
Watch TV more than once a week	0.59	0.49	1314
Read newspaper more than once a week	0.47	0.50	1314
Get newspapers at least couple of times a month	0.56	0.50	1314
Uses a computer at least sometimes	0.06	0.23	1314
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.20	0.40	1310
Prefers cash for the poor to health investment	0.08	0.27	1307
Prefers jobs for the poor to road investment	0.72	0.45	1306
Prefers cash for the poor to road investment	0.39	0.49	1303
Prefers health to road investment	0.87	0.33	1309
Government should give electricity for free (incl. only poor)	0.78	0.41	1310
Government should waive farmer loans (incl. only poor)	0.95	0.22	1307
Government teachers are very or somewhat good	0.78	0.41	1295
Government doctors and nurses are very or somewhat good	0.84	0.37	1297
Would vote for candidate who bribes	0.14	0.34	1301
Thinks candidate who bribes will win	0.52	0.50	1271
Thinks candidate who bribes more likely to be corrupt	0.81	0.39	1281
Thinks candidate who bribes will do work well	0.10	0.30	1278
<i>Politics</i>			
Has run for office before	0.08	0.28	1314
Ran for local position (Ward or Mukhiya)	0.69	0.46	110
Definitely or Probably will run for office	0.25	0.43	1205
Someone in family held political office	0.11	0.32	1314

Note:

Table 29

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.88	0.33	1314
Always - works hard	0.73	0.44	1314
Always - finishes what starts	0.64	0.48	1314
Always - finishes work on time	0.62	0.49	1314
Always - works without a break	0.44	0.50	1314
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.75	0.43	1314
Fully disagree - it's OK to take others' belongings	0.84	0.37	1314
Fully disagree - that exaggerating own qualities is no big deal	0.85	0.36	1314
Fully disagree - that OK if junior does something wrong under senior's pressure	0.76	0.43	1314
Fully Disagree - that OK if one does something wrong under friends' pressure	0.75	0.43	1314
Fully disagree - it's OK to take credit for others' work	0.82	0.39	1314
Fully disagree - that some people have to be dealt with roughly	0.48	0.50	1314
Fully disagree - that some people only deserve rude behaviour	0.45	0.50	1314
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	2.37	1.36	1314
Share of lottery donated to orphanage	0.40	0.27	1314
Share of tax paid to panchayat	0.25	0.27	1314
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.76	0.46	1314
Fully Applicable - Good at solving problems between other people	0.35	0.54	1314
Fully Applicable - Many public causes are worth fighting for	0.56	0.66	1314
Fully Applicable - Use energy to make society better	0.76	0.48	1314
Fully Applicable - Not afraid to defend others even personal risk	0.44	0.72	1314
Fully Applicable - Public service more important than doing well financially	0.22	0.44	1314
Fully Applicable - Politics is not a dirty word	0.49	0.87	1314
Fully Applicable - Thinks government can do much to make society fair	0.31	0.95	1314
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.71	0.45	1314
Often - very interested in learning new things	0.85	0.35	1314
Often - relaxed during stressful situations	0.38	0.49	1314
Often - tend to worry a lot	0.23	0.42	1314
Often - get nervous easily	0.10	0.30	1314
Very important to rise in life	0.88	0.32	1314
Very important to make a lot of money	0.77	0.42	1314

Note:

Table 30

	Mean	SD	N
Job tenure in years	11.21	5.44	1314
Number of trainings received: 1 - 2	0.13	0.34	1314
Number of trainings received: 3 - 5	0.48	0.50	1314
Number of trainings received: More than 5	0.37	0.48	1314
Number of trainings received: Never	0.02	0.14	1314
Last training: previous month	0.12	0.33	1289
Last training: 2 - 3 months ago	0.12	0.33	1289
Last training: 6 months - 1 year ago	0.25	0.43	1289
Last training: 2 years ago	0.51	0.50	1289
ANM supervisor has good or very good management skills	0.97	0.18	1309
Frequency meetings with ANM: weekly	0.09	0.29	1314
Frequency meetings with ANM: bi-monthly	0.25	0.44	1314
Frequency meetings with ANM: monthly	0.59	0.49	1314
Frequency meetings with ANM: two or more months	0.06	0.24	1314
Previous meeting ANM: previous week	0.18	0.39	1314
Previous meeting ANM: previous month	0.61	0.49	1314
Previous meeting ANM: 2 months before	0.15	0.36	1314
Previous meeting ANM: 6 months before	0.05	0.22	1314
Frequency meetings with MOIC: weekly	0.06	0.24	1314
Frequency meetings with MOIC: bi-monthly	0.11	0.31	1314
Frequency meetings with MOIC: monthly	0.60	0.49	1314
Frequency meetings with MOIC: two or more months	0.16	0.37	1314
Frequency meetings with MOIC: never	0.08	0.27	1314
Previous meeting MOIC: previous week	0.14	0.35	1214
Previous meeting MOIC: previous month	0.57	0.50	1214
Previous meeting MOIC: 2 months before	0.18	0.38	1214
Previous meeting MOIC: 6 months before	0.11	0.31	1214
Sometimes or always interact with peers in BPHC meetings	0.94	0.24	1306
Sometimes or always issues on bad performance are raised	0.78	0.41	1307
Sometimes or always supervisor scold peers who don't perform	0.79	0.41	1309
Supervisor report employees who don't work and they lose job	0.49	0.50	1281
Sometime or always there is recognition for good work	0.55	0.50	1307
Issues raised in interaction with peers: daily work	0.78	0.41	1314
Issues raised in interaction with peers: lack of supplies	0.45	0.50	1314
Issues raised in interaction with peers: supervisors	0.21	0.41	1314
Issues raised in interaction with peers: salary and non-payment	0.38	0.49	1314

*Note:*

Table 31

	Mean	SD	N
Quite a few or all ASHA/AWW known are hardworking	0.98	0.15	1271
Quite a few or all ASHA/AWW known are honest	0.96	0.19	1263
Meets other ASHA/AWW to discuss issues related to work	0.97	0.17	1310
HSCs sometimes or always open	0.89	0.32	1157
ANM sometimes or always show up to work	0.91	0.29	1158
Owns smartphone	0.15	0.36	1314
Uses whatsapp	0.16	0.36	1312
Participates whatsapp group with health workers	0.74	0.44	204
Participates whatsapp group with other workers without supervisor	0.31	0.46	199
Wants to become ASHA facilitator	1.16	0.90	650
Share ASHA/ANM colleagues hardworkers	0.97	0.13	1138
Share ASHA/ANM colleagues honest	0.97	0.13	1118
It would have been better to work in other profession	0.65	0.48	1295
Feels sense of inner pride/fulfillement at work	0.93	0.26	1306
Gets status from being in profession	0.94	0.25	1311
The system will not allow peoples' health to improve	0.75	0.44	1298
I have to get permission for every little thing	0.77	0.42	1307
Job satisfaction index	-0.00	1.00	1314
Politicians often/sometimes create work difficulties	0.24	0.43	1311
Politicians often/sometimes support work	0.68	0.47	1311
Good workers transferred due others feel threatened	0.60	0.49	1280
Work somewhat or often hampered by delay of funds release	0.68	0.47	1289
Reason for delay of funds: bureaucrats are lazy	0.81	0.39	1260
Reason for delay of funds: bureaucrats are corrupt	0.70	0.46	1247
Reason for delay of funds: insufficient funds	0.66	0.48	1246
Reason for delay of funds: bureaucrats mismanaged by politicians	0.45	0.50	1228
Reason for delay of funds: political leaders not improving the system	0.42	0.49	1214
Reason for delay of funds: politicians are corrupt	0.43	0.49	1212
Had to use money or connections to get job	0.21	0.41	1247
Important to get transfer or promotion: political connections	0.14	0.34	1314
Important to get transfer or promotion: informal payments	0.15	0.36	1314
Important to get transfer or promotion: both	0.17	0.37	1314
Important to get transfer or promotion: neither	0.49	0.50	1314
How many months of salary not received	6.43	3.94	1225
Days not coming to work previous week	1.15	2.37	1033
When absent provides explanation to: health supervisor	0.91	0.29	1276
When absent provides explanation to: colleagues	0.84	0.36	1218
When absent provides explanation to: officer in charge	0.84	0.37	1226
When absent provides explanation to: beneficiares	0.77	0.42	1182

*Note:*

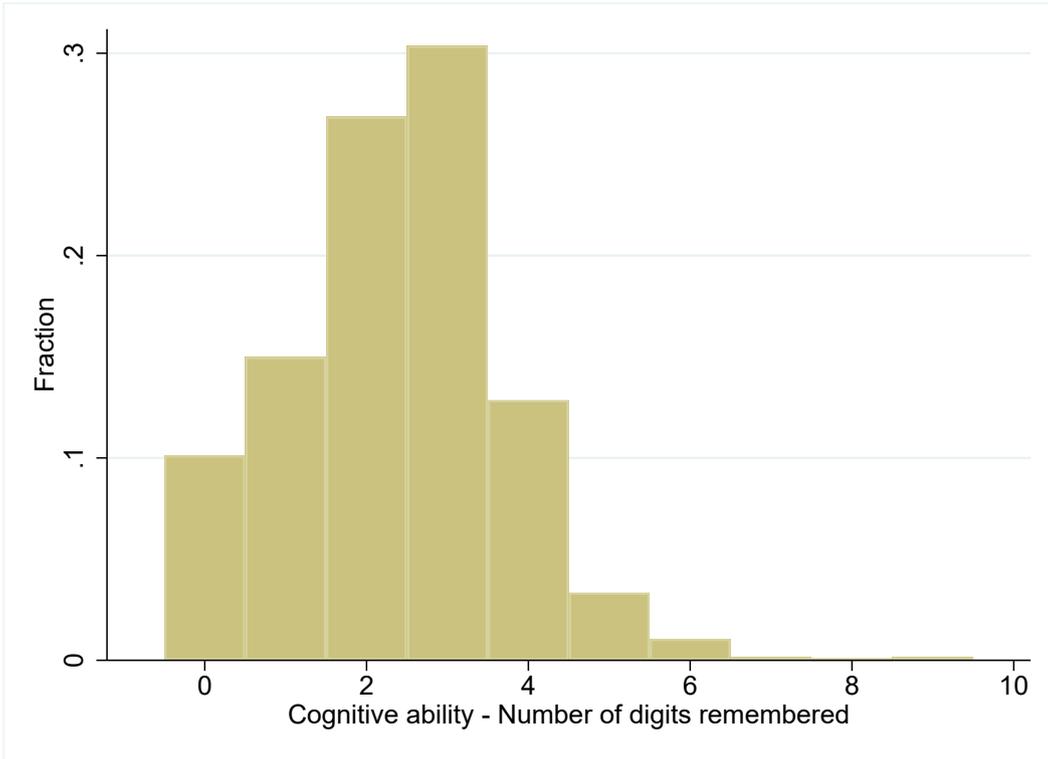


Figure 14

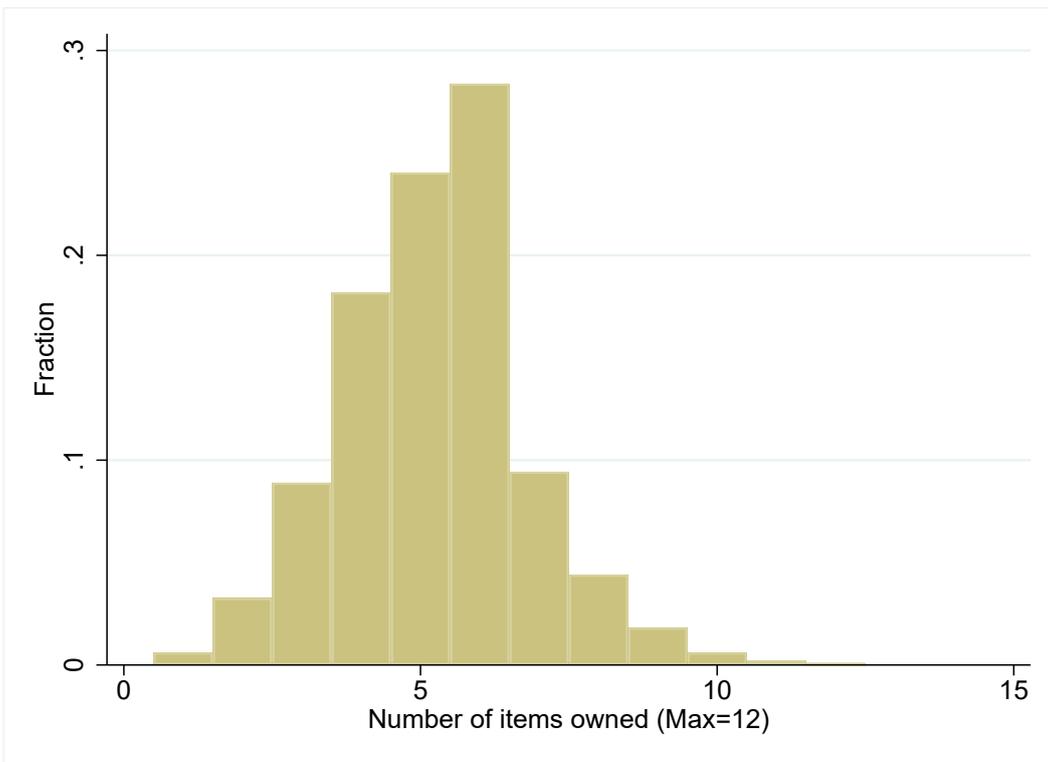


Figure 15

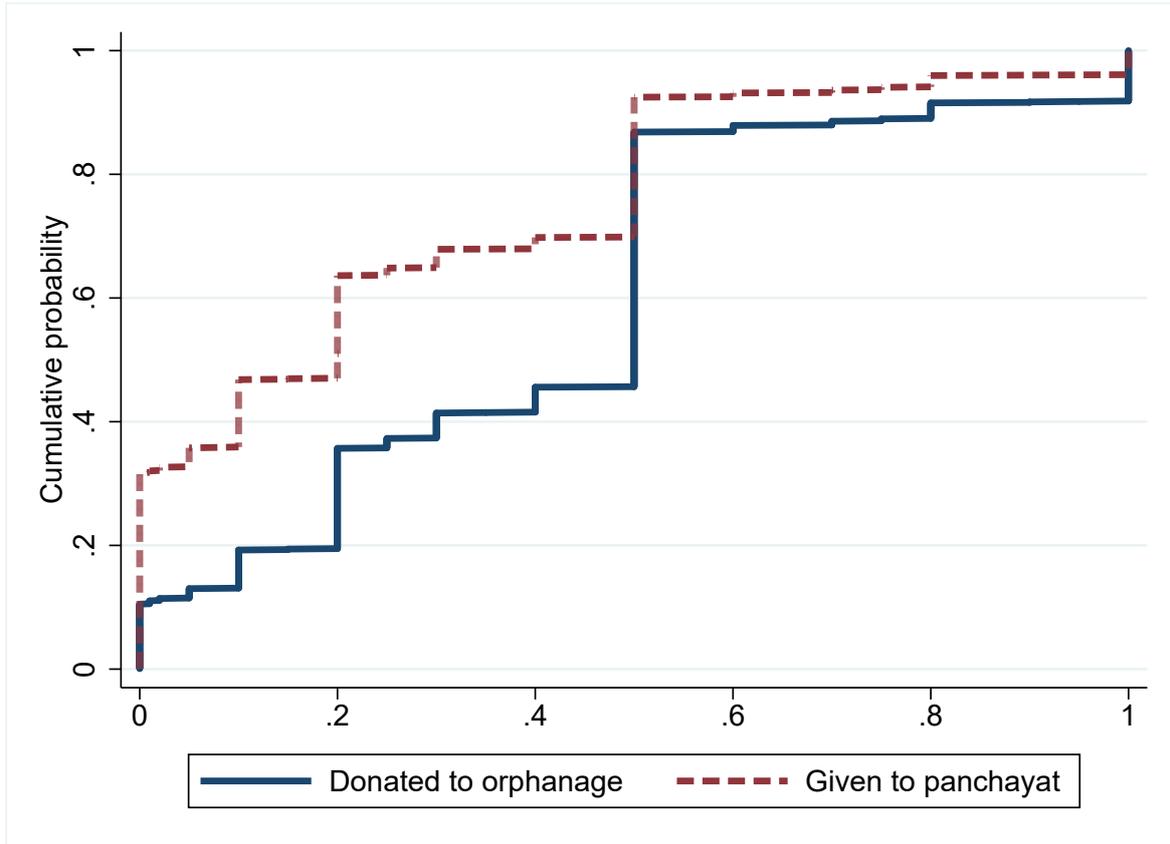


Figure 16

## 11 Doctors - District/Block-level

Summary statistics in the tables below.

Table 32

	Mean	SD	N
Household head	0.83	0.37	308
Male	0.87	0.34	308
Married	0.99	0.08	308
ST, ST or OBC	0.58	0.49	308
Age	42.58	8.53	308
Have ration card	0.11	0.32	308
Have Aadhar card	1.00	0.00	308
Rural locality	0.42	0.49	308
Permanent structured house	0.39	0.49	308
Owns car	0.75	0.43	308
Owns motorcycle	0.95	0.22	308
Owns computer	0.81	0.40	308
Owns cooler/electric fan	1.00	0.06	308
Owns washing machine	0.83	0.38	308
Owns fridge	0.96	0.20	308
Owns TV	0.99	0.11	308
Has bank account	1.00	0.00	308
Has LPG	0.99	0.08	308
Owns pumping set	0.17	0.37	308
Owns tractor	0.08	0.27	308
Has toilet inside the house	1.00	0.00	308
Number of items owned (Max=12)	9.51	1.17	308
Number of goats/sheep owned	0.02	0.20	308
Number of buffalo/bull owned	0.04	0.26	308
Number of cows owned	0.41	0.92	308
Asset Index (ICW)	0.55	0.68	308

*Note:*

Table 33

	Mean	SD	N
Facebook user	0.81	0.40	308
Twitter user	0.41	0.49	308
Instagram user	0.33	0.47	308
Watch TV more than once a week	0.94	0.24	308
Read newspaper more than once a week	0.99	0.11	308
Get newspapers at least couple of times a month	0.98	0.14	308
Uses a computer at least sometimes	0.80	0.40	308
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.16	0.37	307
Prefers cash for the poor to health investment	0.03	0.18	306
Prefers jobs for the poor to road investment	0.61	0.49	307
Prefers cash for the poor to road investment	0.17	0.37	305
Prefers health to road investment	0.92	0.26	306
Government should give electricity for free (incl. only poor)	0.94	0.23	306
Government should waive farmer loans (incl. only poor)	0.81	0.39	302
Government teachers are very or somewhat good	0.71	0.45	293
Government doctors and nurses are very or somewhat good	0.96	0.19	307
<i>Politics</i>			
Has run for office before	0.01	0.11	308
Ran for local position (Ward or Mukhiya)	0.00	0.00	308
Definitely or Probably will run for office	0.14	0.35	283
Someone in family held political office	0.10	0.30	308

*Note:*

Table 34

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.98	0.14	307
Always - works hard	0.89	0.32	307
Always - finishes what starts	0.86	0.35	307
Always - finishes work on time	0.86	0.35	307
Always - works without a break	0.75	0.43	307
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.94	0.23	307
Fully disagree - it's OK to take others' belongings	0.95	0.22	306
Fully disagree - that exaggerating own qualities is no big deal	0.96	0.19	307
Fully disagree - that OK if junior does something wrong under senior's pressure	0.88	0.33	307
Fully Disagree - that OK if one does something wrong under friends' pressure	0.96	0.20	307
Fully disagree - it's OK to take credit for others' work	0.96	0.19	307
Fully disagree - that some people have to be dealt with roughly	0.33	0.47	303
Fully disagree - that some people only deserve rude behaviour	0.40	0.49	296
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	3.69	1.56	308
Share of lottery donated to orphanage	0.53	0.26	308
Share of tax paid to panchayat	0.27	0.24	308
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.75	0.44	307
Fully Applicable - Good at solving problems between other people	0.35	0.48	306
Fully Applicable - Many public causes are worth fighting for	0.53	0.50	305
Fully Applicable - Use energy to make society better	0.62	0.49	306
Fully Applicable - Not afraid to defend others even personal risk	0.47	0.50	307
Fully Applicable - Public service more important than doing well financially	0.57	0.50	307
Fully Applicable - Politics is not a dirty word	0.43	0.50	296
Fully Applicable - Thinks government can do much to make society fair	0.25	0.43	303
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.86	0.35	307
Often - very interested in learning new things	0.95	0.22	307
Often - relaxed during stressful situations	0.76	0.43	307
Often - tend to worry a lot	0.06	0.23	307
Often - get nervous easily	0.02	0.15	307
Very important to rise in life	0.88	0.33	306
Very important to make a lot of money	0.51	0.50	306

Note:

Table 35

	Mean	SD	N
Position tenure in years	8.94	7.47	221
Job tenure in years	9.86	7.80	219
Number of trainings received: 1 - 2	0.06	0.23	308
Number of trainings received: 3 - 5	0.19	0.39	308
Number of trainings received: More than 5	0.33	0.47	308
Last training: previous month	0.22	0.41	308
Last training: 2 - 3 months ago	0.22	0.42	308
Last training: 6 months - 1 year ago	0.23	0.42	308
Last training: 2 years ago	0.10	0.30	308
ANM supervisor has good or very good management skills	0.93	0.25	308
Frequency meetings with supervisor: weekly	0.52	0.50	308
Frequency meetings with supervisor: bi-monthly	0.07	0.26	308
Frequency meetings with supervisor: monthly	0.30	0.46	308
Frequency meetings with supervisor: two or more months	0.06	0.23	308
Previous meeting supervisor: previous week	0.59	0.49	294
Previous meeting supervisor: previous month	0.30	0.46	294
Previous meeting supervisor: 2 months before	0.06	0.25	294
Previous meeting supervisor: 6 months before	0.03	0.17	294
Sometimes or always interact with peers in BPHC meetings	0.68	0.47	301
Sometimes or always issues on bad performance are raised	0.84	0.37	293
Sometimes or always supervisor scold peers who don't perform	0.80	0.40	292
Supervisor report employees who don't work and they lose job	0.60	0.49	285
Sometime or always there is recognition for good work	0.44	0.50	297
Issues raised in interaction with peers: daily work	0.86	0.35	308
Issues raised in interaction with peers: lack of supplies	0.73	0.44	308
Issues raised in interaction with peers: supervisors	0.22	0.41	308
Issues raised in interaction with peers: salary and non-payment	0.20	0.40	308

*Note:*

Table 36

	Mean	SD	N
Owns smartphone	0.90	0.30	308
Uses whatsapp	0.91	0.28	308
Participates whatsapp group with health workers	0.84	0.36	280
Participates whatsapp group with other workers without supervisor	0.56	0.50	280
Share doctors hardworkers	0.96	0.11	285
Share doctors honest	0.97	0.11	282
Share nurses hardworkers	0.97	0.10	133
Share nurses honest	0.97	0.12	133
Share ANM hardworkers	0.97	0.10	133
Share ANM honest	0.97	0.12	133
Quite a few or all doctors other facilities are hardworking	0.95	0.22	272
Quite a few or all doctors other facilities are honest	0.93	0.26	272
Quite a few or all nurses other facilities are hardworking	0.94	0.23	262
Quite a few or all nurses other facilities are honest	0.94	0.23	260
Quite a few or all ANM other facilities are hardworking	0.96	0.19	263
Quite a few or all ANM other facilities are honest	0.96	0.19	263
It would have been better to work in other profession	0.16	0.37	308
Feels sense of inner pride/fulfillement at work	0.97	0.16	308
Gets status from being in profession	0.97	0.17	307
The system will not allow peoples' health to improve	0.77	0.42	307
I have to get permission for every little thing	0.69	0.46	307
Job satisfaction index	0.32	0.91	308
Politicians often/sometimes create work difficulties	0.30	0.46	304
Politicians often/sometimes support work	0.27	0.45	304
Good workers transferred due others feel threatened	0.48	0.50	303
Work somewhat or often hampered by delay of funds release	0.70	0.46	307
Reason for delay of funds: bureaucrats are lazy	0.64	0.48	286
Reason for delay of funds: bureaucrats are corrupt	0.59	0.49	280
Reason for delay of funds: insufficient funds	0.81	0.39	285
Reason for delay of funds: bureaucrats mismanaged by politicians	0.55	0.50	279
Reason for delay of funds: political leaders not improving the system	0.50	0.50	278
Reason for delay of funds: politicians are corrupt	0.59	0.49	276
Had to use money or connections to get job	0.06	0.24	277
Important to get transfer or promotion: political connections	0.07	0.26	308
Important to get transfer or promotion: informal payments	0.07	0.25	308
Important to get transfer or promotion: both	0.12	0.32	308
Important to get transfer or promotion: neither	0.62	0.49	308
How many months of salary not received	1.53	2.64	263
Days not coming to work previous week	0.39	1.15	248
When absent provides explanation to: health supervisor	0.72	0.45	266
When absent provides explanation to: colleagues	0.82	0.39	287
When absent provides explanation to: officer in charge	0.94	0.24	305
When absent provides explanation to: beneficiares	0.47	0.50	247

## 12 Nurses - District/Block-level

Summary statistics in tables below.

Table 37

	Mean	SD	N
Household head	0.56	0.50	326
Male	0.04	0.20	326
Married	0.96	0.19	326
ST, ST or OBC	0.83	0.37	326
Age	39.05	7.99	326
Have ration card	0.31	0.46	326
Have Aadhar card	1.00	0.00	326
Rural locality	0.59	0.49	326
Permanent structured house	0.35	0.48	326
Owens car	0.08	0.27	326
Owens motorcycle	0.87	0.34	326
Owens computer	0.28	0.45	326
Owens cooler/electric fan	0.97	0.17	326
Owens washing machine	0.28	0.45	326
Owens fridge	0.56	0.50	326
Owens TV	0.97	0.16	326
Has bank account	1.00	0.00	326
Has LPG	0.99	0.10	326
Owens pumping set	0.17	0.38	326
Owens tractor	0.02	0.15	326
Has toilet inside the house	0.98	0.13	326
Number of items owned (Max=12)	7.17	1.57	326
Number of goats/sheep owned	0.08	0.45	326
Number of buffalo/bull owned	0.10	0.39	326
Number of cows owned	0.47	0.73	326
Asset Index (ICW)	-0.17	0.93	326

*Note:*

Table 38

	Mean	SD	N
Facebook user	0.52	0.50	326
Twitter user	0.06	0.23	326
Instagram user	0.05	0.22	326
Watch TV more than once a week	0.84	0.37	326
Read newspaper more than once a week	0.72	0.45	326
Get newspapers at least couple of times a month	0.82	0.39	326
Uses a computer at least sometimes	0.21	0.41	326
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.23	0.42	326
Prefers cash for the poor to health investment	0.07	0.25	326
Prefers jobs for the poor to road investment	0.68	0.47	322
Prefers cash for the poor to road investment	0.39	0.49	324
Prefers health to road investment	0.95	0.22	324
Government should give electricity for free (incl. only poor)	0.81	0.39	322
Government should waive farmer loans (incl. only poor)	0.63	0.48	322
Government teachers are very or somewhat good	0.80	0.40	316
Government doctors and nurses are very or somewhat good	0.94	0.24	325
<i>Politics</i>			
Has run for office before	0.02	0.13	326
Ran for local position (Ward or Mukhiya)	0.01	0.11	326
Definitely or Probably will run for office	0.10	0.31	308
Someone in family held political office	0.06	0.23	326

*Note:*

Table 39

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.95	0.22	326
Always - works hard	0.89	0.31	326
Always - finishes what starts	0.85	0.35	326
Always - finishes work on time	0.85	0.36	326
Always - works without a break	0.71	0.45	326
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.91	0.28	326
Fully disagree - it's OK to take others' belongings	0.92	0.27	325
Fully disagree - that exaggerating own qualities is no big deal	0.92	0.27	325
Fully disagree - that OK if junior does something wrong under senior's pressure	0.79	0.40	326
Fully Disagree - that OK if one does something wrong under friends' pressure	0.89	0.31	325
Fully disagree - it's OK to take credit for others' work	0.91	0.29	326
Fully disagree - that some people have to be dealt with roughly	0.44	0.50	323
Fully disagree - that some people only deserve rude behaviour	0.41	0.49	317
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	3.56	1.75	326
Share of lottery donated to orphanage	0.45	0.23	326
Share of tax paid to panchayat	0.21	0.21	326
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.70	0.46	326
Fully Applicable - Good at solving problems between other people	0.31	0.46	324
Fully Applicable - Many public causes are worth fighting for	0.43	0.50	324
Fully Applicable - Use energy to make society better	0.51	0.50	326
Fully Applicable - Not afraid to defend others even personal risk	0.31	0.46	325
Fully Applicable - Public service more important than doing well financially	0.48	0.50	325
Fully Applicable - Politics is not a dirty word	0.43	0.50	310
Fully Applicable - Thinks government can do much to make society fair	0.25	0.43	321
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.75	0.44	324
Often - very interested in learning new things	0.90	0.30	326
Often - relaxed during stressful situations	0.65	0.48	326
Often - tend to worry a lot	0.08	0.27	326
Often - get nervous easily	0.03	0.18	326
Very important to rise in life	0.84	0.36	326
Very important to make a lot of money	0.55	0.50	326

Note:

Table 40

	Mean	SD	N
Position tenure in years	8.36	5.84	284
Job tenure in years	9.21	9.92	279
Number of trainings received: 1 - 2	0.02	0.13	326
Number of trainings received: 3 - 5	0.22	0.41	326
Number of trainings received: More than 5	0.31	0.46	326
Last training: previous month	0.35	0.48	326
Last training: 2 - 3 months ago	0.21	0.41	326
Last training: 6 months - 1 year ago	0.15	0.36	326
Last training: 2 years ago	0.14	0.35	326
ANM supervisor has good or very good management skills	0.97	0.16	323
Frequency meetings with supervisor: weekly	0.35	0.48	326
Frequency meetings with supervisor: bi-monthly	0.13	0.34	326
Frequency meetings with supervisor: monthly	0.40	0.49	326
Frequency meetings with supervisor: two or more months	0.04	0.20	326
Previous meeting supervisor: previous week	0.35	0.48	305
Previous meeting supervisor: previous month	0.54	0.50	305
Previous meeting supervisor: 2 months before	0.06	0.24	305
Previous meeting supervisor: 6 months before	0.03	0.16	305
Sometimes or always interact with peers in BPHC meetings	0.78	0.41	321
Sometimes or always issues on bad performance are raised	0.74	0.44	313
Sometimes or always supervisor scold peers who don't perform	0.69	0.46	316
Supervisor report employees who don't work and they lose job	0.37	0.48	305
Sometime or always there is recognition for good work	0.42	0.50	318
Issues raised in interaction with peers: daily work	0.86	0.35	326
Issues raised in interaction with peers: lack of supplies	0.62	0.49	326
Issues raised in interaction with peers: supervisors	0.26	0.44	326
Issues raised in interaction with peers: salary and non-payment	0.41	0.49	326

*Note:*

Table 41

	Mean	SD	N
Owns smartphone	0.62	0.49	323
Uses whatsapp	0.62	0.49	326
Participates whatsapp group with health workers	0.65	0.48	202
Participates whatsapp group with other workers without supervisor	0.50	0.50	202
Share doctors hardworkers	0.97	0.13	268
Share doctors honest	0.97	0.12	262
Share nurses hardworkers	0.98	0.09	281
Share nurses honest	0.98	0.08	278
Share ANM hardworkers	0.98	0.09	281
Share ANM honest	0.98	0.08	278
Quite a few or all doctors other facilities are hardworking	0.94	0.25	265
Quite a few or all doctors other facilities are honest	0.92	0.28	265
Quite a few or all nurses other facilities are hardworking	0.95	0.22	268
Quite a few or all nurses other facilities are honest	0.96	0.20	269
Quite a few or all ANM other facilities are hardworking	0.96	0.19	266
Quite a few or all ANM other facilities are honest	0.95	0.21	266
It would have been better to work in other profession	0.40	0.49	326
Feels sense of inner pride/fulfillement at work	0.97	0.16	326
Gets status from being in profession	0.94	0.23	326
The system will not allow peoples' health to improve	0.69	0.46	323
I have to get permission for every little thing	0.68	0.47	326
Job satisfaction index	-0.10	1.05	326
Politicians often/sometimes create work difficulties	0.22	0.42	325
Politicians often/sometimes support work	0.24	0.43	324
Good workers transferred due others feel threatened	0.45	0.50	308
Work somewhat or often hampered by delay of funds release	0.70	0.46	325
Reason for delay of funds: bureaucrats are lazy	0.76	0.42	302
Reason for delay of funds: bureaucrats are corrupt	0.67	0.47	300
Reason for delay of funds: insufficient funds	0.76	0.43	303
Reason for delay of funds: bureaucrats mismanaged by politicians	0.61	0.49	291
Reason for delay of funds: political leaders not improving the system	0.61	0.49	290
Reason for delay of funds: politicians are corrupt	0.62	0.49	290
Had to use money or connections to get job	0.09	0.28	293
Important to get transfer or promotion: political connections	0.10	0.30	326
Important to get transfer or promotion: informal payments	0.07	0.26	326
Important to get transfer or promotion: both	0.19	0.39	326
Important to get transfer or promotion: neither	0.49	0.50	326
How many months of salary not received	1.89	2.56	252
Days not coming to work previous week	0.33	0.91	238
When absent provides explanation to: health supervisor	0.62	0.48	288
When absent provides explanation to: colleagues	0.66	0.47	311
When absent provides explanation to: officer in charge	0.92	0.28	321
When absent provides explanation to: beneficiares	0.33	0.47	283

## 13 ANM - District/Block-level

Summary statistics in tables below.

Table 42

	Mean	SD	N
Household head	0.56	0.50	554
Male	0.01	0.11	554
Married	0.97	0.18	554
ST, ST or OBC	0.83	0.38	554
Age	40.01	8.56	554
Have ration card	0.29	0.45	554
Have Aadhar card	1.00	0.04	554
Rural locality	0.75	0.43	554
Permanent structured house	0.43	0.50	554
Owens car	0.06	0.24	554
Owens motorcycle	0.87	0.34	554
Owens computer	0.31	0.46	554
Owens cooler/electric fan	0.97	0.16	554
Owens washing machine	0.25	0.43	554
Owens fridge	0.45	0.50	554
Owens TV	0.97	0.17	554
Has bank account	1.00	0.04	554
Has LPG	0.98	0.14	554
Owens pumping set	0.14	0.35	554
Owens tractor	0.03	0.18	554
Has toilet inside the house	0.99	0.10	554
Number of items owned (Max=12)	7.03	1.45	554
Number of goats/sheep owned	0.19	0.80	554
Number of buffalo/bull owned	0.16	0.59	554
Number of cows owned	0.48	0.84	554
Asset Index (ICW)	-0.21	1.07	554

*Note:*

Table 43

	Mean	SD	N
Facebook user	0.34	0.48	554
Twitter user	0.04	0.20	554
Instagram user	0.04	0.19	554
Watch TV more than once a week	0.86	0.35	554
Read newspaper more than once a week	0.67	0.47	554
Get newspapers at least couple of times a month	0.79	0.41	554
Uses a computer at least sometimes	0.15	0.35	554
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.21	0.41	553
Prefers cash for the poor to health investment	0.10	0.30	553
Prefers jobs for the poor to road investment	0.66	0.48	551
Prefers cash for the poor to road investment	0.32	0.47	551
Prefers health to road investment	0.95	0.21	553
Government should give electricity for free (incl. only poor)	0.81	0.39	550
Government should waive farmer loans (incl. only poor)	0.63	0.48	548
Government teachers are very or somewhat good	0.71	0.45	531
Government doctors and nurses are very or somewhat good	0.88	0.32	548
<i>Politics</i>			
Has run for office before	0.02	0.13	554
Ran for local position (Ward or Mukhiya)	0.01	0.09	554
Definitely or Probably will run for office	0.10	0.29	534
Someone in family held political office	0.10	0.30	554

Note:

Table 44

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.92	0.27	554
Always - works hard	0.86	0.35	554
Always - finishes what starts	0.81	0.39	553
Always - finishes work on time	0.82	0.39	553
Always - works without a break	0.68	0.47	553
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.90	0.30	554
Fully disagree - it's OK to take others' belongings	0.90	0.30	554
Fully disagree - that exaggerating own qualities is no big deal	0.90	0.29	552
Fully disagree - that OK if junior does something wrong under senior's pressure	0.82	0.38	542
Fully Disagree - that OK if one does something wrong under friends' pressure	0.89	0.31	547
Fully disagree - it's OK to take credit for others' work	0.90	0.29	552
Fully disagree - that some people have to be dealt with roughly	0.41	0.49	528
Fully disagree - that some people only deserve rude behaviour	0.42	0.49	505
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	3.53	2.08	554
Share of lottery donated to orphanage	0.42	0.23	554
Share of tax paid to panchayat	0.18	0.20	554
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.68	0.47	553
Fully Applicable - Good at solving problems between other people	0.30	0.46	551
Fully Applicable - Many public causes are worth fighting for	0.40	0.49	524
Fully Applicable - Use energy to make society better	0.49	0.50	550
Fully Applicable - Not afraid to defend others even personal risk	0.32	0.47	549
Fully Applicable - Public service more important than doing well financially	0.50	0.50	553
Fully Applicable - Politics is not a dirty word	0.54	0.50	513
Fully Applicable - Thinks government can do much to make society fair	0.27	0.45	510
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.70	0.46	554
Often - very interested in learning new things	0.82	0.39	554
Often - relaxed during stressful situations	0.58	0.49	550
Often - tend to worry a lot	0.06	0.24	554
Often - get nervous easily	0.02	0.15	551
Very important to rise in life	0.77	0.42	552
Very important to make a lot of money	0.57	0.50	552

Note:

Table 45

	Mean	SD	N
Position tenure in years	10.72	8.00	511
Job tenure in years	11.22	8.06	516
Number of trainings received: 1 - 2	0.00	0.04	554
Number of trainings received: 3 - 5	0.16	0.37	554
Number of trainings received: More than 5	0.36	0.48	554
Last training: previous month	0.32	0.47	554
Last training: 2 - 3 months ago	0.17	0.37	554
Last training: 6 months - 1 year ago	0.14	0.35	554
Last training: 2 years ago	0.18	0.39	554
ANM supervisor has good or very good management skills	0.97	0.17	553
Frequency meetings with supervisor: weekly	0.64	0.48	554
Frequency meetings with supervisor: bi-monthly	0.12	0.32	554
Frequency meetings with supervisor: monthly	0.19	0.39	554
Frequency meetings with supervisor: two or more months	0.04	0.19	554
Previous meeting supervisor: previous week	0.59	0.49	540
Previous meeting supervisor: previous month	0.35	0.48	540
Previous meeting supervisor: 2 months before	0.04	0.21	540
Previous meeting supervisor: 6 months before	0.01	0.09	540
Sometimes or always interact with peers in BPHC meetings	0.85	0.36	553
Sometimes or always issues on bad performance are raised	0.91	0.28	546
Sometimes or always supervisor scold peers who don't perform	0.83	0.38	546
Supervisor report employees who don't work and they lose job	0.36	0.48	527
Sometime or always there is recognition for good work	0.41	0.49	548
Issues raised in interaction with peers: daily work	0.84	0.37	554
Issues raised in interaction with peers: lack of supplies	0.60	0.49	554
Issues raised in interaction with peers: supervisors	0.30	0.46	554
Issues raised in interaction with peers: salary and non-payment	0.42	0.49	554

*Note:*

Table 46

	Mean	SD	N
Owns smartphone	0.52	0.50	551
Uses whatsapp	0.52	0.50	554
Participates whatsapp group with health workers	0.86	0.35	287
Participates whatsapp group with other workers without supervisor	0.42	0.50	285
Share doctors hardworkers	0.95	0.14	451
Share doctors honest	0.90	1.22	450
Share nurses hardworkers	0.95	0.18	257
Share nurses honest	0.95	0.17	256
Share ANM hardworkers	0.95	0.18	257
Share ANM honest	0.95	0.17	256
Quite a few or all doctors other facilities are hardworking	0.91	0.29	416
Quite a few or all doctors other facilities are honest	0.92	0.28	418
Quite a few or all nurses other facilities are hardworking	0.94	0.23	409
Quite a few or all nurses other facilities are honest	0.94	0.24	409
Quite a few or all ANM other facilities are hardworking	0.95	0.21	423
Quite a few or all ANM other facilities are honest	0.96	0.19	425
It would have been better to work in other profession	0.41	0.49	554
Feels sense of inner pride/fulfilment at work	0.97	0.17	554
Gets status from being in profession	0.96	0.20	554
The system will not allow peoples' health to improve	0.73	0.44	551
I have to get permission for every little thing	0.72	0.45	554
Job satisfaction index	-0.12	0.98	554
Politicians often/sometimes create work difficulties	0.22	0.42	547
Politicians often/sometimes support work	0.37	0.48	543
Good workers transferred due others feel threatened	0.45	0.50	512
Work somewhat or often hampered by delay of funds release	0.68	0.47	552
Reason for delay of funds: bureaucrats are lazy	0.73	0.45	518
Reason for delay of funds: bureaucrats are corrupt	0.61	0.49	511
Reason for delay of funds: insufficient funds	0.73	0.44	516
Reason for delay of funds: bureaucrats mismanaged by politicians	0.60	0.49	499
Reason for delay of funds: political leaders not improving the system	0.60	0.49	492
Reason for delay of funds: politicians are corrupt	0.62	0.48	488
Had to use money or connections to get job	0.13	0.33	462
Important to get transfer or promotion: political connections	0.08	0.27	554
Important to get transfer or promotion: informal payments	0.11	0.31	554
Important to get transfer or promotion: both	0.23	0.42	554
Important to get transfer or promotion: neither	0.38	0.49	554
How many months of salary not received	2.68	3.09	450
Days not coming to work previous week	0.37	1.06	395
When absent provides explanation to: health supervisor	0.72	0.45	517
When absent provides explanation to: colleagues	0.65	0.48	533
When absent provides explanation to: officer in charge	0.86	0.34	550
When absent provides explanation to: beneficiares	0.32	0.47	494

## 14 Health supervisors - District/Block-level

Summary statistics in tables below.

One area worth noting at this stage is that the Health Supervisor respondents (Medical Officers in Charge, Civil Surgeons, various programme officers at the district and block-levels) are a useful source for understanding the extent to which the public health system suffers from low-effort norms. As mentioned earlier, questions posed to health workers about their expectations of their peers—whether they think their peers are hardworking or honest—did not work well in eliciting objective views because respondents are reluctant to speak ill of their peers. Indeed, even supervisors appear reluctant to report any problems: 80 percent of supervisor respondents say that 100 percent of the various cadres of health staff are both hard-working and honest. But, when we restrict attention to the 20 percent of respondents whose answers are less than 100 percent, these supervisors are reporting quite high rates of dishonesty and shirking among health workers. The average reported shares of dishonest/shirking workers when we only look at the data from those supervisors are: 36 percent of ANMs, 44 percent of Nurses, and 47 percent of Doctors. (Note: the ANMs here include those posted at PHCs, who may be performing significantly better than the GP-level ANMs)

Health supervisors answer other pertinent questions in ways that suggest systemic problems: 44 percent say that good workers get transferred because others feel threatened by them; 80 percent say that irrespective of their efforts, the system will not allow people's health to improve; 67 percent say they have to get permission for every little thing. Health supervisors' responses to these three questions are thus similar to the responses of health workers across the cadres, from the GP-level up.

Among the 13 Civil Surgeons interviewed, 9 of them respond that their management challenges are "very difficult", the highest of the 5-point scale of possible responses, with another 3 citing the next level of difficulty. Supervisor respondents are also bunched at "always" when asked whether they raise issues of bad performance in staff meetings, consistent with the responses from health workers.

Table 47

	Mean	SD	N
Age	43.69	9.95	293
Male	0.90	0.30	293
Married	0.98	0.13	293
Facebook user	0.90	0.30	293
Twitter user	0.51	0.50	293
Whatsapp user	0.97	0.16	293
Instagram user	0.97	0.16	293
Watch TV more than once a week	0.92	0.26	293
Read newspaper more than once a week	0.98	0.14	293
Get newspapers at least couple of times a month	0.99	0.12	293
Uses a computer at least sometimes	0.89	0.31	293
<i>Perceptions on public goods and corruption</i>			
Prefers jobs for the poor to health investment	0.29	0.45	293
Prefers cash for the poor to health investment	0.10	0.30	293
Prefers jobs for the poor to road investment	0.66	0.47	293
Prefers cash for the poor to road investment	0.22	0.42	293
Prefers health to road investment	0.92	0.26	293
Government should give electricity for free (incl. only poor)	0.90	0.30	291
Government should waive farmer loans (incl. only poor)	0.81	0.39	288
Government teachers are very or somewhat good	0.70	0.46	269
Government doctors and nurses are very or somewhat good	0.96	0.21	292
<i>Politics</i>			
Has run for office before	0.01	0.08	293
Ran for local position (Ward or Mukhiya)	0.00	0.00	293
Definitely or Probably will run for office	0.17	0.37	273
Someone in family held political office	0.10	0.30	293

Note:

Table 48

	Mean	SD	N
<i>Personality traits</i>			
Always - careful when doing something	0.95	0.22	293
Always - works hard	0.90	0.30	293
Always - finishes what starts	0.86	0.35	293
Always - finishes work on time	0.82	0.38	293
Always - works without a break	0.74	0.44	293
<i>Integrity</i>			
Fully disagree - it's OK to spread rumors	0.93	0.25	293
Fully disagree - it's OK to take others' belongings	0.94	0.23	291
Fully disagree - that exaggerating own qualities is no big deal	0.95	0.22	293
Fully disagree - that OK if junior does something wrong under senior's pressure	0.88	0.32	292
Fully Disagree - that OK if one does something wrong under friends' pressure	0.93	0.25	293
Fully disagree - it's OK to take credit for others' work	0.94	0.23	293
Fully disagree - that some people have to be dealt with roughly	0.32	0.47	292
Fully disagree - that some people only deserve rude behaviour	0.37	0.48	293
<i>Cognition and altruism</i>			
Cognitive ability - Number of digits remembered	3.98	1.57	293
Share of lottery donated to orphanage	0.52	0.29	293
Share of tax paid to panchayat	0.20	0.23	293
<i>Public Sector Motivation</i>			
Fully Applicable - Make difference in society means more than personal achievement	0.76	0.43	292
Fully Applicable - Good at solving problems between other people	0.27	0.44	291
Fully Applicable - Many public causes are worth fighting for	0.49	0.50	290
Fully Applicable - Use energy to make society better	0.63	0.48	293
Fully Applicable - Not afraid to defend others even personal risk	0.35	0.48	293
Fully Applicable - Public service more important than doing well financially	0.57	0.50	293
Fully Applicable - Politics is not a dirty word	0.62	0.49	283
Fully Applicable - Thinks government can do much to make society fair	0.32	0.47	291
<i>Entrepreneurship</i>			
Often - comes up with ideas other people haven't thought of	0.88	0.32	293
Often - very interested in learning new things	0.95	0.22	293
Often - relaxed during stressful situations	0.72	0.45	293
Often - tend to worry a lot	0.07	0.26	293
Often - get nervous easily	0.02	0.15	293
Very important to rise in life	0.89	0.32	293
Very important to make a lot of money	0.50	0.50	293

Note:

Table 49

	Mean	SD	N
Position tenure in years	14.42	125.33	250
Job tenure in years	13.03	9.95	238
Management challenges are hard or very hard	0.74	0.44	293
Meet at least monthly with peers	0.97	0.18	291
Talk/message with peers often	0.97	0.17	292
Discuss issues of performance of workers with peers	0.97	0.17	292
Number of trainings received: 1 - 2	0.12	0.32	293
Number of trainings received: 3 - 5	0.21	0.41	293
Number of trainings received: More than 5	0.27	0.45	293
Frequency meetings with supervisor: weekly	0.65	0.48	293
Frequency meetings with supervisor: bi-monthly	0.13	0.34	293
Frequency meetings with supervisor: monthly	0.20	0.40	293
Frequency meetings with supervisor: two or more months	0.01	0.12	293
Previous meeting supervisor: previous week	0.68	0.47	293
Previous meeting supervisor: previous month	0.28	0.45	293
Previous meeting supervisor: 2 months before	0.03	0.17	293
Previous meeting supervisor: 6 months before	0.01	0.10	293
Sometimes or always interact with peers in BPHC meetings	0.67	0.47	293

*Note:*

Table 50

	Mean	SD	N
Share doctors hardworkers	0.93	0.20	254
Share doctors honest	0.93	0.20	252
Share nurses hardworkers	0.94	0.18	162
Share nurses honest	0.95	0.17	160
Share ANM hardworkers	0.93	0.17	218
Share ANM honest	0.93	0.17	216
Quite a few or all doctors other facilities are hardworking	0.88	0.33	242
Quite a few or all doctors other facilities are honest	0.87	0.34	240
Quite a few or all nurses other facilities are hardworking	0.93	0.26	238
Quite a few or all nurses other facilities are honest	0.92	0.27	238
Quite a few or all ANM other facilities are hardworking	0.92	0.27	244
Quite a few or all ANM other facilities are honest	0.92	0.27	244
It would have been better to work in other profession	0.30	0.46	293
Feels sense of inner pride/fulfillement at work	0.97	0.17	292
Gets status from being in profession	0.98	0.15	292
The system will not allow peoples' health to improve	0.80	0.40	292
I have to get permission for every little thing	0.67	0.47	293
Job satisfaction index	-0.00	1.00	293
Politicians often/sometimes create work difficulties	0.22	0.41	292
Politicians often/sometimes support work	0.35	0.48	292
Good workers transferred due others feel threatened	0.45	0.50	282

*Note:*

## 15 Comparison of Selection Traits across respondent-types - GP-level only

Table 51

	(1) Citizens mean/sd	(2) Politicians mean/sd	(3) ANM mean/sd	(4) ASHA AWW mean/sd	(5) SHGs mean/sd	(6) Mukhiya mean/sd
Male	0.71 (0.45)	0.66 (0.48)	0.00 (0.00)	0.00 (0.00)	0.01 (0.10)	0.66 (0.47)
ST, ST or OBC	1.83 (0.38)	1.83 (0.38)	1.81 (0.39)	1.83 (0.37)	1.90 (0.30)	1.80 (0.40)
Age	40.16 (13.45)	42.25 (10.65)	42.51 (9.02)	38.38 (7.28)	36.64 (9.42)	42.45 (9.65)
Illiterate	0.26 (0.44)	0.10 (0.30)	0.00 (0.00)	0.00 (0.00)	0.22 (0.41)	0.01 (0.12)
Have ration card	0.74 (0.44)	0.73 (0.44)	0.50 (0.50)	0.73 (0.44)	0.77 (0.42)	0.52 (0.50)
Have Aadhar card	0.99 (0.08)	1.00 (0.04)	0.99 (0.10)	1.00 (0.03)	1.00 (0.04)	1.00 (0.00)
Permanent structured house	0.25 (0.43)	0.46 (0.50)	0.76 (0.43)	0.47 (0.50)	0.31 (0.46)	0.82 (0.38)
Number of items owned (Max=12)	4.28 (1.83)	5.40 (2.01)	6.36 (2.35)	5.25 (1.58)	4.13 (1.54)	7.93 (2.09)
Asset Index (ICW)	-0.16 (0.97)	0.26 (1.08)	0.40 (0.81)	0.06 (0.80)	-0.18 (0.76)	1.28 (1.38)
Prefers jobs for the poor to health investment	0.27 (0.44)	0.21 (0.41)	0.21 (0.41)	0.20 (0.40)	0.36 (0.48)	0.18 (0.39)
Prefers cash for the poor to health investment	0.13 (0.34)	0.12 (0.32)	0.07 (0.25)	0.08 (0.27)	0.17 (0.38)	0.08 (0.27)
Prefers jobs for the poor to road investment	0.60 (0.49)	0.57 (0.49)	0.61 (0.49)	0.72 (0.45)	0.72 (0.45)	0.55 (0.50)
Prefers cash for the poor to road investment	0.36 (0.48)	0.28 (0.45)	0.35 (0.48)	0.39 (0.49)	0.45 (0.50)	0.21 (0.41)
Prefers health to road investment	0.80 (0.40)	0.83 (0.38)	0.84 (0.37)	0.87 (0.33)	0.82 (0.38)	0.82 (0.38)
Government should give electricity for free (incl. only poor)	0.75 (0.43)	0.67 (0.47)	0.67 (0.47)	0.78 (0.41)	0.83 (0.37)	0.56 (0.50)
Government should waive farmer loans (incl. only poor)	0.90 (0.30)	0.91 (0.29)	0.89 (0.32)	0.95 (0.22)	0.94 (0.23)	0.89 (0.31)
Government teachers are very or somewhat good	0.58 (0.49)	0.58 (0.49)	0.86 (0.35)	0.78 (0.41)	0.70 (0.46)	0.54 (0.50)
Government doctors and nurses are very or somewhat good	0.62 (0.48)	0.62 (0.49)	0.95 (0.21)	0.84 (0.37)	0.70 (0.46)	0.60 (0.49)
Observations	3834	1384	114	1314	713	219

*Note:*

Table 52

	(1) Citizens mean/sd	(2) Politicians mean/sd	(3) ANM mean/sd	(4) ASHA AWW mean/sd	(5) SHGs mean/sd	(6) Mukhiya mean/sd
Cognitive ability - Number of digits remembered	2.21 (1.37)	2.46 (1.33)	2.16 (1.37)	2.37 (1.36)	2.11 (1.29)	2.93 (1.33)
Share of lottery donated to orphanage	0.36 (0.28)	0.50 (0.31)	0.52 (0.29)	0.40 (0.27)	0.36 (0.24)	0.65 (0.32)
Share of tax paid to panchayat	0.28 (0.28)	0.42 (0.34)	0.32 (0.33)	0.25 (0.27)	0.26 (0.26)	0.62 (0.36)
Index Personality Traits	-0.09 (1.09)	0.09 (0.78)	0.17 (0.81)	0.17 (0.82)	-0.02 (1.15)	0.26 (0.81)
Index Integrity	-0.00 (1.04)	0.12 (0.84)	-0.35 (0.99)	-0.01 (1.03)	-0.11 (1.05)	0.12 (0.84)
Index Public Service Motivation	-0.04 (1.00)	0.55 (0.93)	-0.14 (0.84)	0.10 (0.94)	-0.15 (0.95)	0.85 (0.81)
Index Entrepreneurship	0.02 (1.07)	0.18 (0.95)	0.04 (0.89)	0.14 (0.87)	-0.04 (0.95)	0.18 (0.90)
Observations	3834	1384	114	1314	713	219

Note:

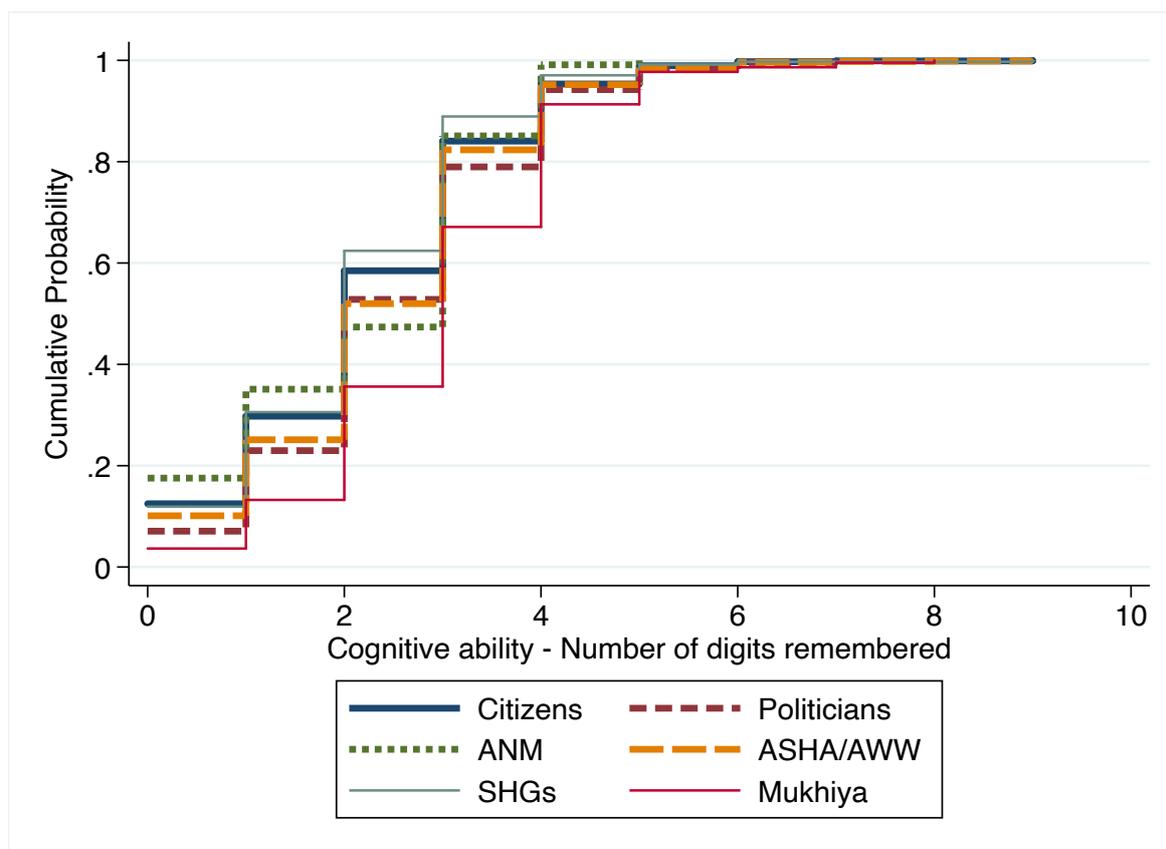


Figure 17

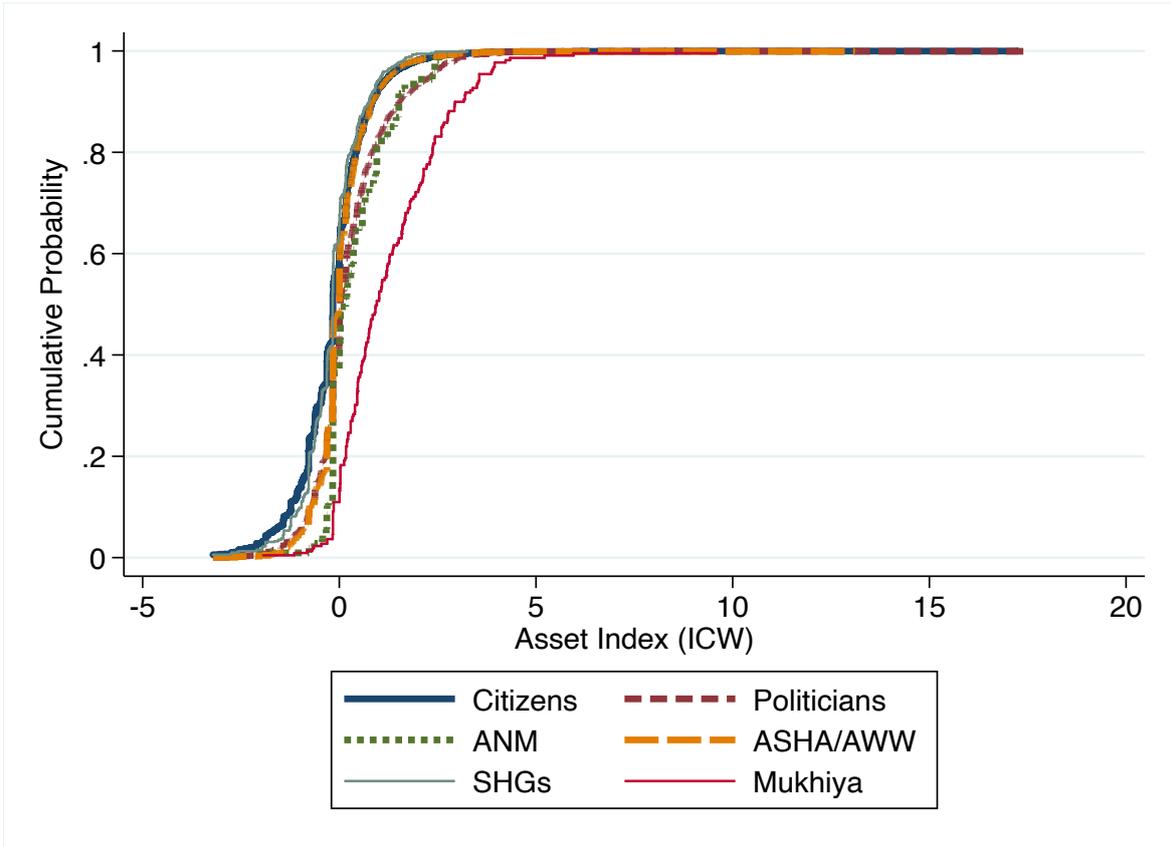


Figure 18

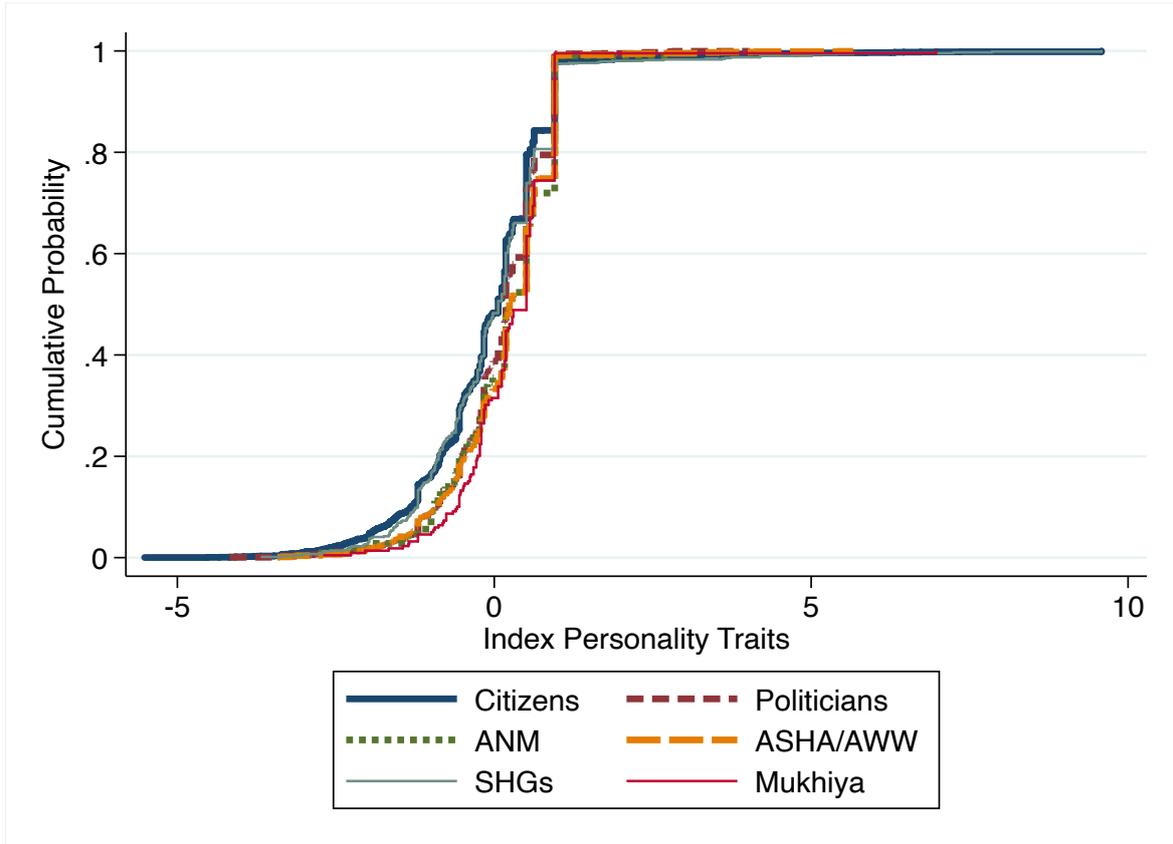


Figure 19

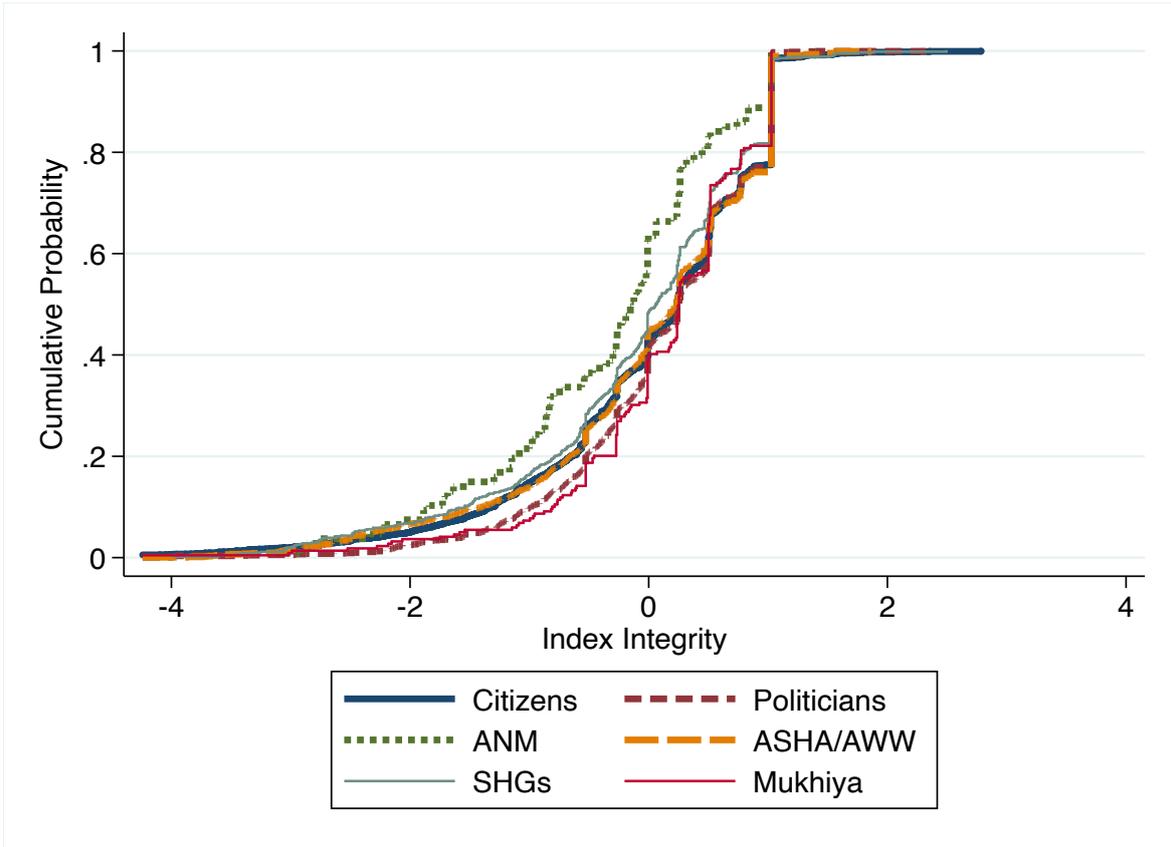


Figure 20

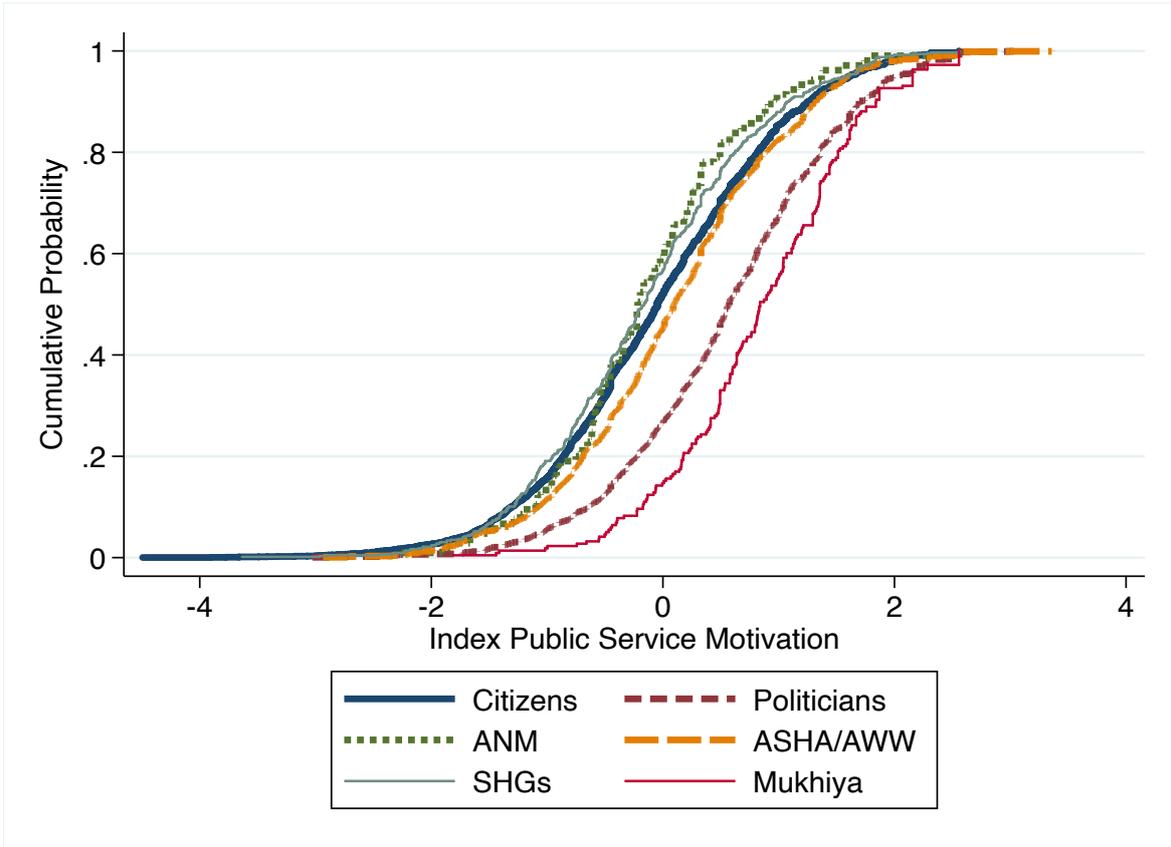


Figure 21

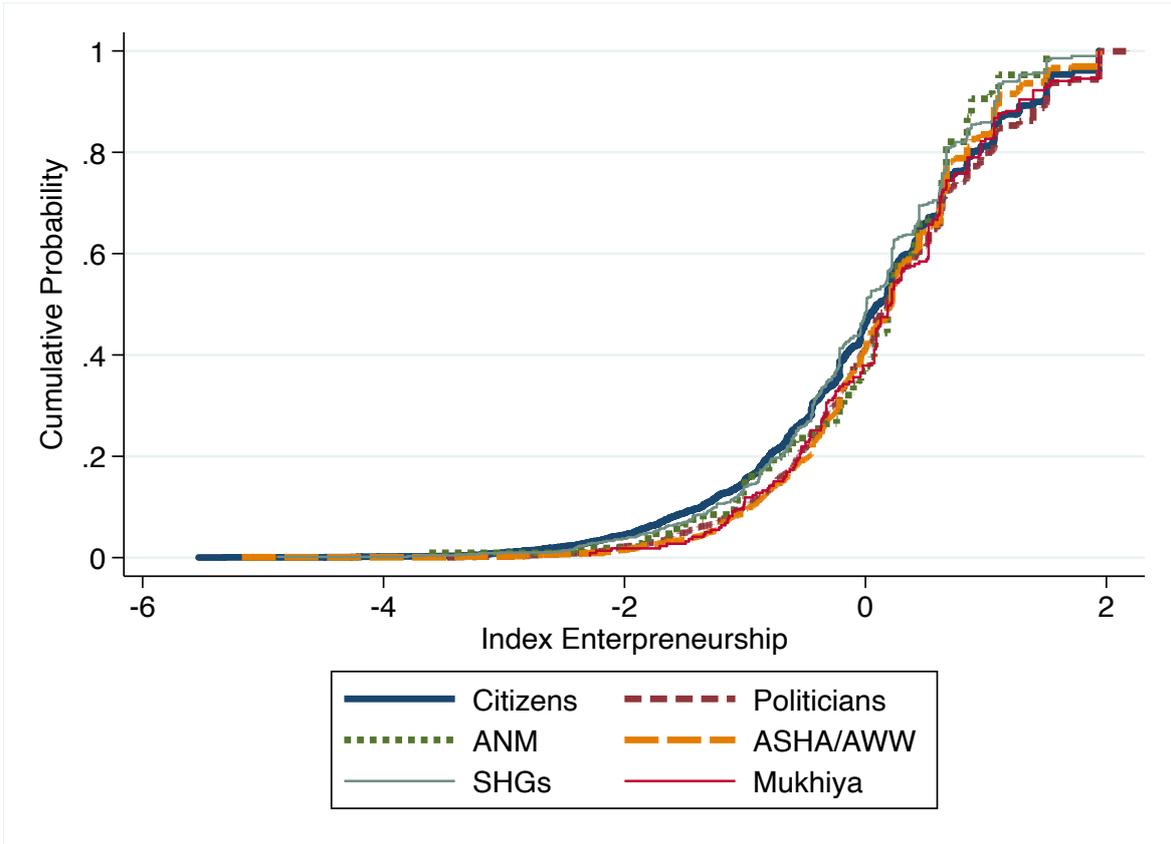


Figure 22

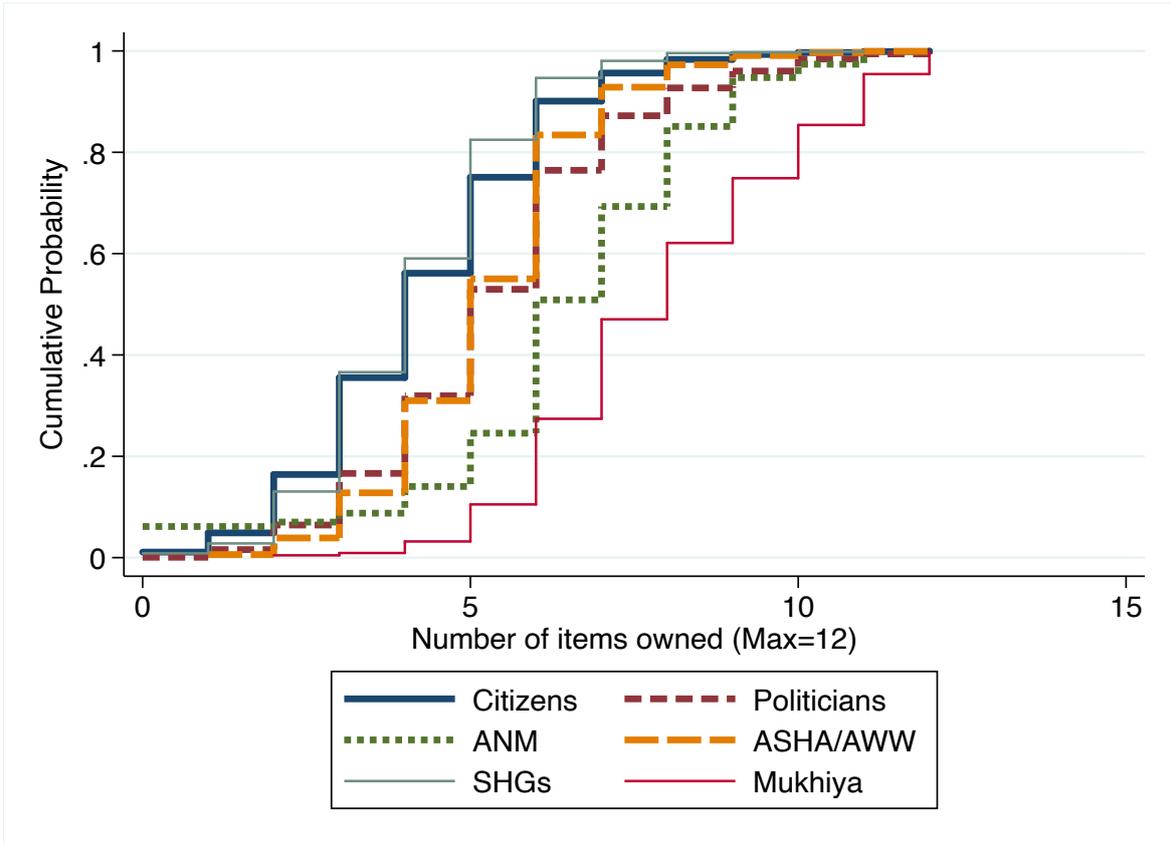


Figure 23

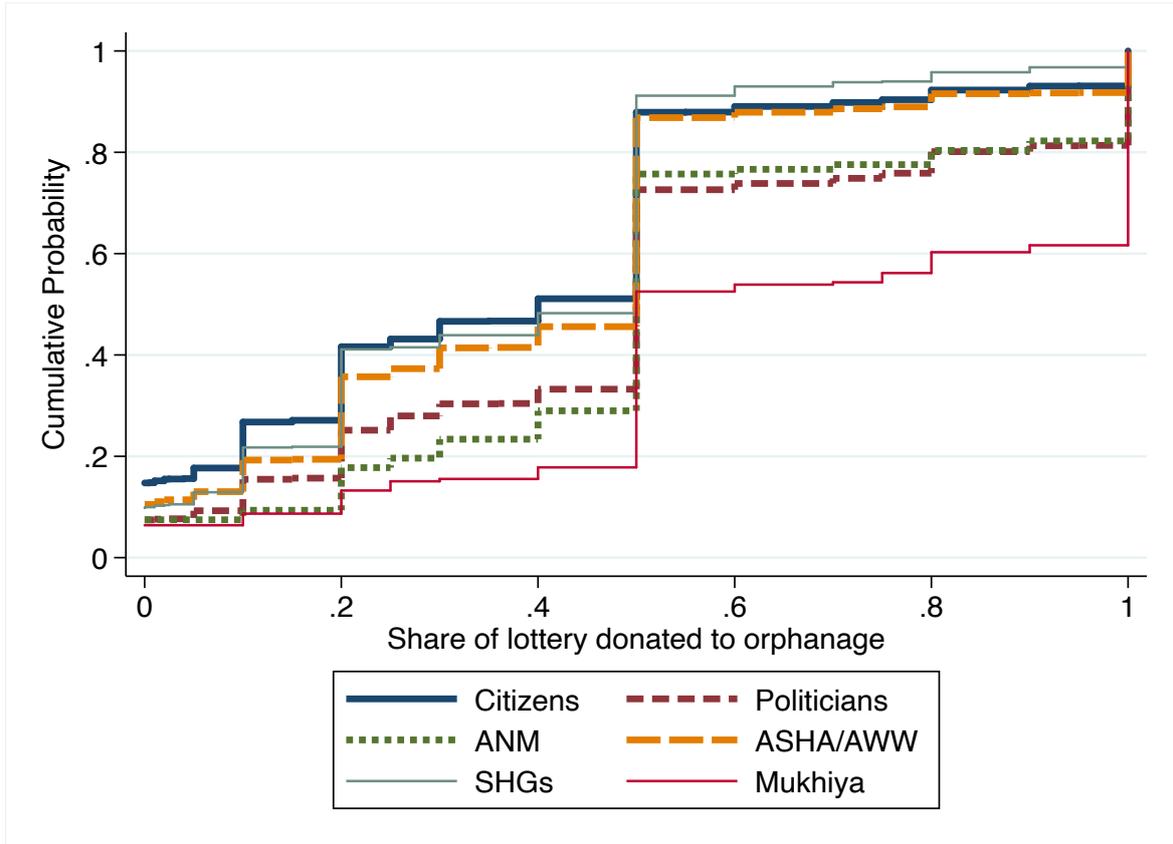


Figure 24

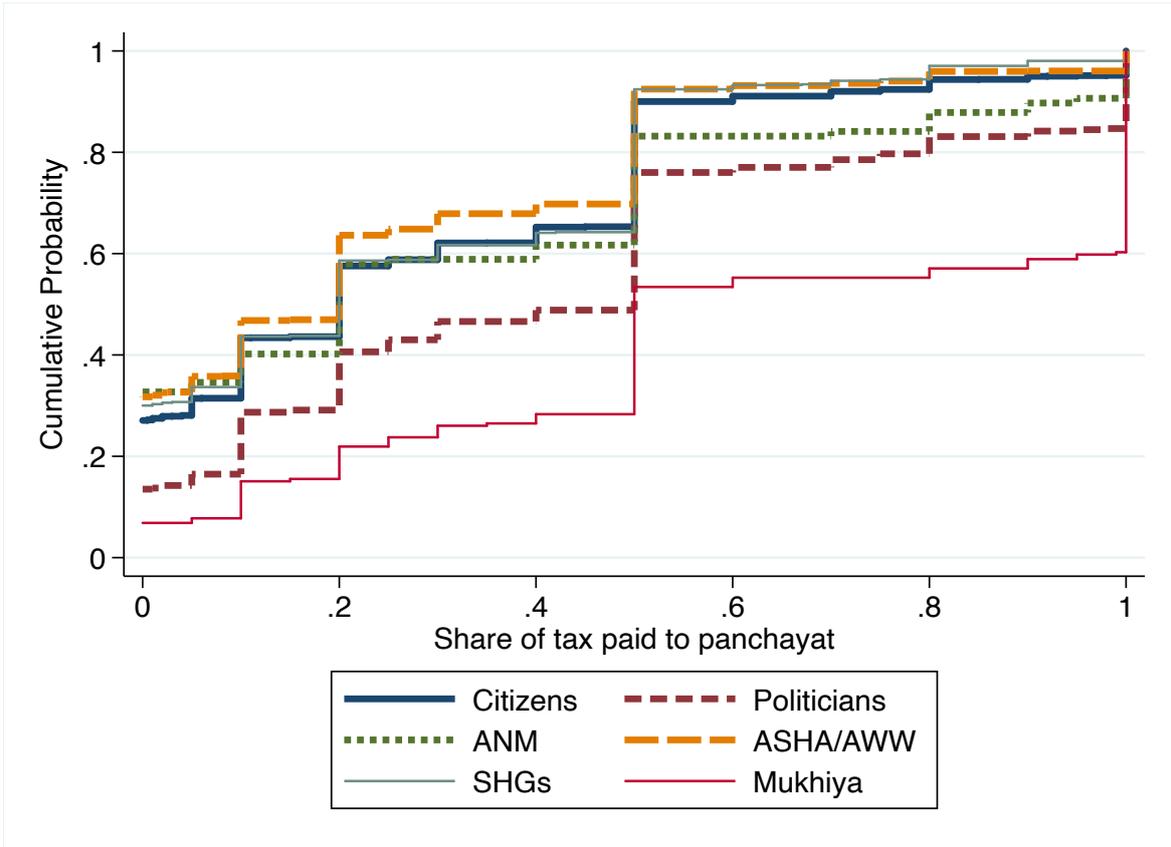


Figure 25

## 16 Comparison of Selection Traits across respondent-types - Above GP level

Table 53

	(1) Above GP Pol mean/sd	(2) Health Staff mean/sd	(3) Supervisors mean/sd
Male	0.70 (0.46)	0.24 (0.43)	0.90 (0.30)
ST, ST or OBC	0.76 (0.43)	0.77 (0.42)	. (.)
Age	44.56 (9.70)	40.41 (8.50)	43.69 (9.95)
Illiterate	0.00 (0.00)	. (.)	. (.)
Have ration card	. (.)	0.25 (0.43)	. (.)
Have Aadhar card	. (.)	1.00 (0.03)	. (.)
Permanent structured house	. (.)	0.40 (0.49)	. (.)
Prefers jobs for the poor to health investment	0.35 (0.48)	0.20 (0.40)	0.29 (0.45)
Prefers cash for the poor to health investment	0.13 (0.34)	0.07 (0.26)	0.10 (0.30)
Prefers jobs for the poor to road investment	0.65 (0.48)	0.65 (0.48)	0.66 (0.47)
Prefers cash for the poor to road investment	0.22 (0.41)	0.30 (0.46)	0.22 (0.42)
Prefers health to road investment	0.91 (0.29)	0.94 (0.23)	0.92 (0.26)
Government should give electricity for free (incl. only poor)	0.91 (0.29)	0.84 (0.36)	0.90 (0.30)
Government should waive farmer loans (incl. only poor)	0.67 (0.47)	0.68 (0.47)	0.81 (0.39)
Government teachers are very or somewhat good	0.48 (0.50)	0.74 (0.44)	0.70 (0.46)
Government doctors and nurses are very or somewhat good	0.58 (0.49)	0.92 (0.27)	0.96 (0.21)
Observations	195	1188	293

Note:

Table 54

	(1) Above GP Pol mean/sd	(2) Health Staff mean/sd	(3) Supervisors mean/sd
Cognitive ability - Number of digits remembered	3.59 (1.72)	3.58 (1.87)	3.98 (1.57)
Share of lottery donated to orphanage	0.53 (0.32)	0.45 (0.24)	0.52 (0.29)
Share of tax paid to panchayat	0.38 (0.33)	0.21 (0.22)	0.20 (0.23)
Index Personality Traits	0.23 (0.89)	-0.03 (1.04)	-0.01 (0.87)
Index Integrity	-0.11 (1.19)	0.04 (1.01)	-0.11 (0.78)
Index Public Sector Motivation	0.78 (1.02)	0.05 (0.98)	0.18 (0.92)
Index Entrepreneurship	-0.05 (1.05)	0.02 (0.99)	0.14 (0.99)
Observations	195	1188	293

*Note:*

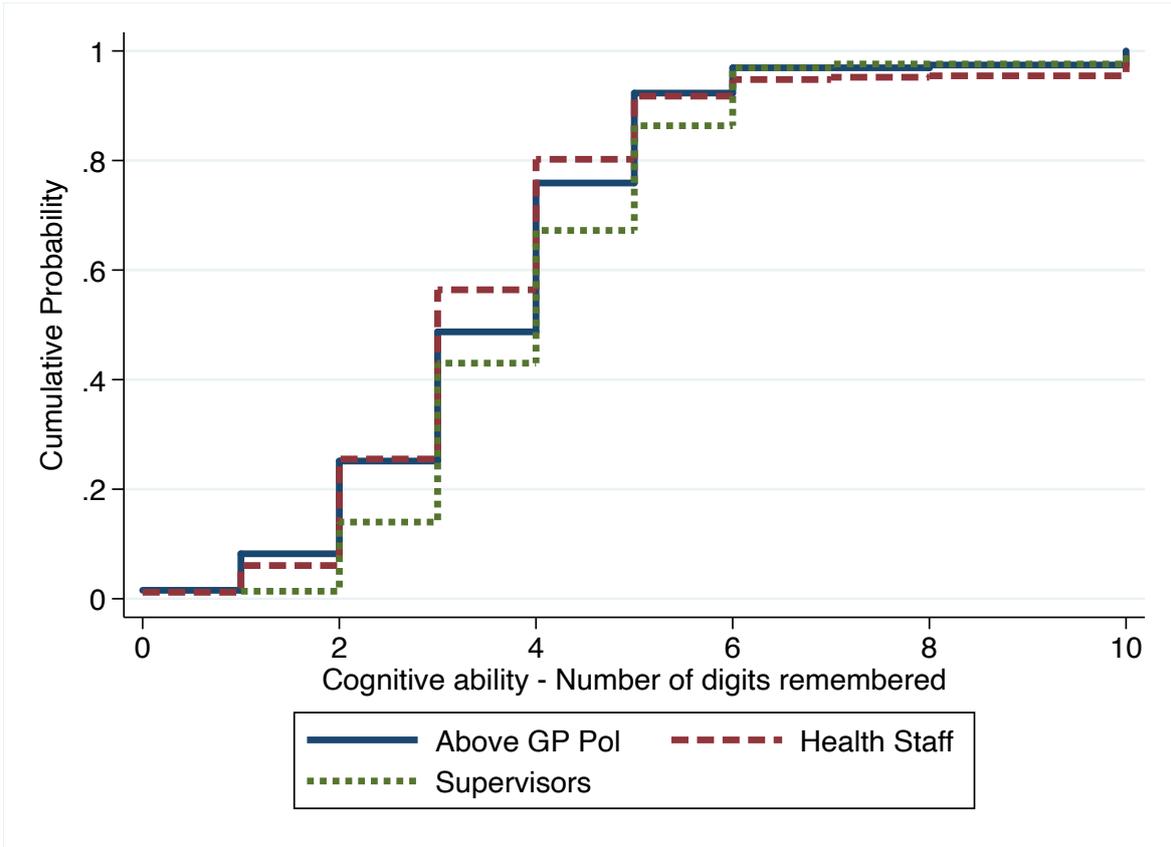


Figure 26

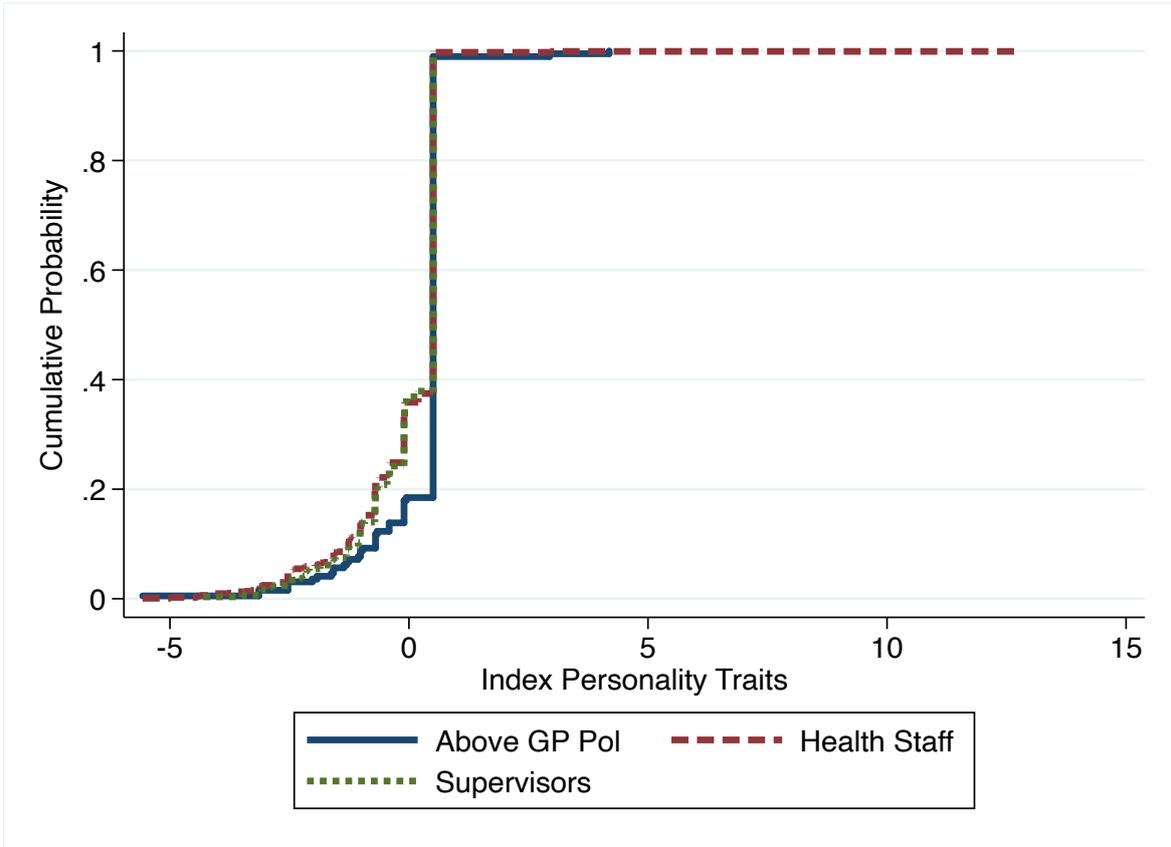


Figure 27

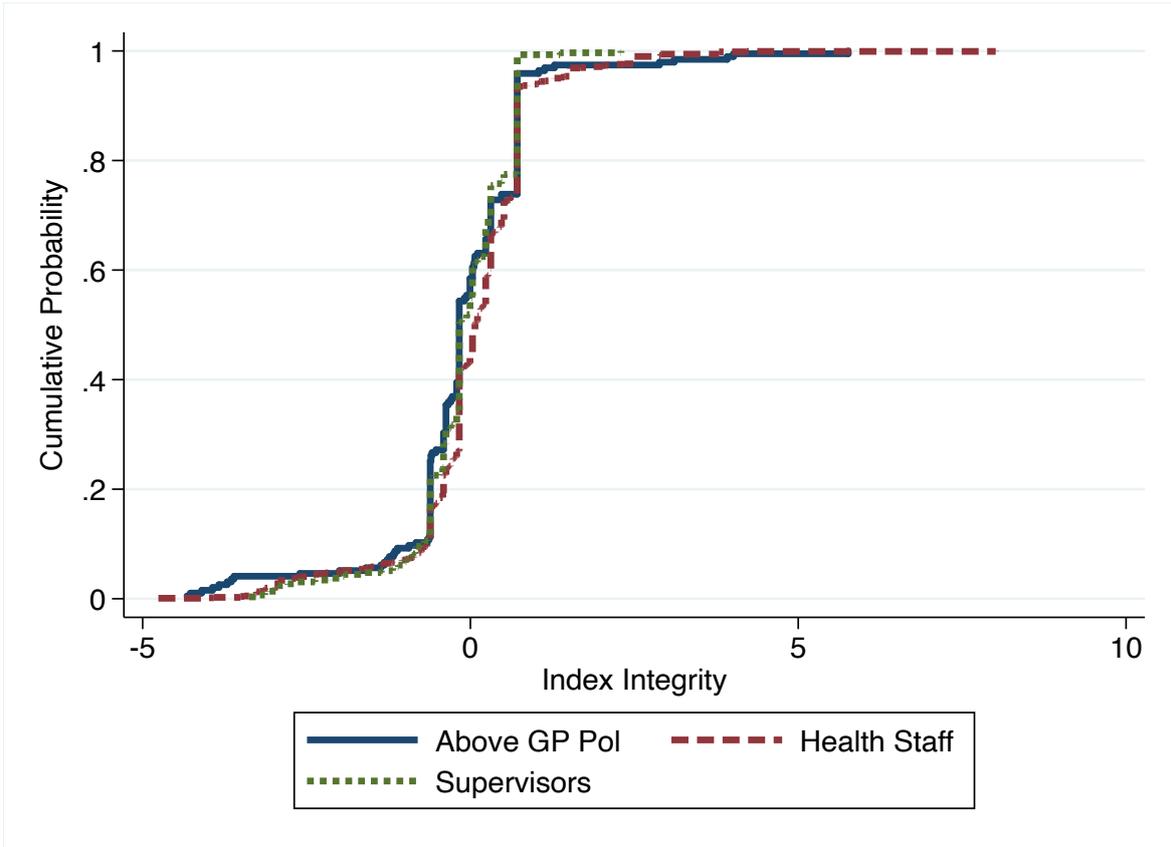


Figure 28

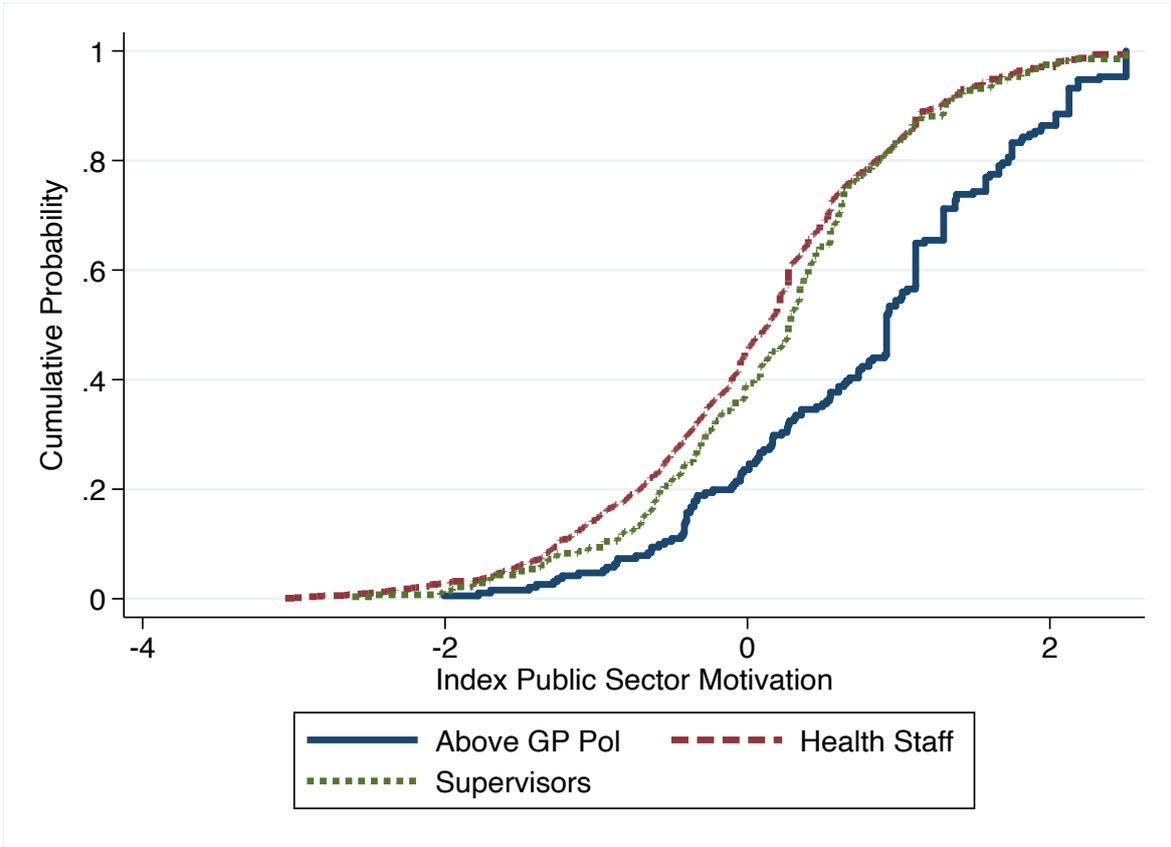


Figure 29

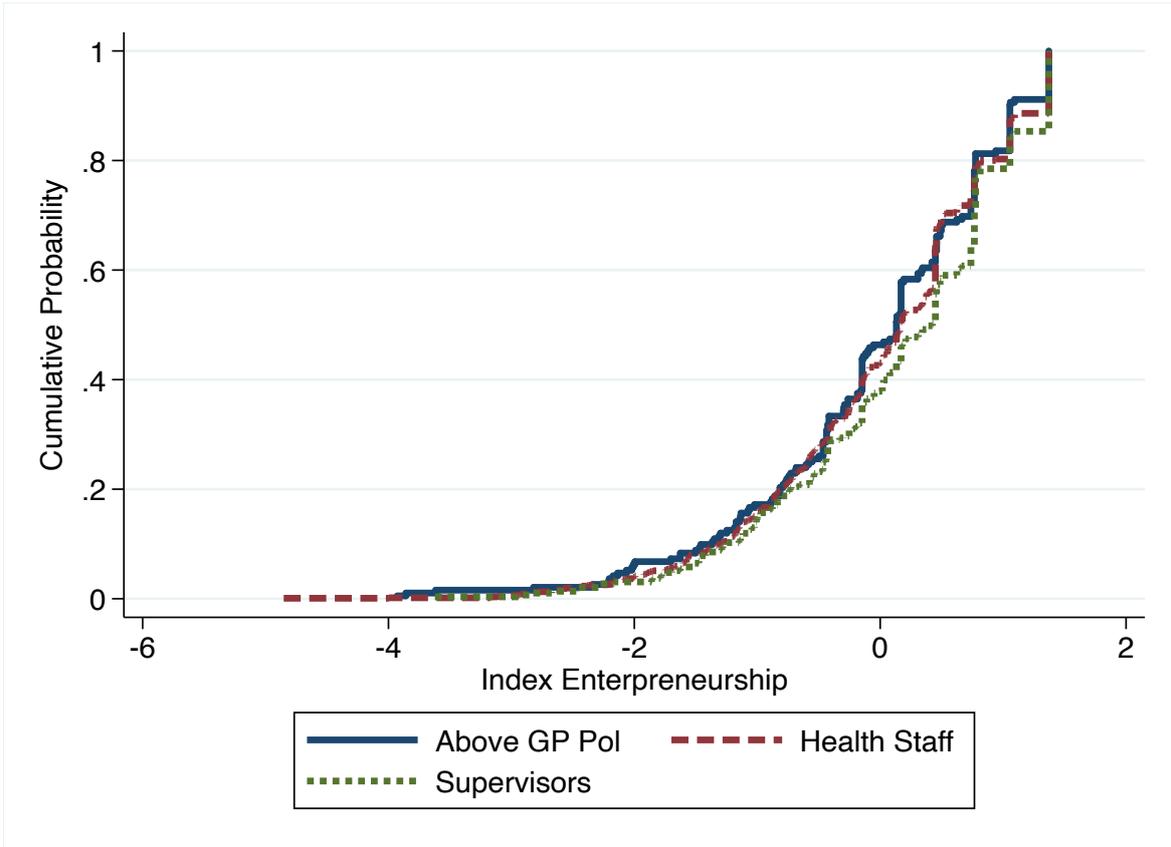


Figure 30

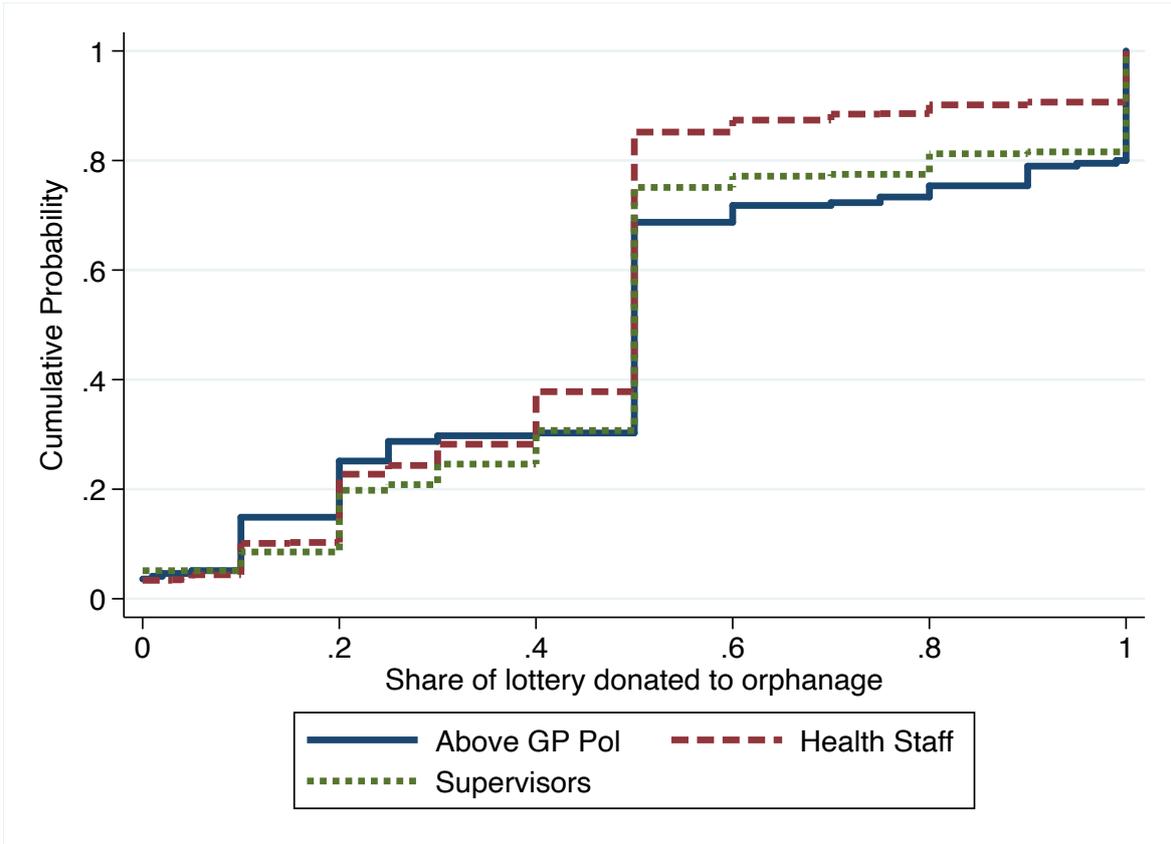


Figure 31

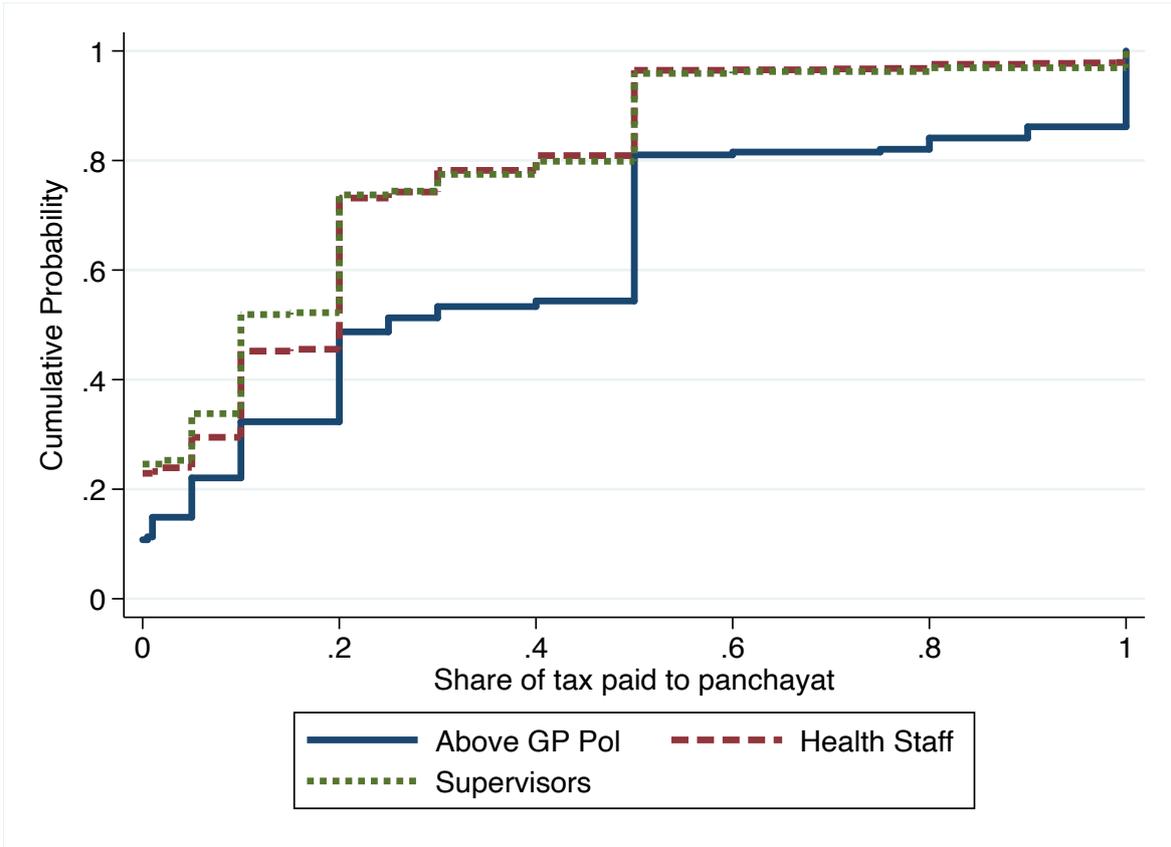


Figure 32

## 17 Comparison of Selection Traits across respondent-types - Health Staff

Table 55

	(1) CHW mean/sd	(2) ANM Subc mean/sd	(3) ANM PHC mean/sd	(4) Staff Nurse mean/sd	(5) Doctor mean/sd	(6) Supervisor mean/sd
Male	0.00 (0.00)	0.01 (0.11)	0.00 (0.00)	0.04 (0.20)	0.87 (0.34)	0.90 (0.30)
ST, ST or OBC	1.83 (0.37)	0.83 (0.38)	1.81 (0.39)	0.83 (0.37)	0.58 (0.49)	. (.)
Age	38.38 (7.28)	40.01 (8.56)	42.51 (9.02)	39.05 (7.99)	42.58 (8.53)	43.69 (9.95)
Illiterate	0.00 (0.00)	. (.)	0.00 (0.00)	. (.)	. (.)	. (.)
Have ration card	0.73 (0.44)	0.29 (0.45)	0.50 (0.50)	0.31 (0.46)	0.11 (0.32)	. (.)
Have Aadhar card	1.00 (0.03)	1.00 (0.04)	0.99 (0.10)	1.00 (0.00)	1.00 (0.00)	. (.)
Permanent structured house	0.47 (0.50)	0.43 (0.50)	0.76 (0.43)	0.35 (0.48)	0.39 (0.49)	. (.)
Prefers jobs for the poor to health investment	0.20 (0.40)	0.21 (0.41)	0.21 (0.41)	0.23 (0.42)	0.16 (0.37)	0.29 (0.45)
Prefers cash for the poor to health investment	0.08 (0.27)	0.10 (0.30)	0.07 (0.25)	0.07 (0.25)	0.03 (0.18)	0.10 (0.30)
Prefers jobs for the poor to road investment	0.72 (0.45)	0.66 (0.48)	0.61 (0.49)	0.68 (0.47)	0.61 (0.49)	0.66 (0.47)
Prefers cash for the poor to road investment	0.39 (0.49)	0.32 (0.47)	0.35 (0.48)	0.39 (0.49)	0.17 (0.37)	0.22 (0.42)
Prefers health to road investment	0.87 (0.33)	0.95 (0.21)	0.84 (0.37)	0.95 (0.22)	0.92 (0.26)	0.92 (0.26)
Government should give electricity for free (incl. only poor)	0.78 (0.41)	0.81 (0.39)	0.67 (0.47)	0.81 (0.39)	0.94 (0.23)	0.90 (0.30)
Government should waive farmer loans (incl. only poor)	0.95 (0.22)	0.63 (0.48)	0.89 (0.32)	0.63 (0.48)	0.81 (0.39)	0.81 (0.39)
Government teachers are very or somewhat good	0.78 (0.41)	0.71 (0.45)	0.86 (0.35)	0.80 (0.40)	0.71 (0.45)	0.70 (0.46)
Government doctors and nurses are very or somewhat good	0.84 (0.37)	0.88 (0.32)	0.95 (0.21)	0.94 (0.24)	0.96 (0.19)	0.96 (0.21)
Observations	1314	554	109	326	308	293

Note:

Table 56

	(1) CHW mean/sd	(2) ANM Subc mean/sd	(3) ANM PHC mean/sd	(4) Staff Nurse mean/sd	(5) Doctor mean/sd	(6) Supervisor mean/sd
Cognitive ability - Number of digits remembered	2.37 (1.36)	3.53 (2.08)	2.16 (1.37)	3.56 (1.75)	3.69 (1.56)	3.98 (1.57)
Share of lottery donated to orphanage	0.40 (0.27)	0.42 (0.23)	0.52 (0.29)	0.45 (0.23)	0.53 (0.26)	0.52 (0.29)
Share of tax paid to panchayat	0.25 (0.27)	0.18 (0.20)	0.32 (0.33)	0.21 (0.21)	0.27 (0.24)	0.20 (0.23)
Index Personality Traits	-0.22 (1.04)	0.14 (1.03)	-0.21 (0.99)	0.27 (0.79)	0.42 (0.90)	0.28 (0.76)
Index Integrity	-0.12 (1.01)	0.24 (1.13)	-0.45 (0.99)	0.13 (0.86)	0.19 (0.86)	0.03 (0.78)
Index Public Service Motivation	-0.05 (1.01)	0.24 (0.90)	-0.34 (0.93)	0.13 (1.03)	0.43 (0.98)	0.41 (0.92)
Index Entrepreneurship	-0.12 (0.93)	0.10 (1.05)	-0.24 (0.98)	0.22 (1.01)	0.42 (0.95)	0.34 (1.02)
Observations	1314	554	114	326	308	293

Note:

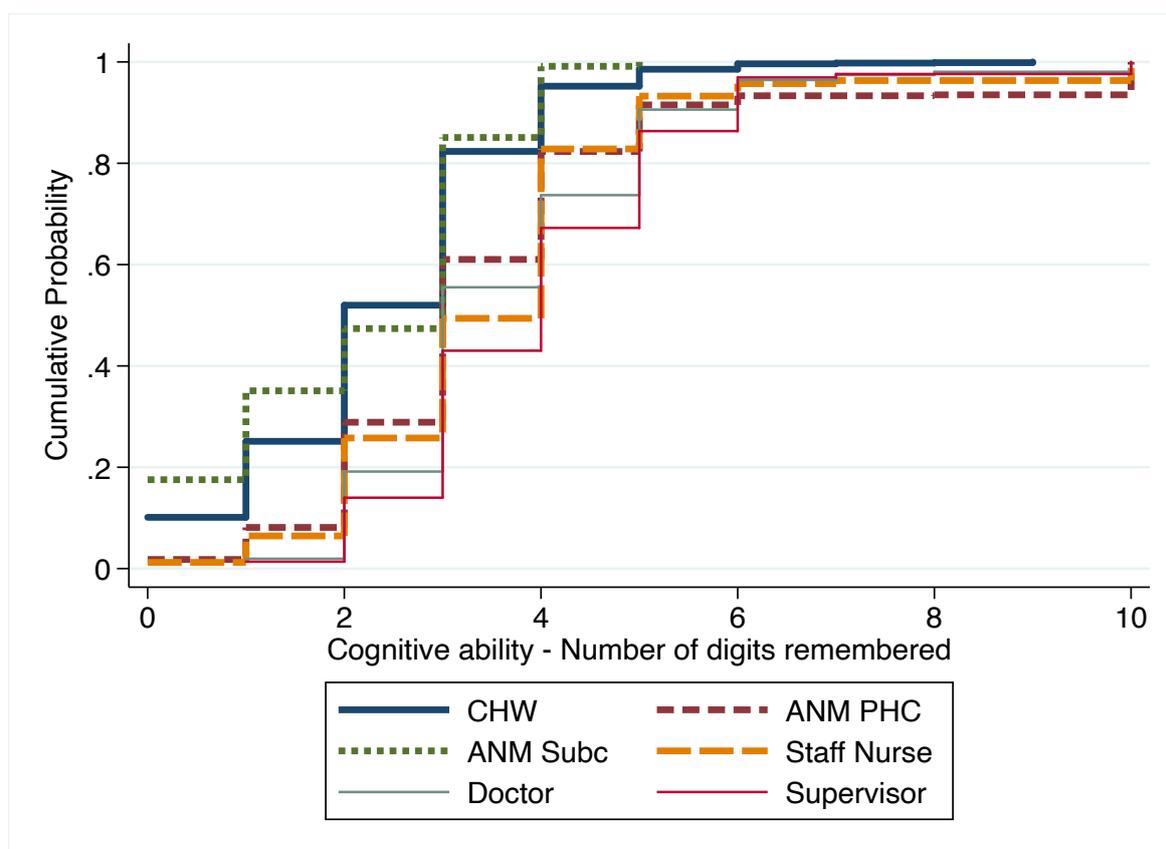


Figure 33

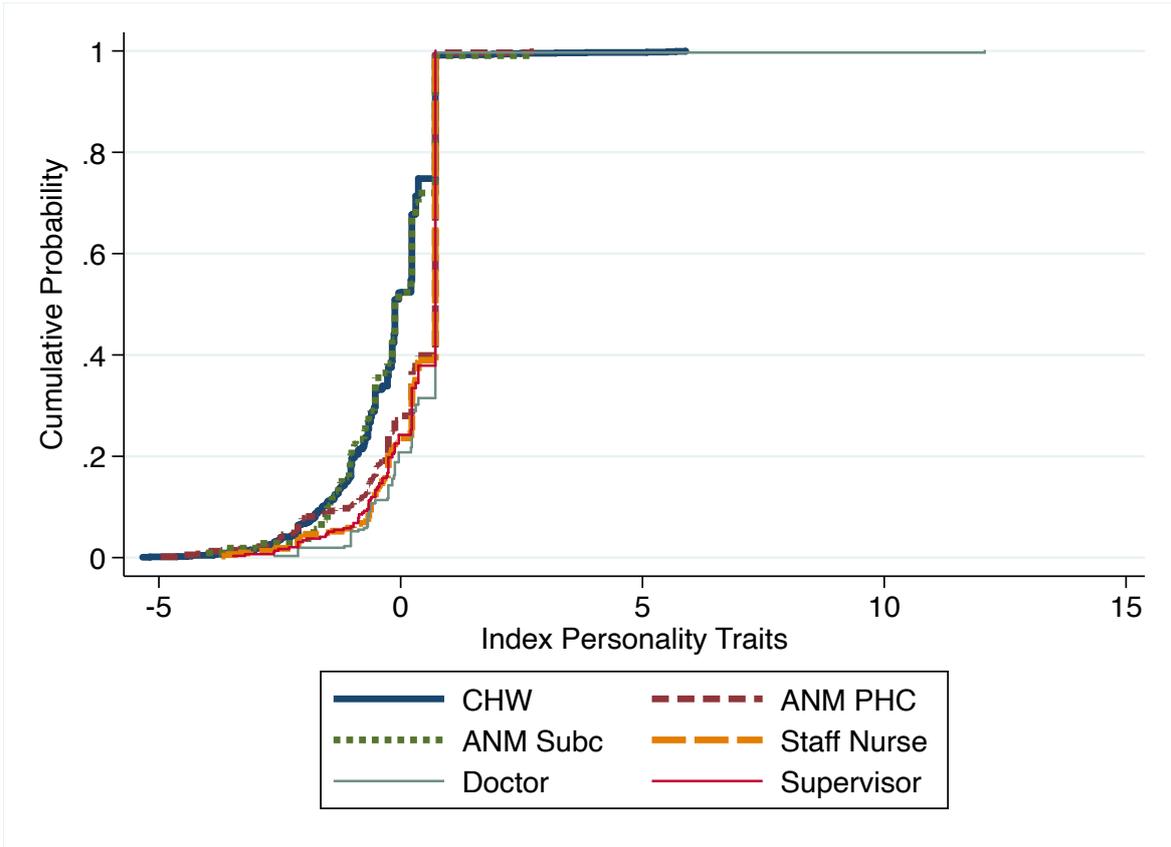


Figure 34

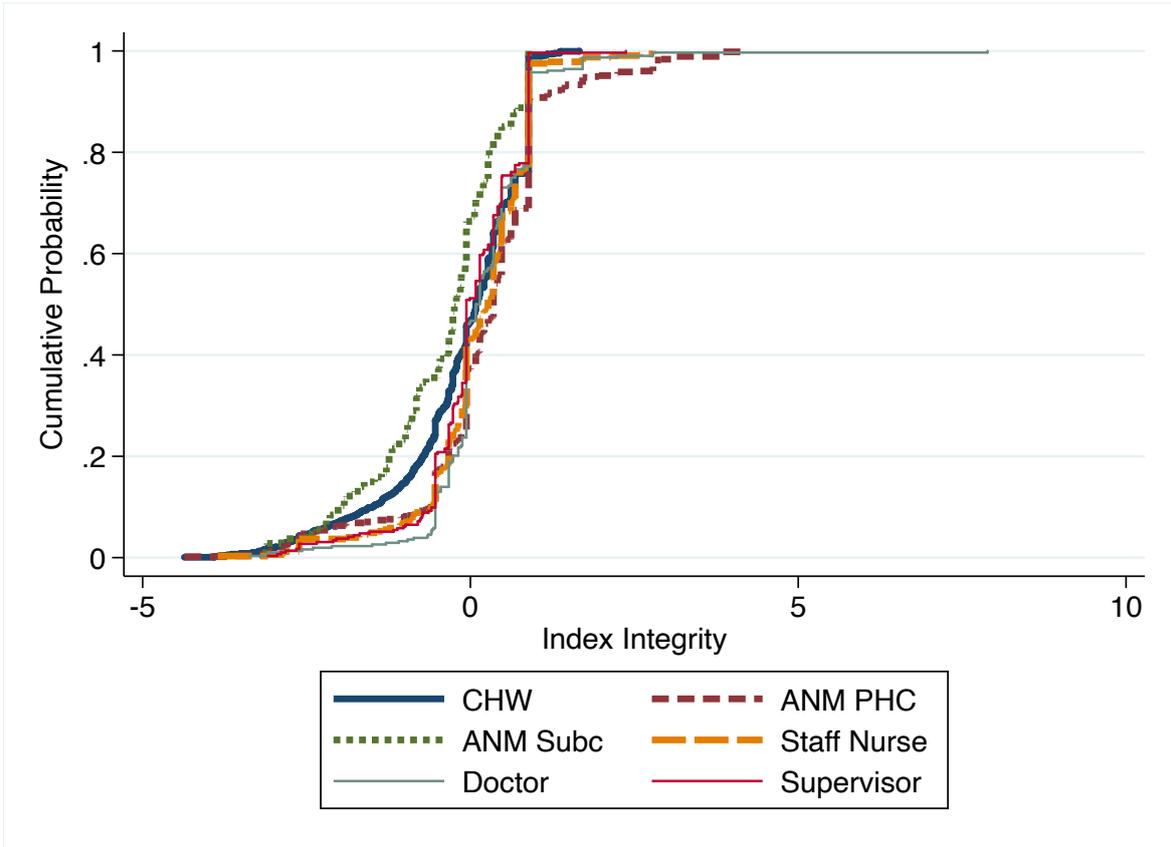


Figure 35

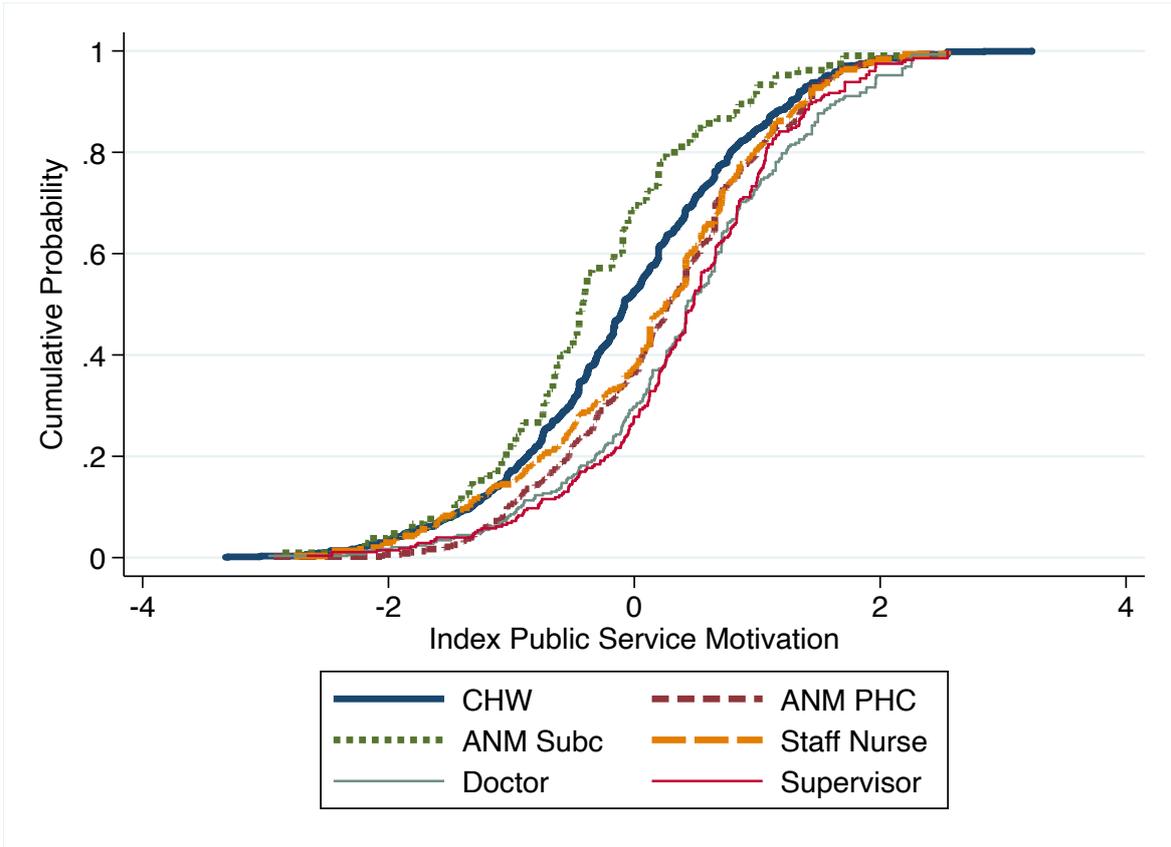


Figure 36

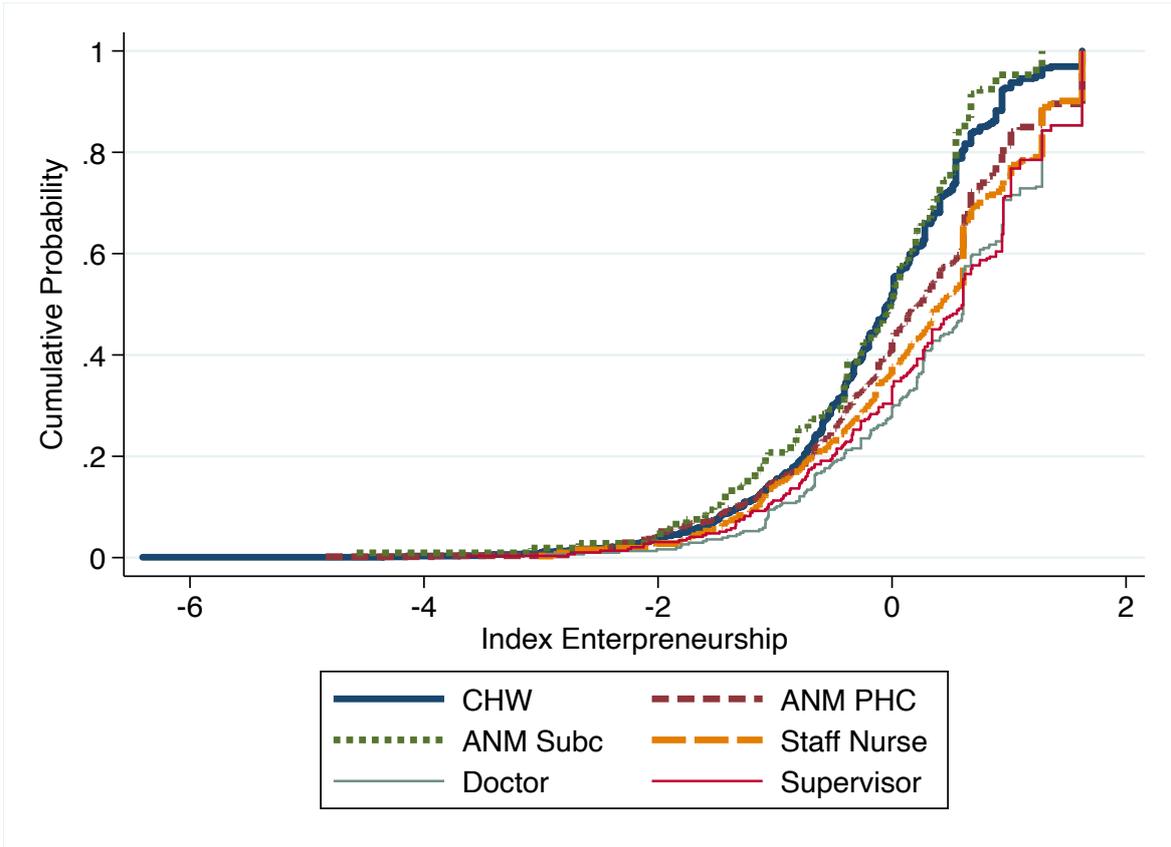


Figure 37

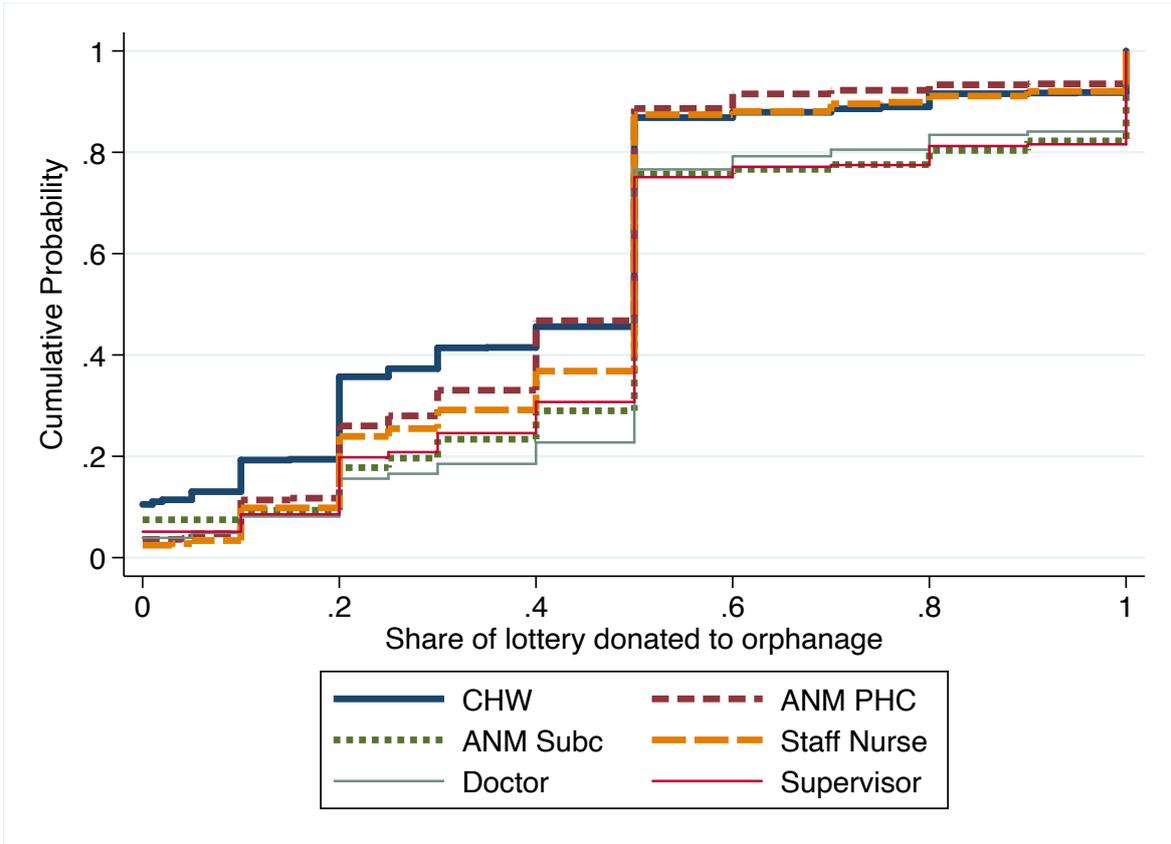


Figure 38

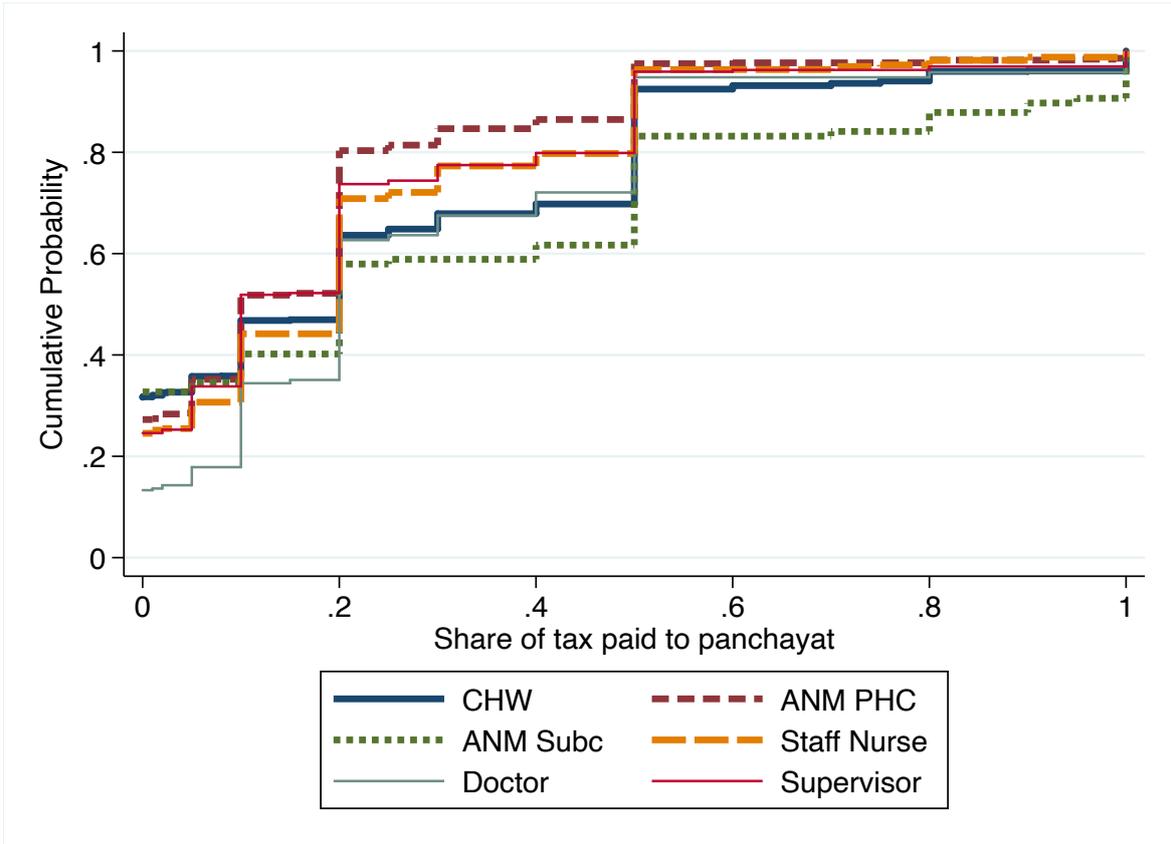


Figure 39

## 18 Comparison of Selection Traits across respondent-types - All politicians

Table 57

	(1)	(2)	(3)	(4)	(5)
	Mukhiya	GP Pol	Pan Sam	Zilla Par	MLA/MP
	mean/sd	mean/sd	mean/sd	mean/sd	mean/sd
Male	0.66 (0.47)	0.66 (0.48)	0.63 (0.48)	0.50 (0.51)	1.00 (0.00)
ST, ST or OBC	1.80 (0.40)	1.83 (0.38)	0.81 (0.40)	0.64 (0.49)	0.71 (0.46)
Age	42.45 (9.65)	42.25 (10.65)	40.72 (6.91)	42.82 (9.27)	55.08 (8.16)
Illiterate	0.01 (0.12)	0.10 (0.30)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Have ration card	0.52 (0.50)	0.73 (0.44)	. (.)	. (.)	. (.)
Have Aadhar card	1.00 (0.00)	1.00 (0.04)	. (.)	. (.)	. (.)
Permanent structured house	0.82 (0.38)	0.46 (0.50)	. (.)	. (.)	. (.)
Number of items owned (Max=12)	7.93 (2.09)	5.40 (2.01)	. (.)	. (.)	. (.)
Asset Index (ICW)	0.64 (1.00)	-0.10 (0.96)	. (.)	. (.)	. (.)
Prefers jobs for the poor to health investment	0.18 (0.39)	0.21 (0.41)	0.31 (0.47)	0.14 (0.36)	0.56 (0.50)
Prefers cash for the poor to health investment	0.08 (0.27)	0.12 (0.32)	0.13 (0.33)	0.00 (0.00)	0.21 (0.41)
Prefers jobs for the poor to road investment	0.55 (0.50)	0.57 (0.49)	0.61 (0.49)	0.54 (0.51)	0.81 (0.39)
Prefers cash for the poor to road investment	0.21 (0.41)	0.28 (0.45)	0.22 (0.41)	0.15 (0.36)	0.25 (0.44)
Prefers health to road investment	0.82 (0.38)	0.83 (0.38)	0.94 (0.24)	0.96 (0.19)	0.79 (0.41)
Government should give electricity for free (incl. only poor)	0.56 (0.50)	0.67 (0.47)	0.91 (0.29)	0.86 (0.36)	0.93 (0.25)
Government should waive farmer loans (incl. only poor)	0.89 (0.31)	0.91 (0.29)	0.62 (0.49)	0.71 (0.46)	0.77 (0.42)
Government teachers are very or somewhat good	0.54 (0.50)	0.58 (0.49)	0.40 (0.49)	0.50 (0.51)	0.65 (0.48)
Government doctors and nurses are very or somewhat good	0.60 (0.49)	0.62 (0.49)	0.56 (0.50)	0.54 (0.51)	0.65 (0.48)
Observations	219	1384	119	28	48

Note:

Table 58

	(1)	(2)	(3)	(4)	(5)
	Mukhiya	GP Pol	Pan Sam	Zilla Par	MLA/MP
	mean/sd	mean/sd	mean/sd	mean/sd	mean/sd
Cognitive ability - Number of digits remembered	2.93 (1.33)	2.46 (1.33)	3.55 (1.78)	3.79 (1.66)	3.58 (1.64)
Share of lottery donated to orphanage	0.65 (0.32)	0.50 (0.31)	0.45 (0.28)	0.58 (0.29)	0.69 (0.35)
Share of tax paid to panchayat	0.62 (0.36)	0.42 (0.34)	0.30 (0.28)	0.41 (0.32)	0.56 (0.40)
Index Personality Traits	0.11 (1.01)	-0.11 (0.98)	0.63 (0.75)	0.52 (1.08)	0.97 (0.70)
Index Integrity	0.02 (0.93)	-0.01 (0.95)	-0.24 (1.23)	0.05 (1.00)	0.72 (1.57)
Index Public Service Motivation	0.25 (0.86)	-0.09 (1.00)	0.27 (1.00)	0.67 (1.20)	0.86 (0.62)
Index Entrepreneurship	0.02 (0.91)	-0.01 (1.00)	0.24 (1.14)	0.35 (0.88)	0.41 (0.84)
Observations	219	1384	119	28	48

Note:

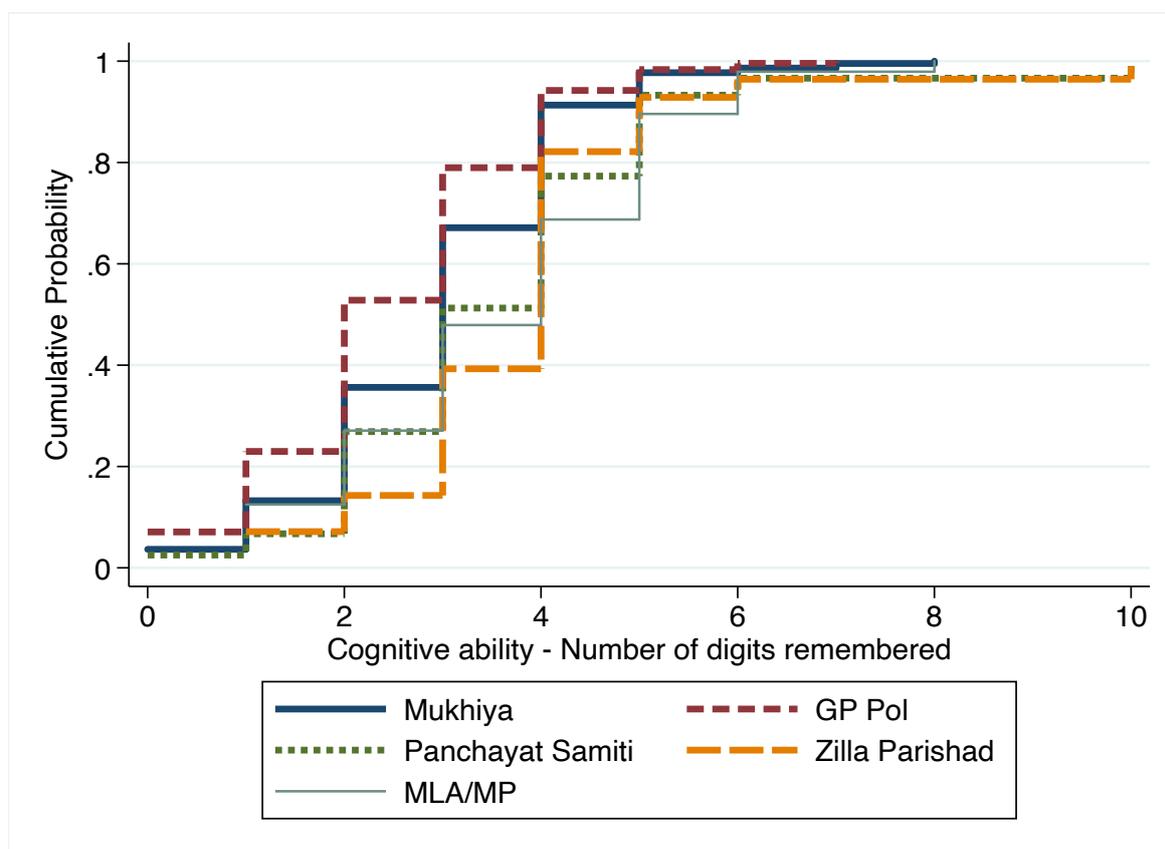


Figure 40

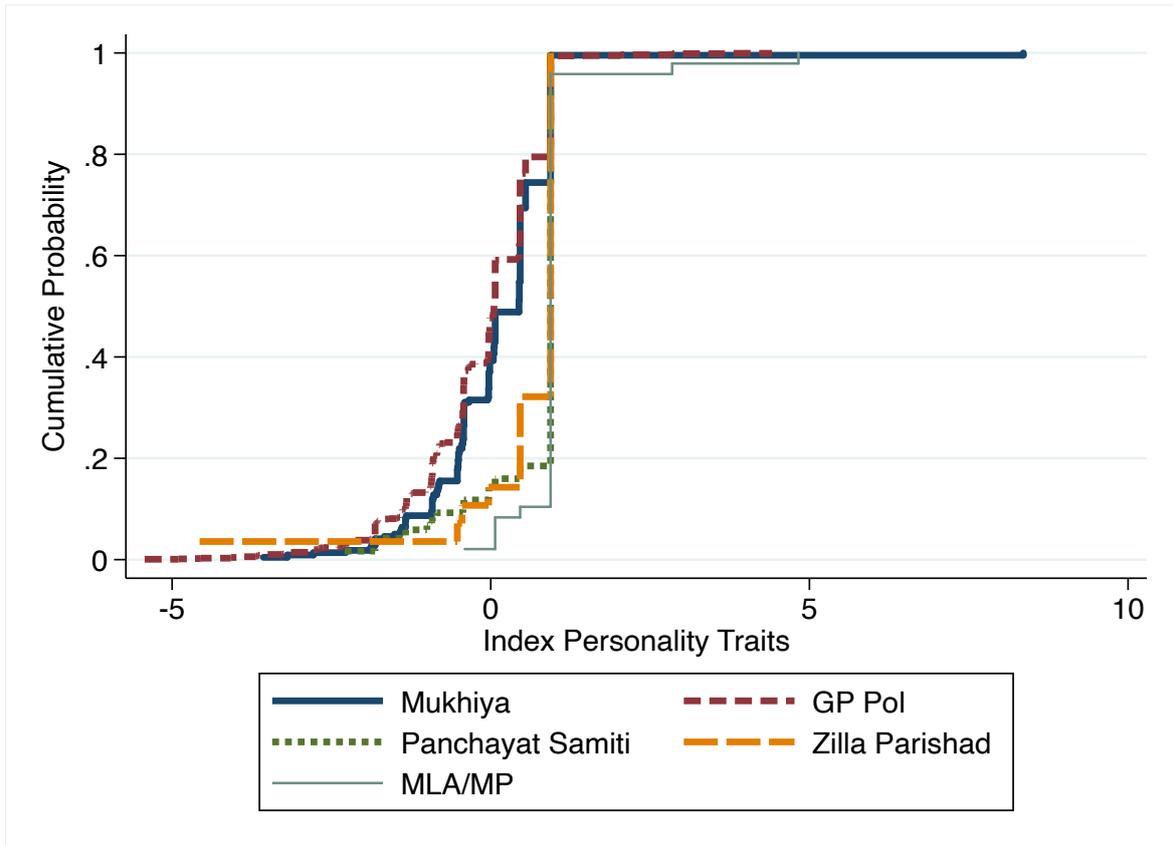


Figure 41

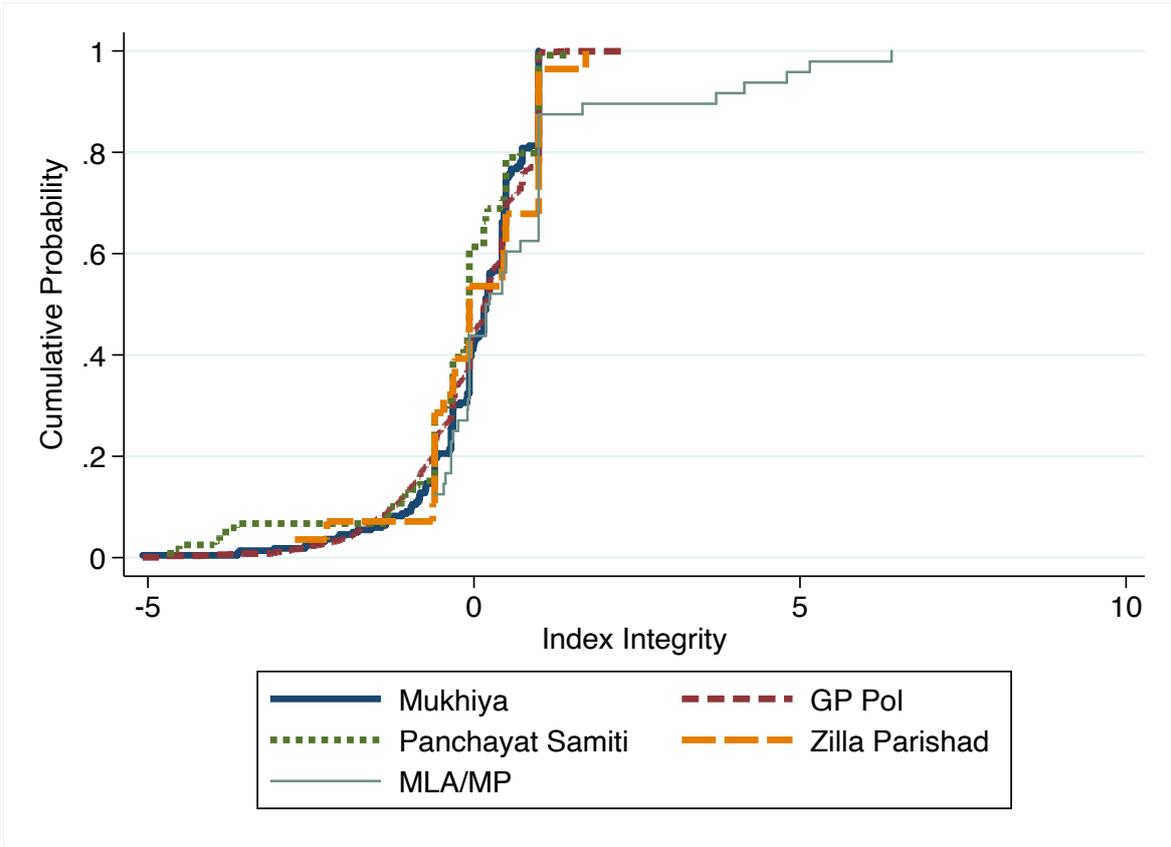


Figure 42

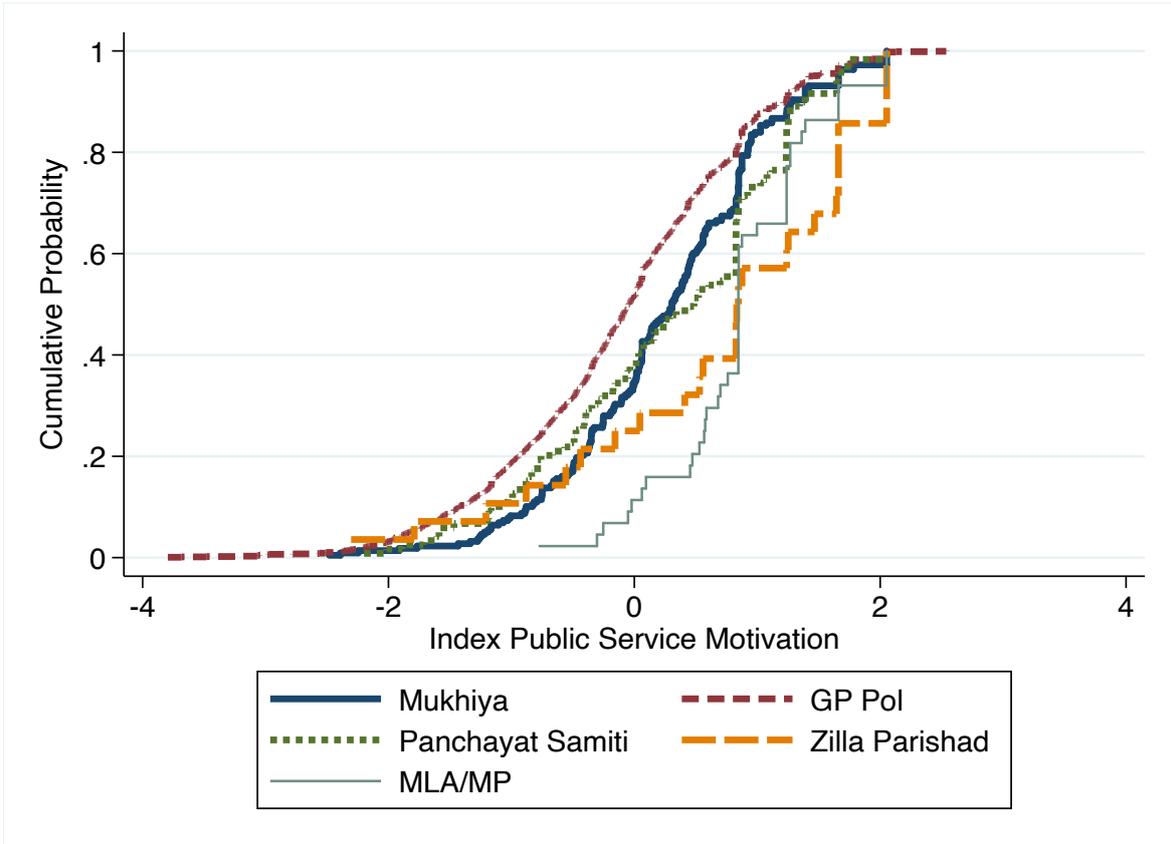


Figure 43

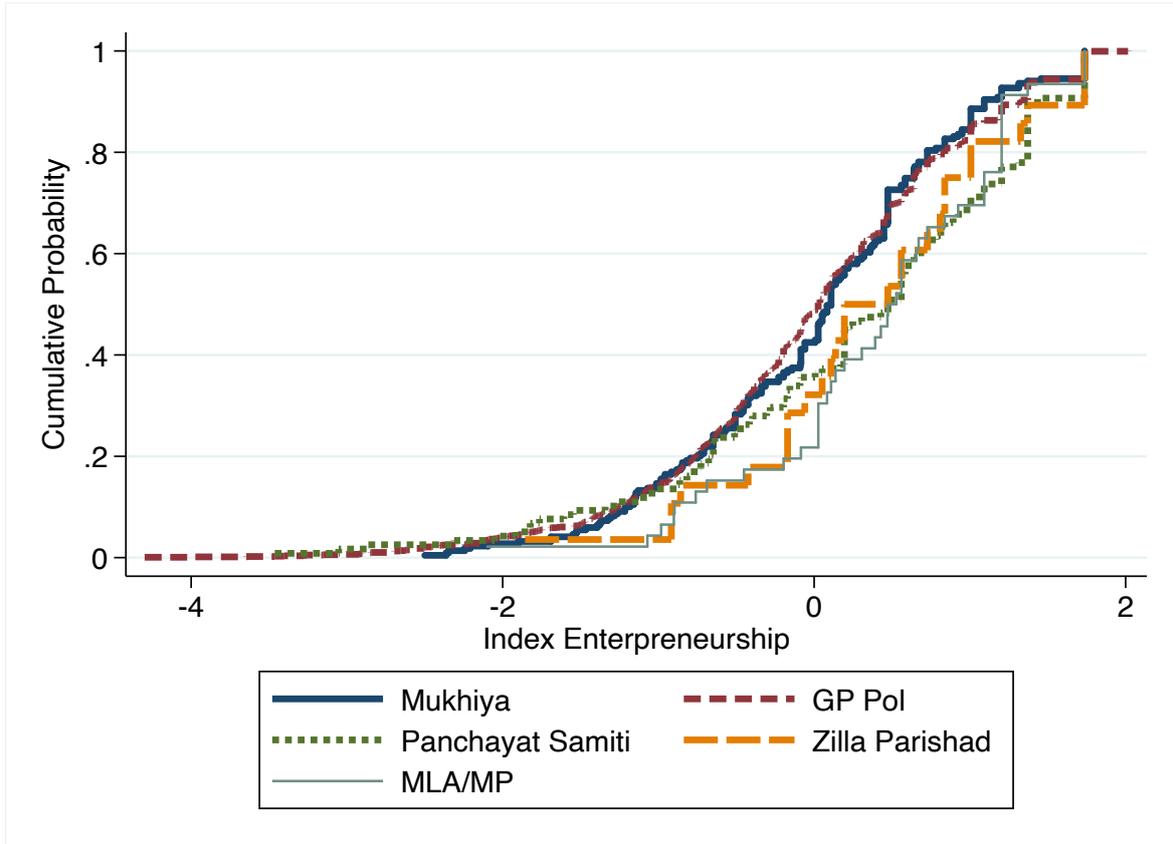


Figure 44

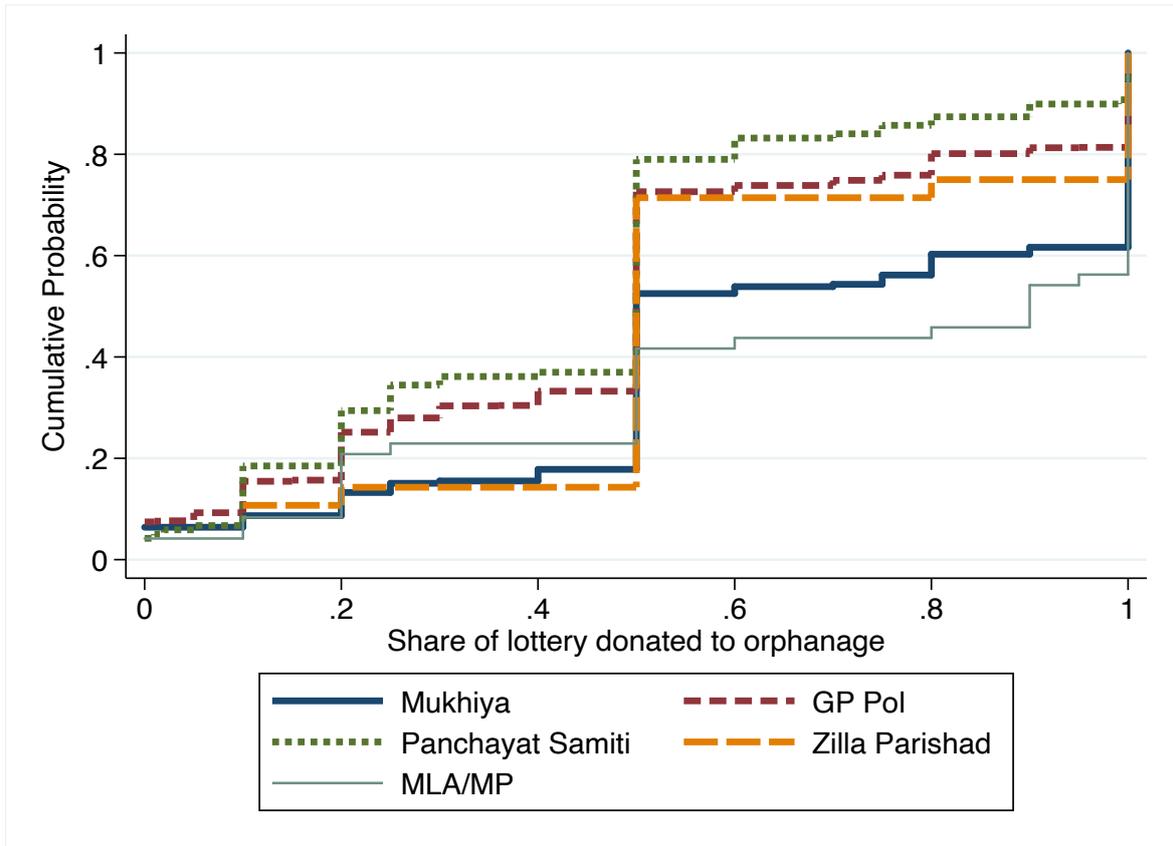


Figure 45

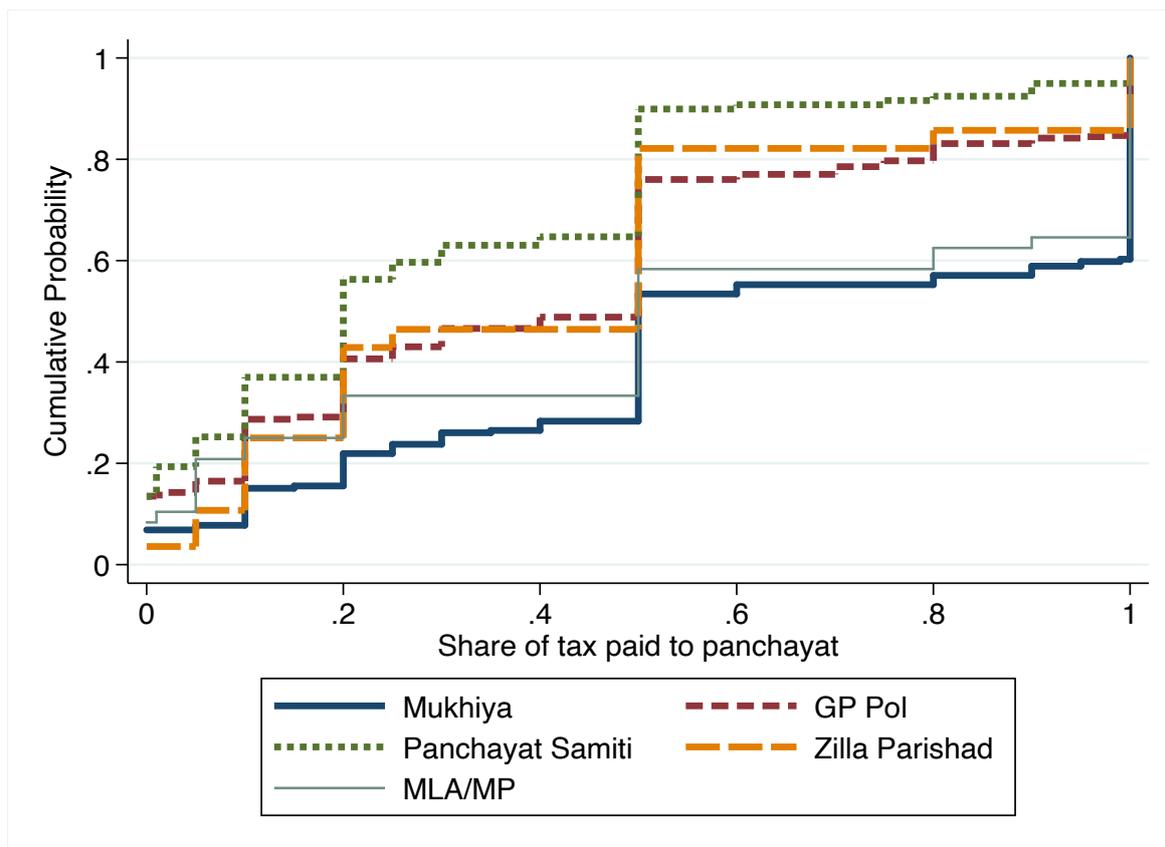


Figure 46

## 19 Correlates of Citizen-Reported Access to Maternal and Child Health Services

One module in the survey asked whether the household included any woman who is currently pregnant, or had been in the last five years, and is available to answer questions about access to maternal and child health and nutrition services. About 23 percent of our household sample, totaling a little over 1000 observations, contains responses of pregnant women or young mothers to questions about whether they received ante-natal care, iron and folic acid, post-natal care, and nutrition supplements. Further, we ask which type of provider these services are received from. By and large, we find that women report relying on community health workers—the ASHAs and AWWs—for these services. For example, among the 72 percent of women who said they received iron and folic acid, more than 75 percent say they received it from the CHWs. At the same time, there is considerable variation across women in whether they receive these services, and scope for CHWs to expand coverage. For example, only 10 percent of women report receiving more than three ante-natal checkups.

In this section we examine variation in women-reported access to maternal and child health services. We find no robust evidence that the selection traits of CHWs are systematically correlated with service delivery. However, we do find that the average reported measures of public service motivation among Gram Panchayat politicians tends to be correlated with greater access to services. We also find some evidence that respondents belonging to Muslim households are less likely to receive services.

Table 59: Iron Folic Acid Received from Community Health Workers

	(1)		(2)	
	IFA Received CHW		IFA Received CHW(FA)	
<i>Selection traits - GP Pol</i>				
(mean) index_psm	0.251***	[0.080]	0.242***	[0.079]
(mean) index_personality	-0.155*	[0.089]	-0.144	[0.089]
(mean) index_integrity	-0.051	[0.068]	-0.043	[0.071]
(mean) index_enterpreneur	0.121*	[0.072]	0.119*	[0.072]
<i>Selection traits - CHW</i>				
(mean) index_psm	-0.137**	[0.068]	-0.154**	[0.069]
(mean) index_personality	0.026	[0.078]	0.024	[0.077]
(mean) index_integrity	-0.110*	[0.063]	-0.102	[0.063]
(mean) index_enterpreneur	0.110*	[0.062]	0.104*	[0.062]
(mean) index_efficacy	0.074	[0.073]	0.113	[0.085]
<i>Selection traits - SHGs</i>				
(mean) index_psm	-0.029	[0.051]	-0.034	[0.051]
(mean) index_personality	0.055	[0.069]	0.046	[0.070]
(mean) index_integrity	0.044	[0.068]	0.034	[0.068]
(mean) index_enterpreneur	-0.032	[0.055]	-0.021	[0.054]
<i>Political Competition</i>				
Working on health issues can help re-election	-0.494**	[0.225]	-0.503**	[0.223]
Would vote for candidate who bribes	-0.013	[0.083]	-0.012	[0.083]
<i>Socio-economic Indicators</i>				
Have ration card	0.072	[0.076]	0.067	[0.077]
Asset Index (ICW)	-0.026	[0.026]	-0.023	[0.026]
SC/ST	0.267**	[0.114]	0.275**	[0.115]
OBC	0.118	[0.095]	0.121	[0.095]
Muslim	-0.257**	[0.105]	-0.247**	[0.104]
Below Primary	0.019	[0.117]	0.011	[0.118]
Below Secondary	0.066	[0.089]	0.056	[0.090]
Above Secondary	-0.020	[0.093]	-0.033	[0.095]
Above High	-0.156	[0.119]	-0.172	[0.119]
No of Adults	0.010	[0.016]	0.010	[0.016]
No of Kids	-0.044***	[0.016]	-0.045***	[0.016]
Landless	-0.064	[0.087]	-0.066	[0.087]
Small Holder	-0.253***	[0.092]	-0.251***	[0.092]
Low Expenditure	-0.145	[0.096]	-0.147	[0.096]
Medium Expenditure	-0.002	[0.076]	-0.003	[0.076]
(mean) fully_agree			0.196	[0.156]
Constant	0.758***	[0.184]	0.678***	[0.186]
Observations	674		674	
R-Squared				
r2	0.172		0.174	

Note: District FE Added

Table 60: Mother Received Supplementary Food from Community Health Workers

	(1)		(2)	
	Mother Received Supp Food		Mother Received Supp Food(FA)	
<i>Selection traits - GP Pol</i>				
(mean) index_psm	0.097*	[0.058]	0.092	[0.060]
(mean) index_personality	0.010	[0.065]	0.017	[0.065]
(mean) index_integrity	-0.010	[0.054]	-0.004	[0.054]
(mean) index_entrepreneur	0.039	[0.057]	0.038	[0.057]
<i>Selection traits - CHW</i>				
(mean) index_psm	0.077	[0.058]	0.066	[0.058]
(mean) index_personality	-0.011	[0.061]	-0.012	[0.060]
(mean) index_integrity	-0.095**	[0.046]	-0.090*	[0.046]
(mean) index_entrepreneur	-0.001	[0.064]	-0.006	[0.065]
(mean) index_efficacy	0.046	[0.053]	0.072	[0.057]
<i>Selection traits - SHGs</i>				
(mean) index_psm	-0.020	[0.043]	-0.023	[0.043]
(mean) index_personality	0.038	[0.054]	0.032	[0.055]
(mean) index_integrity	0.016	[0.039]	0.009	[0.040]
(mean) index_entrepreneur	0.069*	[0.039]	0.076*	[0.039]
<i>Political Competition</i>				
Working on health issues can help re-election	0.213	[0.161]	0.208	[0.161]
Would vote for candidate who bribes	0.119*	[0.067]	0.120*	[0.068]
<i>Socio-economic Indicators</i>				
Have ration card	-0.014	[0.059]	-0.017	[0.059]
Asset Index (ICW)	0.010	[0.022]	0.012	[0.022]
SC/ST	0.125	[0.094]	0.130	[0.095]
OBC	0.093	[0.075]	0.094	[0.076]
Muslim	-0.061	[0.081]	-0.055	[0.081]
Below Primary	0.128	[0.083]	0.124	[0.084]
Below Secondary	0.021	[0.071]	0.014	[0.070]
Above Secondary	-0.067	[0.070]	-0.076	[0.070]
Above High	-0.087	[0.098]	-0.098	[0.099]
No of Adults	0.014	[0.011]	0.014	[0.011]
No of Kids	-0.019	[0.012]	-0.019	[0.013]
Landless	0.053	[0.077]	0.052	[0.078]
Small Holder	0.043	[0.084]	0.046	[0.083]
Low Expenditure	-0.072	[0.088]	-0.073	[0.088]
Medium Expenditure	-0.006	[0.062]	-0.007	[0.062]
(mean) fully_agree			0.133	[0.119]
Constant	0.404***	[0.145]	0.348**	[0.156]
Observations	705		705	
R-Squared				
r2	0.120		0.121	

Note: District FE Added

Table 61: Child Received Supplementary Food from Community Health Workers

	(1)		(2)	
	Child Received Supp Food		Child Received Supp Food(FA)	
<i>Selection traits - GP Pol</i>				
(mean) index_psm	0.280*	[0.155]	0.277*	[0.156]
(mean) index_personality	-0.026	[0.192]	-0.022	[0.195]
(mean) index_integrity	0.048	[0.139]	0.051	[0.138]
(mean) index_enterpreneur	0.064	[0.171]	0.063	[0.172]
<i>Selection traits - CHW</i>				
(mean) index_psm	0.045	[0.134]	0.039	[0.141]
(mean) index_personality	0.310**	[0.157]	0.309*	[0.157]
(mean) index_integrity	0.162	[0.132]	0.165	[0.134]
(mean) index_enterpreneur	-0.102	[0.114]	-0.105	[0.114]
(mean) index_efficacy	0.053	[0.130]	0.067	[0.149]
<i>Selection traits - SHGs</i>				
(mean) index_psm	-0.010	[0.097]	-0.012	[0.096]
(mean) index_personality	0.012	[0.145]	0.008	[0.148]
(mean) index_integrity	-0.154*	[0.089]	-0.158*	[0.088]
(mean) index_enterpreneur	0.183*	[0.108]	0.187*	[0.109]
<i>Political Competition</i>				
Working on health issues can help re-election	-0.410	[0.390]	-0.413	[0.394]
Would vote for candidate who bribes	0.229	[0.176]	0.229	[0.176]
<i>Socio-economic Indicators</i>				
Have ration card	0.232*	[0.137]	0.231*	[0.136]
Asset Index (ICW)	-0.025	[0.069]	-0.024	[0.070]
SC/ST	0.595***	[0.214]	0.597***	[0.215]
OBC	0.184	[0.171]	0.184	[0.172]
Muslim	-0.186	[0.218]	-0.183	[0.218]
Below Primary	0.694***	[0.266]	0.692**	[0.267]
Below Secondary	0.063	[0.187]	0.060	[0.188]
Above Secondary	-0.024	[0.222]	-0.028	[0.220]
Above High	0.103	[0.260]	0.097	[0.259]
No of Adults	-0.005	[0.029]	-0.005	[0.029]
No of Kids	-0.017	[0.036]	-0.017	[0.036]
Landless	0.261	[0.184]	0.261	[0.184]
Small Holder	0.163	[0.219]	0.165	[0.220]
Low Expenditure	-0.433**	[0.202]	-0.433**	[0.202]
Medium Expenditure	0.014	[0.160]	0.014	[0.160]
(mean) fully_agree			0.072	[0.371]
Constant	0.797*	[0.445]	0.767	[0.505]
Observations	707		707	
R-Squared				
r2	0.136		0.137	

Note: District FE Added

Table 62: Ante Natal Care Received from Community Health Workers

	(1)		(2)	
	ANC Received CHW		ANC Received CHW(FA)	
<i>Selection traits - GP Pol</i>				
(mean) index_psm	0.069	[0.094]	0.068	[0.095]
(mean) index_personality	0.064	[0.109]	0.066	[0.110]
(mean) index_integrity	-0.033	[0.081]	-0.032	[0.082]
(mean) index_entrepreneur	-0.015	[0.093]	-0.015	[0.093]
<i>Selection traits - CHW</i>				
(mean) index_psm	-0.073	[0.079]	-0.076	[0.080]
(mean) index_personality	0.156*	[0.091]	0.156*	[0.091]
(mean) index_integrity	-0.054	[0.065]	-0.053	[0.065]
(mean) index_entrepreneur	-0.063	[0.061]	-0.065	[0.062]
(mean) index_efficacy	0.020	[0.067]	0.027	[0.077]
<i>Selection traits - SHGs</i>				
(mean) index_psm	0.038	[0.058]	0.037	[0.059]
(mean) index_personality	0.044	[0.075]	0.042	[0.076]
(mean) index_integrity	-0.085*	[0.051]	-0.086	[0.053]
(mean) index_entrepreneur	0.116*	[0.062]	0.118*	[0.062]
<i>Political Competition</i>				
Working on health issues can help re-election	-0.397	[0.250]	-0.398	[0.250]
Would vote for candidate who bribes	0.225**	[0.107]	0.225**	[0.108]
<i>Socio-economic Indicators</i>				
Have ration card	0.119	[0.080]	0.118	[0.080]
Asset Index (ICW)	-0.009	[0.032]	-0.009	[0.032]
SC/ST	0.105	[0.114]	0.106	[0.114]
OBC	-0.009	[0.106]	-0.009	[0.106]
Muslim	-0.309***	[0.107]	-0.308***	[0.107]
Below Primary	-0.021	[0.135]	-0.022	[0.135]
Below Secondary	-0.119	[0.099]	-0.120	[0.100]
Above Secondary	0.010	[0.114]	0.008	[0.115]
Above High	-0.077	[0.116]	-0.080	[0.118]
No of Adults	-0.004	[0.016]	-0.005	[0.016]
No of Kids	-0.013	[0.018]	-0.013	[0.018]
Landless	0.206**	[0.097]	0.205**	[0.097]
Small Holder	0.082	[0.103]	0.082	[0.103]
Low Expenditure	0.016	[0.103]	0.016	[0.103]
Medium Expenditure	-0.021	[0.077]	-0.021	[0.077]
(mean) fully_agree			0.034	[0.176]
Constant	0.741***	[0.233]	0.727***	[0.246]
Observations	662		662	
R-Squared				
r2	0.110		0.110	

Note: District FE Added

Table 63: Post Natal Care Never Received from Community Health Workers

	(1)	(2)	(3)	(4)
	PNC Never	PNC Never(FA)	PNC RarNev	PNC RarNev(FA)
<i>Selection traits - GP Pol</i>				
(mean) index_psm	-0.089* [0.047]	-0.090* [0.046]	-0.139***[0.039]	-0.136*** [0.039]
(mean) index_personality	0.114** [0.045]	0.116***[0.044]	0.122***[0.045]	0.117** [0.045]
(mean) index_integrity	0.054 [0.039]	0.054 [0.039]	0.061 [0.044]	0.058 [0.045]
(mean) index_entrepreneur	-0.122***[0.045]	-0.122***[0.046]	-0.111** [0.048]	-0.110** [0.048]
<i>Selection traits - CHW</i>				
(mean) index_psm	0.008 [0.038]	0.006 [0.038]	-0.028 [0.037]	-0.021 [0.038]
(mean) index_personality	0.026 [0.041]	0.026 [0.041]	-0.007 [0.040]	-0.006 [0.041]
(mean) index_integrity	0.030 [0.032]	0.031 [0.032]	0.062* [0.035]	0.059* [0.036]
(mean) index_entrepreneur	-0.012 [0.034]	-0.013 [0.035]	0.025 [0.033]	0.028 [0.033]
(mean) index_efficacy	0.025 [0.040]	0.029 [0.043]	0.045 [0.040]	0.029 [0.042]
<i>Selection traits - SHGs</i>				
(mean) index_psm	0.046* [0.027]	0.046* [0.026]	0.033 [0.028]	0.035 [0.028]
(mean) index_personality	-0.021 [0.034]	-0.022 [0.034]	-0.074** [0.033]	-0.070** [0.033]
(mean) index_integrity	0.004 [0.027]	0.003 [0.027]	-0.007 [0.028]	-0.003 [0.028]
(mean) index_entrepreneur	0.037 [0.028]	0.038 [0.027]	0.009 [0.030]	0.005 [0.029]
<i>Political Competition</i>				
Working on health issues can help re-election	0.250** [0.101]	0.249** [0.102]	0.304***[0.109]	0.307*** [0.107]
Would vote for candidate who bribes	0.015 [0.046]	0.015 [0.046]	0.002 [0.050]	0.002 [0.050]
<i>Socio-economic Indicators</i>				
Have ration card	-0.006 [0.038]	-0.006 [0.038]	-0.006 [0.041]	-0.004 [0.042]
Asset Index (ICW)	-0.014 [0.015]	-0.014 [0.016]	-0.030* [0.015]	-0.031** [0.015]
SC/ST	-0.086 [0.058]	-0.085 [0.058]	-0.071 [0.061]	-0.073 [0.062]
OBC	-0.052 [0.050]	-0.052 [0.050]	-0.022 [0.055]	-0.022 [0.055]
Muslim	0.077 [0.062]	0.078 [0.062]	0.064 [0.063]	0.060 [0.063]
Below Primary	0.040 [0.063]	0.039 [0.063]	0.002 [0.061]	0.005 [0.062]
Below Secondary	0.003 [0.043]	0.002 [0.044]	-0.017 [0.045]	-0.013 [0.045]
Above Secondary	-0.029 [0.046]	-0.030 [0.047]	-0.034 [0.048]	-0.029 [0.048]
Above High	-0.015 [0.053]	-0.017 [0.053]	-0.049 [0.053]	-0.042 [0.053]
No of Adults	-0.004 [0.008]	-0.004 [0.008]	-0.008 [0.008]	-0.008 [0.008]
No of Kids	-0.003 [0.010]	-0.003 [0.010]	0.002 [0.010]	0.003 [0.010]
Landless	-0.072 [0.052]	-0.072 [0.052]	-0.138***[0.051]	-0.137*** [0.051]
Small Holder	-0.036 [0.054]	-0.036 [0.054]	-0.064 [0.057]	-0.066 [0.057]
Low Expenditure	-0.081 [0.055]	-0.081 [0.055]	-0.061 [0.057]	-0.060 [0.057]
Medium Expenditure	-0.068* [0.039]	-0.068* [0.039]	-0.086** [0.041]	-0.085** [0.042]
(mean) fully_agree		0.021 [0.079]		-0.084 [0.081]
Constant	0.465*** [0.116]	0.457*** [0.120]	0.513*** [0.116]	0.548*** [0.121]
Observations	707	707	707	707
R-Squared				
r2	0.113	0.113	0.149	0.150

Note: District FE Added

## **20 Use of Government Health Facilities for Curative Care - Increasing in Political Power**

As discussed in Section 5, citizens report greater reliance on publicly provided preventive and promotive health services than on curative health services. For example, in response to a question about how often they use government health facilities when someone in the family falls ill, only 12 percent answer "often", while 47 percent answer "rarely" or "never". This is consistent with the findings from the work of Das et al (2016) that people in rural India tend to rely on private providers for curative health care. Table 64 below shows that respondents who are in positions of political power (such as elected politicians at the Gram Panchayat, Block and District Panchayats, MLAs and MPs) are significantly more likely to use government clinics or hospitals for curative care needs.<sup>13</sup>

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<sup>13</sup>We are unable to control for measures of income and assets because these questions were not asked in the surveys of higher-level politicians owing to sensitivity issues and time constraints in getting these powerful respondents to sit down for a survey. We hypothesize that the estimated influence of political power in accessing curative care in government hospitals may be even higher if we were to be able to control for income, since higher-level politicians would tend to have higher incomes, and higher incomes are associated with greater use of expensive private care facilities.

Table 64: Use of Government Health Facilities for:

	(1)		(2)	
	Common Illnesses		Hospitalization	
<i>Increasing Political Power</i>				
Contender for Mukhiya	0.035*	[0.019]	0.025	[0.021]
Ward Member	0.095***	[0.019]	0.085***	[0.020]
Mukhiya	0.153***	[0.034]	0.061*	[0.035]
Panchayat Samiti	0.389***	[0.045]	0.260***	[0.044]
Zilla Parishad	0.339***	[0.093]	0.262***	[0.086]
MLA/MP	0.335***	[0.072]	0.172**	[0.071]
<i>Socio-economic Indicators</i>				
Muslim	0.006	[0.018]	0.027	[0.021]
SC/ST	0.047**	[0.018]	0.087***	[0.020]
OBC	0.058***	[0.016]	0.096***	[0.017]
Below Primary	0.014	[0.022]	-0.013	[0.024]
Below Secondary	-0.003	[0.016]	0.022	[0.018]
Above Secondary	-0.000	[0.017]	0.004	[0.019]
Above High	-0.030	[0.022]	0.007	[0.025]
Male	0.019	[0.013]	0.003	[0.014]
Age	0.001**	[0.000]	0.002***	[0.001]
Constant	0.159***	[0.029]	0.239***	[0.031]
Observations	6345		6345	
R-Squared				
r2	0.029		0.018	

Note:

## 21 Demand for Public Policies—comparison across respondent types

The tables below examine how different types of respondents in our survey answer questions aimed at measuring demand from public policy. The omitted category of respondent for all the reported regressions is the no-office-bearing citizen respondent. Table 65 shows that citizens are generally more likely than other respondents to prioritize public spending on health, over and above cash and jobs for the poor, and above roads. SHG members are

less likely than the average citizens to pick health over jobs and cash, even after controlling for gender of respondent. In contrast to SHG members, local GP politicians—such as contenders for the Mukhiya position in the last election of 2016—are more likely to choose health over jobs and cash. Higher-tier politicians—MLAs and MPs—are substantially less likely to choose health over jobs and cash. Among health service providers, as one might expect, there is greater prioritization of health spending; but surprisingly, those in supervisory positions are less likely than the average citizen to pick health spending over job creation programs. Across all respondents, health spending is much more likely to be preferred over roads.

Another surprising finding in the data is that citizens and Gram Panchayat politicians are less likely than other respondents to demand free electricity (Table 67). The question in the survey asked respondents whether they think governments should provide electricity for free. Higher-tier politicians are substantially more likely to answer the question affirmatively, that the government should provide free electricity. Educated medical professionals—the doctors and supervisors—are also much more likely than the average rural citizen to say that the government should provide free electricity. This finding may be worth probing with a more sophisticated research design, across different contexts. The rise in protests around the world when governments try to pursue price reforms is a concern of our times, with little research and empirical evidence on what drives these protests, or whose views are represented in them.

In Tables 65-68 we do not include the usual correlates of income and education because these questions were not asked of higher-tier politicians (to keep their interview as short as possible, and to avoid offending them).<sup>14</sup> Tables 69-72 includes income and education variables such that the sample gets reduced to the village-level respondents of citizens, SHG members, and GP politicians. Among these respondents, we find that SC/ST respondents are more likely to choose jobs over health, but not cash. We also find that SC/ST respondents are more likely to say government should provide free electricity. Indicators of lower income and education are also correlated with being more likely to say that governments should provide free electricity.

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<sup>14</sup>Also, the general education module was not administered to health workers because we asked them more specific questions about their medical education and training.

Table 65: Demand - Health vs Other Public Services

	(1)	(2)	(3)
	Health Over Jobs	Health Over Cash	Health Over Roads
<i>Respondents</i>			
SHG	-0.047** [0.022]	-0.036** [0.017]	0.007 [0.018]
Contender for Mukhiya	0.049*** [0.018]	0.022* [0.013]	0.022 [0.016]
Ward Member	0.034** [0.018]	-0.010 [0.014]	0.019 [0.016]
Mukhiya	0.048* [0.028]	0.034* [0.020]	-0.005 [0.028]
Panchayat Samiti	-0.090** [0.045]	-0.016 [0.031]	0.117*** [0.024]
Zilla Parishad	0.083 [0.068]	0.105*** [0.010]	0.138*** [0.037]
MLA/MP	-0.364*** [0.073]	-0.110* [0.060]	-0.037 [0.060]
CHW	0.101*** [0.016]	0.049*** [0.012]	0.050*** [0.014]
ANM Subcentre	0.063 [0.042]	0.023 [0.030]	-0.012 [0.039]
ANM PHC	0.071*** [0.022]	0.016 [0.016]	0.117*** [0.015]
Staff Nurse	0.051* [0.027]	0.047*** [0.017]	0.105*** [0.017]
Doctors	0.045* [0.024]	0.066*** [0.014]	0.105*** [0.019]
Supervisors	-0.085*** [0.029]	-0.006 [0.020]	0.096*** [0.019]
<i>Media Access</i>			
Watch TV Daily	0.014 [0.010]	0.034*** [0.007]	0.065*** [0.009]
Receive Newspaper Daily	0.045*** [0.013]	0.009 [0.010]	0.001 [0.011]
Read Newspaper Daily	0.011 [0.014]	0.013 [0.010]	-0.016 [0.012]
Rely on Newspaper for News	0.020* [0.011]	0.007 [0.008]	0.034*** [0.009]
<i>Social Indicators</i>			
Male	0.058*** [0.013]	0.005 [0.010]	-0.022* [0.011]
Married	0.026 [0.020]	-0.017 [0.014]	-0.008 [0.017]
Age	-0.000 [0.000]	-0.000 [0.000]	0.000 [0.000]
Muslim	-0.009 [0.016]	-0.057*** [0.014]	-0.070*** [0.015]
Constant	0.648*** [0.025]	0.878*** [0.018]	0.794*** [0.023]
Observations	9247	9247	9247
R-Squared			
r2	0.023	0.018	0.032

Note:

Table 66: Demand - Other Public Services

	(1)	(2)
	Jobs Over Roads	Cash Over Roads
<i>Respondents</i>		
SHG	0.056*** [0.021]	0.076*** [0.022]
Contender for Mukhiya	-0.035 [0.021]	-0.109*** [0.019]
Ward Member	-0.015 [0.020]	-0.041** [0.019]
Mukhiya	-0.040 [0.036]	-0.129*** [0.030]
Panchayat Samiti	0.021 [0.047]	-0.118*** [0.040]
Zilla Parishad	-0.062 [0.095]	-0.198*** [0.068]
MLA/MP	0.254*** [0.058]	-0.091 [0.064]
CHW	0.063*** [0.018]	0.025 [0.018]
ANM Subcentre	-0.052 [0.050]	-0.016 [0.048]
ANM PHC	0.002 [0.025]	-0.037 [0.024]
Staff Nurse	0.024 [0.030]	0.036 [0.030]
Doctors	0.039 [0.031]	-0.161*** [0.025]
Supervisors	0.089*** [0.031]	-0.103*** [0.028]
<i>Media Access</i>		
Watch TV Daily	0.015 [0.012]	-0.029** [0.011]
Receive Newspaper Daily	-0.015 [0.015]	-0.006 [0.015]
Read Newspaper Daily	-0.019 [0.016]	-0.009 [0.015]
Rely on Newspaper for News	0.017 [0.013]	0.008 [0.012]
<i>Social Indicators</i>		
Male	-0.084*** [0.014]	-0.031** [0.013]
Married	-0.012 [0.022]	0.024 [0.021]
Age	0.000 [0.000]	0.002*** [0.000]
Muslim	-0.026 [0.018]	0.040** [0.017]
Constant	0.665*** [0.028]	0.276*** [0.027]
Observations	9247	9247
R-Squared		
r2	0.019	0.024

Note:

Table 67: Respondents NOT Demanding Free Electricity and Loan Waivers

	(1)		(2)	
	No - Free Electricity		No - Farming Loan Waivers	
<i>Respondents</i>				
SHG	-0.036*	[0.020]	-0.036**	[0.017]
Contender for Mukhiya	0.108***	[0.025]	-0.001	[0.018]
Ward Member	0.058**	[0.024]	-0.025	[0.016]
Mukhiya	0.115***	[0.036]	-0.016	[0.023]
Panchayat Samiti	-0.235***	[0.030]	0.261***	[0.046]
Zilla Parishad	-0.182***	[0.066]	0.172**	[0.085]
MLA/MP	-0.320***	[0.038]	0.087	[0.062]
CHW	-0.002	[0.018]	-0.037**	[0.015]
ANM Subcentre	0.103*	[0.057]	0.038	[0.049]
ANM PHC	-0.072***	[0.023]	0.253***	[0.024]
Staff Nurse	-0.080***	[0.027]	0.254***	[0.030]
Doctors	-0.297***	[0.020]	0.056**	[0.025]
Supervisors	-0.260***	[0.023]	0.058**	[0.026]
<i>Media Access</i>				
Watch TV Daily	0.088***	[0.012]	0.006	[0.010]
Receive Newspaper Daily	0.004	[0.016]	0.010	[0.013]
Read Newspaper Daily	0.031*	[0.017]	-0.024*	[0.013]
Rely on Newspaper for News	0.007	[0.013]	-0.008	[0.010]
<i>Social Indicators</i>				
Male	0.073***	[0.014]	0.024*	[0.012]
Married	-0.014	[0.021]	-0.014	[0.020]
Age	0.000	[0.000]	0.001**	[0.000]
Muslim	-0.047***	[0.018]	-0.030***	[0.011]
Constant	0.194***	[0.029]	0.089***	[0.023]
Observations	9247		9247	
R-Squared				
r2	0.043		0.042	

Note:

Table 68: Government Teachers/Doctors Performance - Rated by Respondents

	(1)		(2)	
	Bad Performance - Teachers		Bad Performance - Doctors	
<i>Respondents</i>				
SHG	-0.121***	[0.032]	-0.114***	[0.040]
Contender for Mukhiya	0.018	[0.030]	0.032	[0.040]
Ward Member	-0.028	[0.028]	0.004	[0.038]
Mukhiya	0.025	[0.037]	-0.048	[0.044]
Panchayat Samiti	0.172***	[0.048]	-0.033	[0.049]
Zilla Parishad	0.079	[0.097]	0.004	[0.100]
MLA/MP	-0.095	[0.073]	-0.106	[0.074]
CHW	-0.170***	[0.028]	-0.283***	[0.031]
ANM Subcentre	-0.257***	[0.061]	-0.429***	[0.034]
ANM PHC	-0.172***	[0.029]	-0.365***	[0.029]
Staff Nurse	-0.249***	[0.031]	-0.413***	[0.029]
Doctors	-0.159***	[0.031]	-0.432***	[0.024]
Supervisors	-0.166***	[0.031]	-0.400***	[0.024]
<i>Media Access</i>				
Watch TV Daily	-0.041**	[0.016]	-0.048**	[0.019]
Receive Newspaper Daily	-0.024	[0.019]	-0.016	[0.024]
Read Newspaper Daily	-0.022	[0.019]	-0.018	[0.025]
Rely on Newspaper for News	-0.032**	[0.016]	-0.042**	[0.019]
<i>Social Indicators</i>				
Male	0.023	[0.021]	-0.009	[0.026]
Married	0.027	[0.031]	0.047	[0.033]
Age	0.001**	[0.001]	0.001	[0.001]
Muslim	-0.071***	[0.024]	0.127***	[0.039]
Constant	0.425***	[0.041]	0.449***	[0.047]
Observations	9247		9247	
R-Squared				
r2	0.027		0.052	

Note:

Table 69: Demand - Health vs Other Public Services

	(1)	(2)	(3)
	Health Over Jobs	Health Over Cash	Health Over Roads
<i>Respondents</i>			
SHG	-0.053** [0.022]	-0.035** [0.017]	0.004 [0.018]
Contender for Mukhiya	0.036* [0.018]	0.012 [0.014]	0.031* [0.017]
Ward Member	0.028 [0.018]	-0.015 [0.015]	0.020 [0.017]
Mukhiya	0.031 [0.030]	0.022 [0.021]	0.012 [0.029]
<i>Media Access</i>			
Watch TV Daily	0.043*** [0.013]	0.058*** [0.010]	0.077*** [0.012]
Receive Newspaper Daily	0.032* [0.017]	0.014 [0.013]	-0.016 [0.015]
Read Newspaper Daily	0.005 [0.018]	0.017 [0.014]	-0.018 [0.016]
Rely on Newspaper for News	0.016 [0.014]	0.003 [0.011]	0.031** [0.013]
<i>Socio-Economic Indicators</i>			
Male	0.034** [0.014]	-0.001 [0.011]	-0.032** [0.013]
Married	0.039* [0.023]	-0.005 [0.017]	-0.018 [0.020]
Age	-0.000 [0.000]	0.000 [0.000]	0.001** [0.000]
Muslim	-0.025 [0.019]	-0.061*** [0.016]	-0.081*** [0.018]
SC/ST	-0.060*** [0.019]	-0.015 [0.015]	-0.042** [0.017]
OBC	-0.002 [0.016]	-0.006 [0.012]	-0.042*** [0.014]
Landless	0.002 [0.016]	0.019 [0.013]	0.066*** [0.016]
Small Holder	0.014 [0.017]	0.036*** [0.013]	0.039** [0.016]
Low Expenditure	0.030 [0.018]	0.009 [0.015]	0.004 [0.017]
Medium Expenditure	0.052*** [0.013]	0.024** [0.010]	0.030** [0.012]
Asset Index (ICW)	0.014** [0.006]	0.006 [0.005]	0.012** [0.006]
Below Primary	0.089*** [0.022]	0.001 [0.018]	-0.002 [0.020]
Below Secondary	0.070*** [0.017]	0.020 [0.014]	0.040*** [0.015]
Above Secondary	0.098*** [0.018]	0.029** [0.015]	0.043** [0.017]
Above High	0.091*** [0.023]	0.023 [0.018]	0.060*** [0.021]
Constant	0.567*** [0.038]	0.806*** [0.030]	0.723*** [0.034]
Observations	6150	6150	6150
R-Squared			
r2	0.040	0.023	0.021

Note:

Table 70: Demand - Other Public Services

	(1)	(2)
	Jobs Over Roads	Cash Over Roads
<i>Respondents</i>		
SHG	0.048** [0.021]	0.061*** [0.023]
Contender for Mukhiya	-0.025 [0.022]	-0.082*** [0.020]
Ward Member	-0.022 [0.021]	-0.047** [0.019]
Mukhiya	-0.017 [0.037]	-0.079** [0.031]
<i>Media Access</i>		
Watch TV Daily	0.028* [0.015]	-0.033** [0.015]
Receive Newspaper Daily	-0.009 [0.020]	0.007 [0.019]
Read Newspaper Daily	-0.010 [0.021]	-0.026 [0.019]
Rely on Newspaper for News	-0.019 [0.016]	-0.008 [0.015]
<i>Socio-Economic Indicators</i>		
Male	-0.075*** [0.015]	-0.019 [0.015]
Married	-0.016 [0.025]	0.011 [0.024]
Age	0.001 [0.001]	0.002*** [0.001]
Muslim	-0.013 [0.021]	0.049** [0.021]
SC/ST	0.043** [0.022]	0.028 [0.021]
OBC	-0.023 [0.018]	-0.003 [0.017]
Landless	0.053*** [0.019]	0.066*** [0.018]
Small Holder	0.015 [0.020]	-0.008 [0.018]
Low Expenditure	0.019 [0.020]	0.038** [0.019]
Medium Expenditure	0.037** [0.015]	0.037*** [0.014]
Asset Index (ICW)	-0.001 [0.007]	-0.004 [0.006]
Below Primary	0.008 [0.024]	0.053** [0.024]
Below Secondary	0.036** [0.018]	0.053*** [0.018]
Above Secondary	0.022 [0.020]	0.031 [0.020]
Above High	-0.004 [0.027]	-0.009 [0.025]
Constant	0.571*** [0.042]	0.204*** [0.040]
Observations	6150	6150
R-Squared		
r2	0.023	0.033

Note:

Table 71: Respondents NOT Demanding Free Electricity and Loan Waivers

	(1)		(2)	
	No - Free Electricity		No - Farming Loan Waivers	
<i>Respondents</i>				
SHG	-0.029	[0.020]	-0.027	[0.017]
Contender for Mukhiya	0.094***	[0.026]	-0.007	[0.020]
Ward Member	0.069***	[0.025]	-0.018	[0.016]
Mukhiya	0.080**	[0.038]	-0.038	[0.025]
<i>Media Access</i>				
Watch TV Daily	0.070***	[0.017]	-0.011	[0.013]
Receive Newspaper Daily	-0.001	[0.021]	0.024	[0.016]
Read Newspaper Daily	-0.005	[0.023]	-0.023	[0.017]
Rely on Newspaper for News	-0.006	[0.018]	-0.008	[0.012]
<i>Socio-Economic Indicators</i>				
Male	0.053***	[0.016]	0.031**	[0.013]
Married	0.018	[0.025]	0.015	[0.019]
Age	-0.000	[0.001]	0.001	[0.000]
Muslim	-0.089***	[0.021]	-0.075***	[0.013]
SC/ST	-0.117***	[0.023]	-0.053***	[0.018]
OBC	-0.089***	[0.020]	-0.049***	[0.016]
Landless	-0.020	[0.019]	-0.012	[0.017]
Small Holder	0.026	[0.021]	-0.019	[0.018]
Low Expenditure	-0.021	[0.020]	-0.025	[0.017]
Medium Expenditure	-0.040***	[0.015]	-0.027**	[0.013]
Asset Index (ICW)	0.028***	[0.007]	0.001	[0.005]
Below Primary	-0.064***	[0.020]	-0.006	[0.022]
Below Secondary	0.024	[0.018]	-0.031**	[0.015]
Above Secondary	0.074***	[0.020]	-0.008	[0.017]
Above High	0.099***	[0.028]	0.012	[0.023]
Constant	0.305***	[0.044]	0.161***	[0.033]
Observations	6150		6150	
R-Squared				
r2	0.060		0.011	

Note:

Table 72: Government Teachers/Doctors Performance - Rated by Respondents

	(1)		(2)	
	Bad Performance - Teachers		Bad Performance - Doctors	
<i>Respondents</i>				
SHG	-0.112***	[0.033]	-0.104**	[0.041]
Contender for Mukhiya	0.029	[0.031]	0.030	[0.042]
Ward Member	-0.020	[0.029]	0.003	[0.038]
Mukhiya	0.033	[0.040]	-0.052	[0.049]
<i>Media Access</i>				
Watch TV Daily	-0.045**	[0.022]	-0.020	[0.028]
Receive Newspaper Daily	-0.040	[0.026]	-0.034	[0.036]
Read Newspaper Daily	0.000	[0.026]	-0.000	[0.037]
Rely on Newspaper for News	-0.030	[0.021]	-0.035	[0.028]
<i>Socio-Economic Indicators</i>				
Male	0.033	[0.024]	0.012	[0.031]
Married	0.012	[0.040]	0.031	[0.043]
Age	0.002*	[0.001]	0.001	[0.001]
Muslim	-0.087***	[0.029]	0.129***	[0.048]
SC/ST	-0.036	[0.030]	-0.034	[0.040]
OBC	-0.009	[0.025]	-0.022	[0.034]
Landless	0.034	[0.023]	0.023	[0.034]
Small Holder	0.029	[0.025]	-0.056*	[0.033]
Low Expenditure	-0.038	[0.029]	-0.082**	[0.038]
Medium Expenditure	-0.039*	[0.022]	-0.082***	[0.028]
Asset Index (ICW)	0.004	[0.010]	-0.029***	[0.011]
Below Primary	0.033	[0.038]	0.019	[0.046]
Below Secondary	-0.057**	[0.026]	-0.034	[0.033]
Above Secondary	-0.045	[0.030]	-0.037	[0.038]
Above High	-0.029	[0.040]	-0.071	[0.047]
Constant	0.467***	[0.060]	0.535***	[0.073]
Observations	6150		6150	
R-Squared				
r2	0.011		0.011	

Note:

## 22 Correlates of Professional Identity and Efficacy

As indicated in the ANM-GP level section above, across the different cadres of health workers a set of questions aimed at measuring attachment to the profession, and sense of efficacy in it, yielded a high share of respondents reporting systemic problems that prevent them from delivering upon health policy goals. At the same time, there is substantial variation across individual health providers in the extent to which they report lack of efficacy and professional identity. The table below provides a first look at potential correlates of this variation.

An interesting result in this table is that community health workers (ASHA and AWW) are likely to report lower efficacy where they also report that local politicians create problems. The questions on professional efficacy were placed in the first half of the survey, immediately following concrete questions about meetings with managers and colleagues. Towards the end of the survey—and hence, after several other intervening modules on a variety of different issues—a question was asked about whether local politicians or strongmen (bahubali) create problems. About 25 percent of the community health worker (ASHA and AWW) respond yes, that local political strongmen often or sometimes create problems. These health workers, who report political problems, are likely to have earlier answered the questions about professional identity and efficacy more negatively (lower attachment to the profession, and greater pessimism about having impact). This yields a negative correlation between reports of local political interference and professional efficacy of community health workers.

Table 73: Determinants of Professional Norms

	(1)		(2)		(3)	
	ASHA/AWW		ANM		Pooled	
<i>Demographics</i>						
Married	0.150	[0.139]	-1.144	[0.807]	0.154	[0.134]
ST, ST or OBC	-0.102	[0.110]	-0.054	[0.230]	-0.030	[0.098]
Age	-0.000	[0.005]	0.012	[0.016]	0.000	[0.005]
Have ration card	0.019	[0.066]	0.045	[0.205]	0.014	[0.060]
Uses whatsapp	-0.078	[0.095]	0.077	[0.196]	-0.049	[0.085]
Asset Index (ICW)	-0.049	[0.036]	-0.047	[0.130]	-0.055*	[0.033]
<i>Behavioral traits</i>						
Index Personality Traits	-0.026	[0.052]	-0.112	[0.146]	-0.052	[0.051]
Index Integrity	0.055	[0.040]	0.136	[0.137]	0.070*	[0.038]
Index Public Sector Motivation	0.033	[0.042]	0.107	[0.130]	0.033	[0.040]
Index Entrepreneurship	0.085*	[0.043]	0.284*	[0.146]	0.091**	[0.042]
<i>Supervisors &amp; Peers</i>						
Job tenure in years	-0.004	[0.008]	-0.004	[0.011]	0.001	[0.007]
How many months of salary not received	-0.014	[0.010]	-0.091**	[0.039]	-0.019**	[0.009]
ANM supervisor has good or very good management skills	-0.024	[0.139]	-0.465	[0.398]	-0.006	[0.133]
Sometimes or always supervisor scold peers who don't perform	0.056	[0.086]	0.057	[0.273]	0.099	[0.082]
Supervisor report employees who don't work and they lose job	-0.128*	[0.075]	-0.053	[0.194]	-0.126*	[0.069]
Sometime or always there is recognition for good work	-0.014	[0.070]	-0.043	[0.218]	-0.021	[0.067]
Sometimes or always interact with peers in BPHC meetings	0.320**	[0.143]	0.201	[0.291]	0.258**	[0.119]
Quite a few or all ANM known are hardworking	0.252	[0.240]	1.102**	[0.537]	0.242	[0.218]
Quite a few or all ANM known are honest	-0.140	[0.278]	1.041**	[0.465]	-0.047	[0.252]
Share ANM colleagues hardworkers	0.267	[0.392]	0.764	[1.280]	0.414	[0.378]
Share ANM colleagues honest	-0.039	[0.368]	-2.026	[1.677]	-0.170	[0.355]
<i>Politics</i>						
Politicians often/sometimes create work difficulties	-0.185**	[0.082]	-0.036	[0.237]	-0.186**	[0.076]
Politicians often/sometimes support work	-0.076	[0.084]	0.083	[0.278]	-0.045	[0.080]
Good workers transferred due others feel threatened	-0.125*	[0.066]	0.279	[0.235]	-0.091	[0.062]
Work somewhat or often hampered by delay of funds release	-0.016	[0.073]	-0.229	[0.226]	-0.025	[0.068]
Had to use money or connections to get job	0.054	[0.105]	0.084	[0.336]	0.078	[0.098]
Important to get transfer or promotion: political connections	-0.080	[0.112]	-0.258	[0.342]	-0.153	[0.102]
Important to get transfer or promotion: informal payments	-0.249**	[0.108]	0.291	[0.314]	-0.224**	[0.101]
Important to get transfer or promotion: both	-0.132	[0.120]	0.089	[0.427]	-0.190*	[0.111]
Constant	-0.264	[0.452]	0.358	[1.617]	-0.459	[0.425]
Observations	896		81		979	
District FE	Yes		No		Yes	
R-Squared	0.452		0.420		0.434	

## 23 Media consumption

Our survey included a detailed module asking about media consumption across all categories of respondents. The primary purpose is to understand the context and patterns of media consumption with an eye towards future communication interventions targeted at strengthening norms. There are two elements to consider in this regard: one, which media are likely to provide local (versus national) news; and two, which media are likely to be

shared in common across respondents, so that communication about local matters can be expected to reach them all simultaneously. Put another way, to what extent are different types of respondents—the health workers, citizens, politicians—accessing completely different media outlets for news, versus converging on some common platforms? (As an aside: segmentation of consumers across different media markets is being analyzed in the United States as a source of increasing political polarization and non-cooperative norms, because it allows people to select into so-called "echo-chambers" to confirm their priors rather than seek common ground with others.)

The following patterns emerge:

One, among the "middle/upper-class" (urban, educated, higher caste and income) respondents in our survey—the district and block-level politicians, health supervisors, and doctors—98 percent respond that they read newspapers regularly, and cite 4 hindi newspapers as their favored papers (Dainik Jagran Bihar; Prabhat Khabar; Dainik Bhaskar Bihar; and Hindustan).

Two, Figure 17 below shows that GP-level respondents—who are rural, lower caste, education and income— are far less likely to report reading newspapers regularly (daily or 2-3 times a week). However, there is considerable variation across different types of respondents: while only 31 percent of citizens report reading newspapers regularly, 82 percent of ANMs and 58 percent of GP politicians do so.

Three, Figure 18 below shows GP-level responses to the question "Which medium do you rely on most for news—newspapers, TV, radio, social media/internet?". Even though 82 percent of ANMs report reading newspapers regularly, only about half of these regular readers answer that newspapers are their main source of news, with 44 percent citing TV. Similarly, 33 percent of GP politicians cite newspapers as their main source, while 41 percent cite TV. (In fact, the middle/upper-class respondents in point one, also split between TV and newspapers when answering this question of the main media on which they rely for news).

Four, Figures 19-22 below together show that among those who regularly read newspapers, there is much lower dispersion in which newspapers they read compared to a high degree of fragmentation across different TV stations of those who cite TV as their main source of news. Those who read newspapers converge on the same 4 hindi language dailies that are local to Bihar (although, we are not sure about Hindustan). The TV channels on which there is some convergence across respondents, are all national channels and therefore unlikely to focus on local news.

Five, the average citizen in rural areas is more likely to rely on national hindi TV chan-

nels for news rather than on local newspapers. Strikingly, SHG leaders report the lowest reliance on or use of newspapers (around 11 percent), and much more on national TV (43 percent). Citizens and SHG leaders thus appear to have little consumption of or access to local news from established news outlets, relying on a variety of "other" informal sources, such as their social networks.

Hindi newspapers thus emerge as the dominant media for local news that is shared across influential respondents (ANMs, GP politicians, and middle/upper-classes of respondents above the GP). A communication campaign that seeks to shift views simultaneously, across health service cadres (ANMS and their supervisors at the block and district level), GP politicians, and the upper-classes of the state, would thus need to seriously consider the role of newspapers as a commonly shared and established media. The existence of newspapers as the shared platform for accessing news is suited to communicating evidence and complex information that requires reading to digest. At the same time, buying time on national hindi TV channels to devote to Bihar-relevant and specific messages, would be an important complement, to reach citizens and SHG leaders who don't read newspapers, and to re-enforce the messages delivered through newspapers.

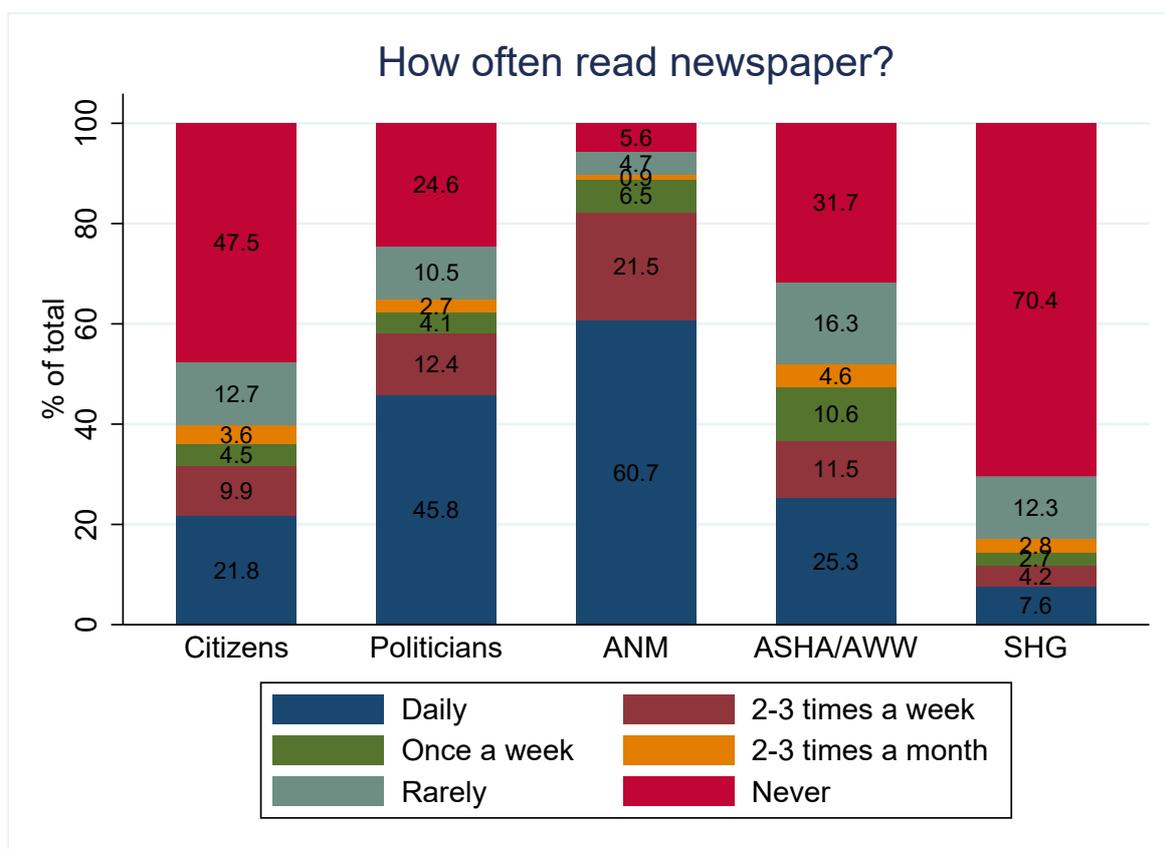


Figure 47

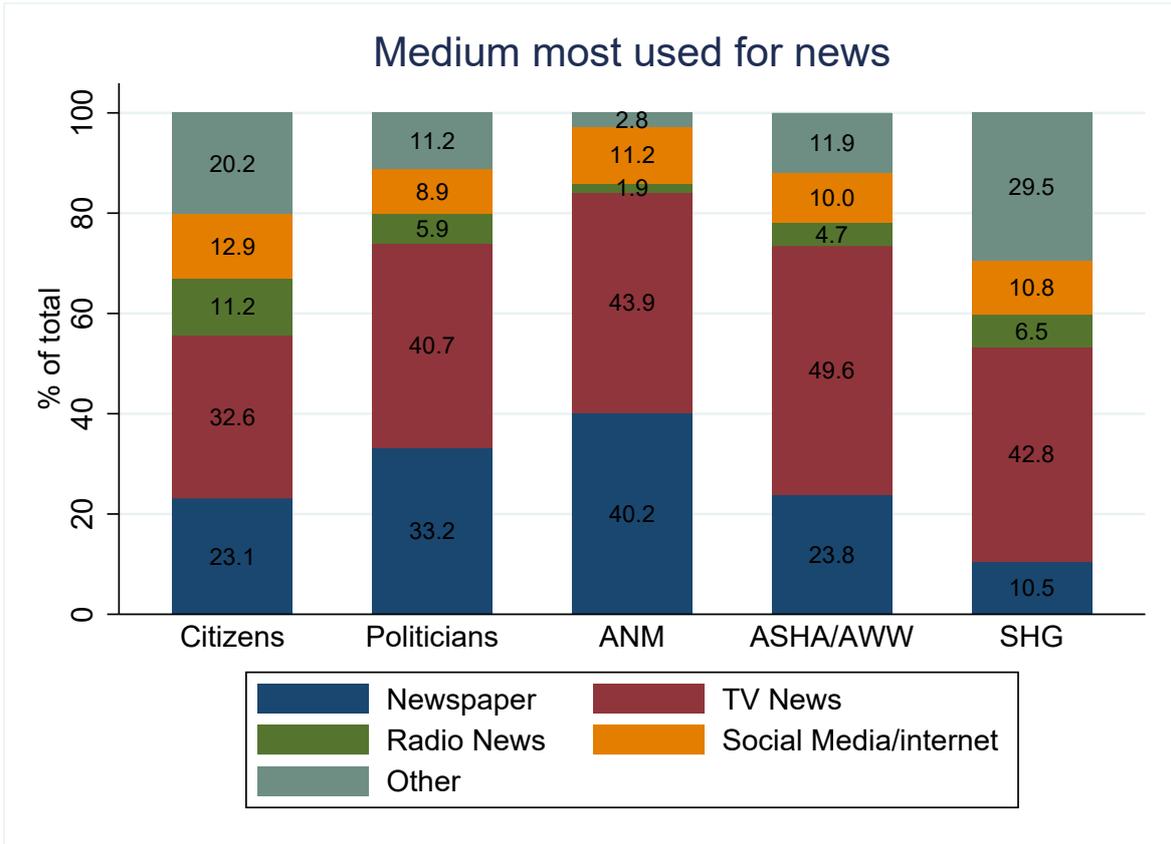


Figure 48

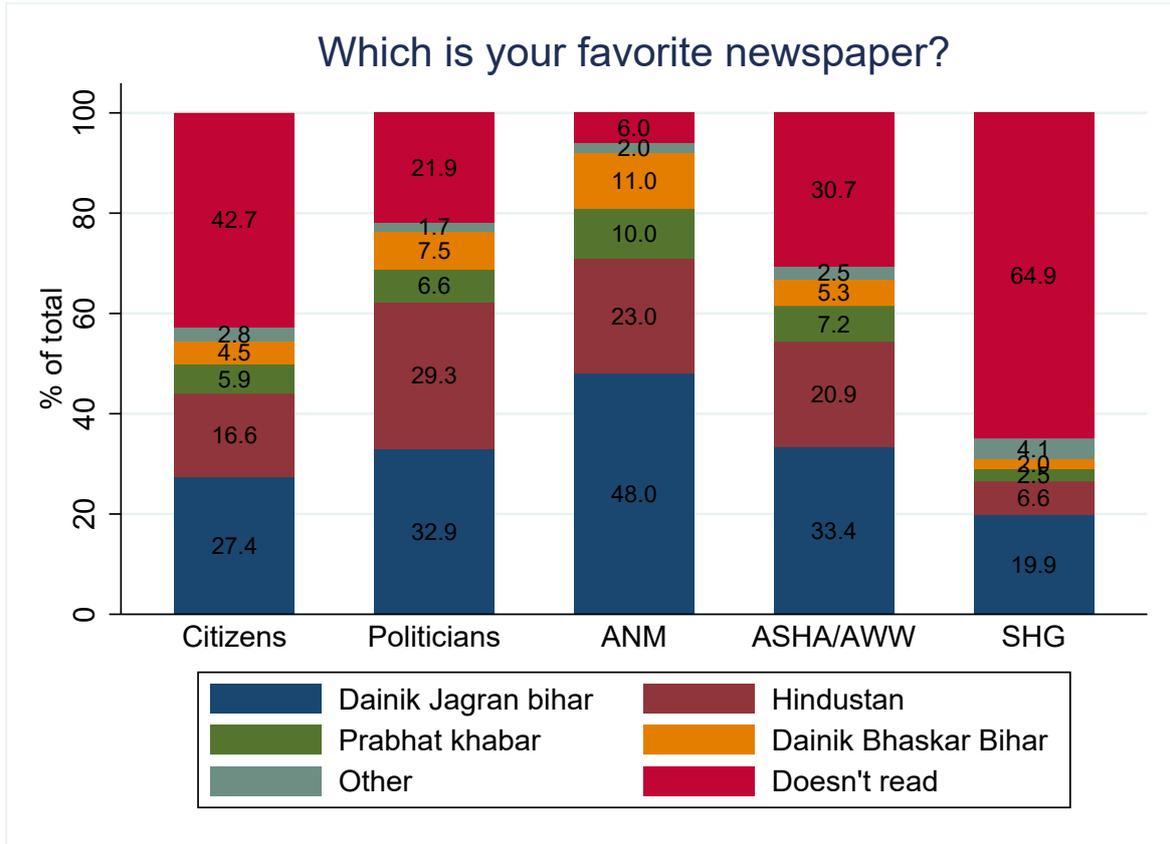


Figure 49

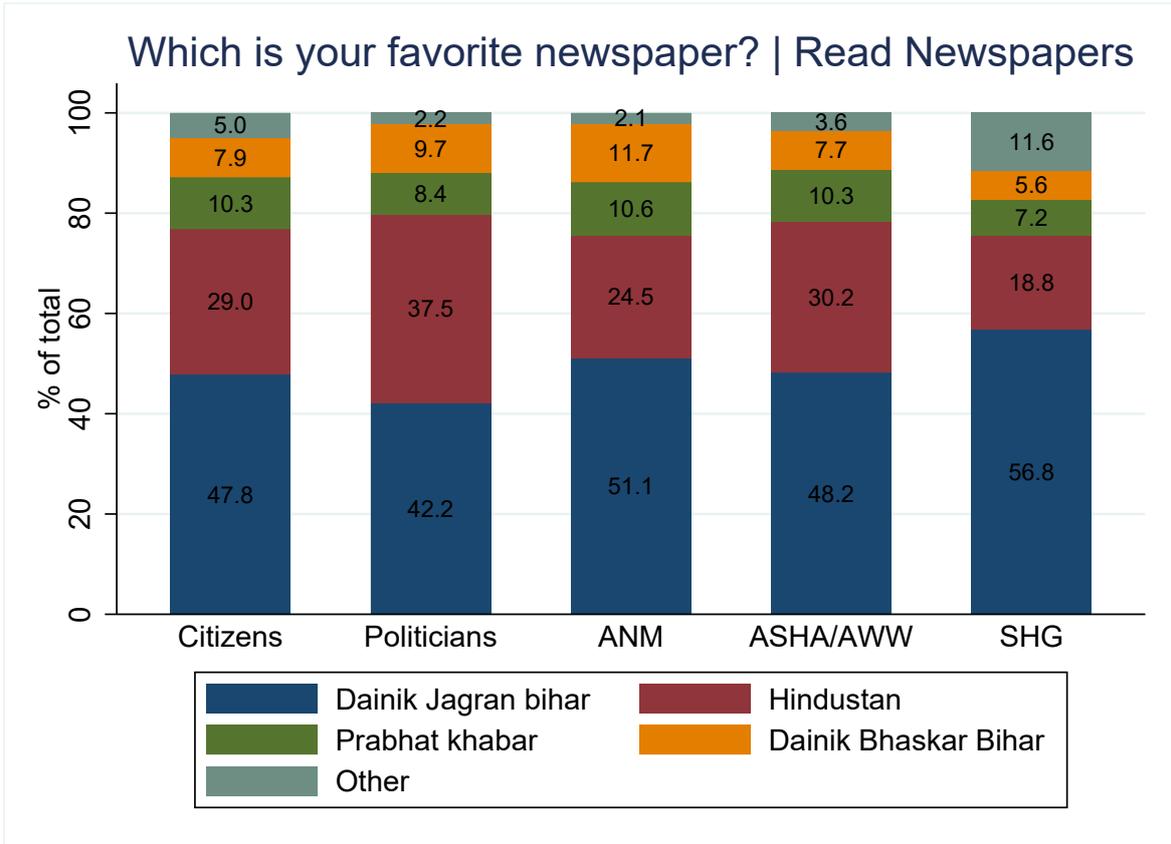


Figure 50

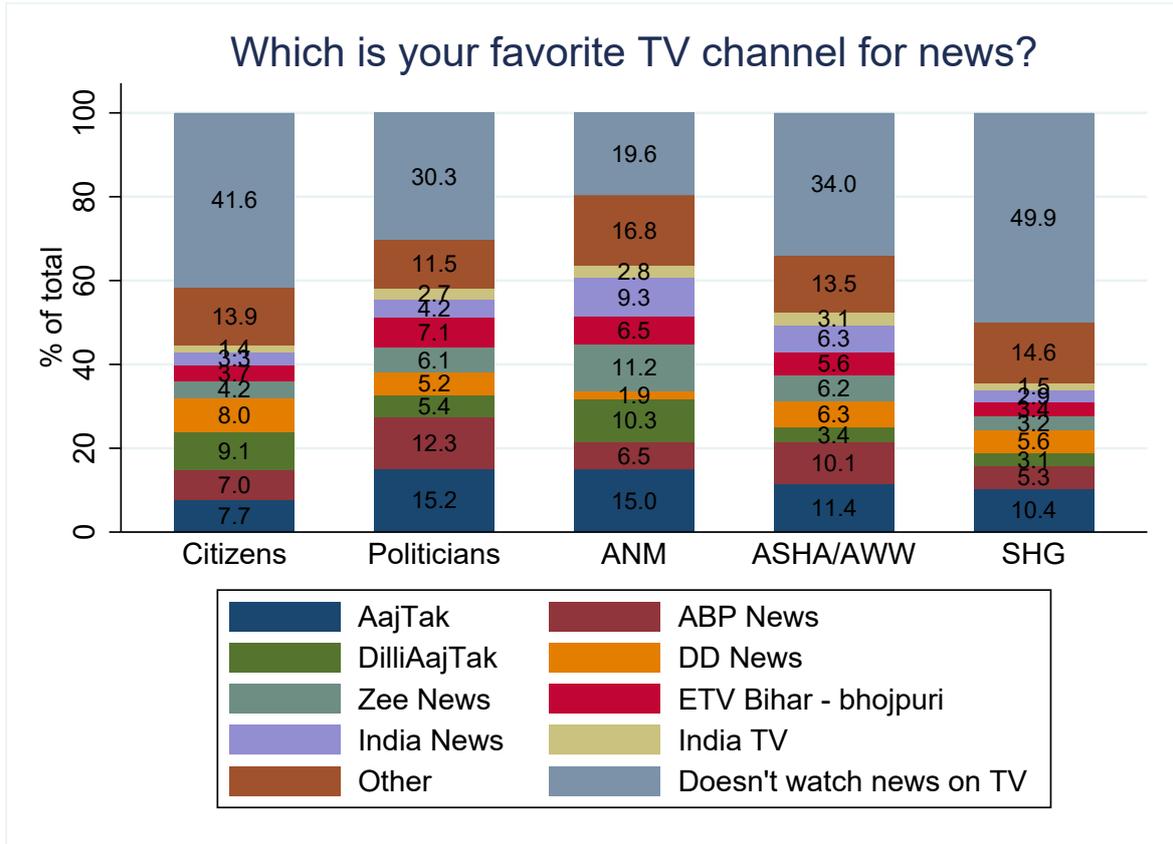


Figure 51

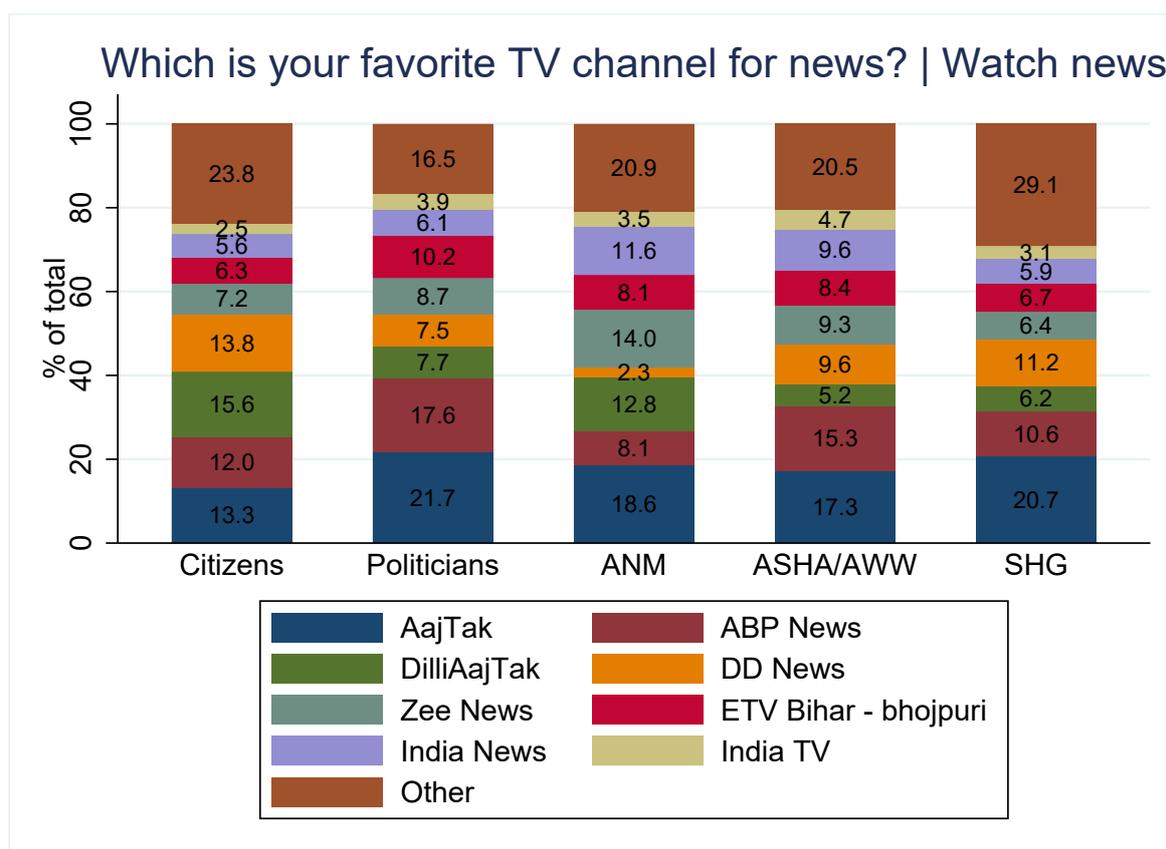


Figure 52

## 24 Looking Ahead: Policy Dialogue and Experiments to Address the Problem of State Capacity

If we had to highlight in one sentence the main message emerging in the data so far, it would be the following: that health workers across cadres, and their managers at the district and block levels, are stuck in an equilibrium of low expectations, low trust, and low performance. Our survey results—that across the board health workers express a sense of personal inefficacy, that no matter how hard they try, the "system" will not allow health outcomes to improve—is consistent with the overall story of Bihar from scholars like Shaibal Gupta and PP Ghosh of deep social divisions, and lack of trust across groups. Health workers feel they are not recognized and empowered to perform; those who have any management power or authority feel that health workers need to be scolded and handled strongly to get them to perform. This equilibrium stands in stark contrast to the recommendations that emerge from the logic of economic theory about how to organize institutions that are tasked with delivering services with "public good" characteristics (Khemani, 2019, provides a review).

The Bihar experience can also be interpreted within a broader macroeconomic story of what explains why some countries are rich and others poor. A body of work by Daron Acemoglu, James Robinson and others has argued that European colonization established "extractive" institutions in the history of currently poor countries, and those historical institutions have persistent effects till today, explaining why some places are not able to sufficiently grow out of poverty or develop "inclusive" political institutions that assure health and education for all. Banerjee and Iyer (2005) and Iyer (2010) test these ideas within India and find that colonial institutions have persistent effects on agricultural productivity and the delivery of public services. Bihar happens to be the state where the historical institutions used by Banerjee and Iyer (2005) and Iyer (2010) show no within-state variation. All of Bihar was governed directly by the British and through feudal land institutions during the colonial era, which these authors find correlated with low agricultural productivity and fewer public good provision in current times (respectively), long after independence and land reforms.

However, the mechanisms of persistent impact remain shrouded in mystery. Research is also lacking on why current formal institutions, such as competitive electoral institutions, courts, police, which most states, including Bihar, possess, are not sufficient to overcome the burden of history. Further, institutional explanations may be unsatisfying because they are so abstract, and provide such little guidance of ways out of the problem. What precisely are "extractive" institutions, and why is it so hard to reverse them after the colonial powers are removed? It is difficult to argue that Bihar's political institutions are not "inclusive", after decades of competitive elections, turnover of political parties in office, and rise of lower-caste political leaders, on platforms of empowering the lower castes. Indeed, our survey data are consistent with inclusive politics, uncovering quite astonishing rates of political aspiration, and sophisticated political thinking among citizens in rural Bihar, across caste groups.

Khemani (2019) answers the above puzzles as follows: that "extractive" institutions can be thought of as a zero-sum game in which individuals in society and politics interact to extract private benefits at the expense of broader public goods. The reason historical institutions have persistent effects is because they work through norms—beliefs about how others are behaving—which are slow to change. Khemani thus argues that communication campaigns are likely to be a necessary complement to all other policy initiatives to address the long-standing problem of norms. She further argues that politics is the arena through which these norms are formed, sustained, or changed, because it is the largest theater in which people interact with each other about public policy issues and observe and evaluate leaders. This argument then yields concrete ideas for a way out of the problem—communication campaigns that are targeted at the political arena are needed as a com-

plement to other "usual suspect" reforms to strengthen state capacity (such as, technical assistance, training, bricks and mortar investments, management on the basis of core performance indicators). (As an aside: political norms can change for the worse, which is the concern currently with the wave of populism sweeping across Europe and the United States. Communication campaigns and media markets have come to be of interest even to an organization like the International Monetary Fund, which has traditionally focused on macroeconomic fundamentals, because of this perverse turn in politics in rich countries.)

How is the approach different from others? One, let's contrast it against a sociological approach— intensive mobilization and social behavior change campaigns, such as through SHGs, and village-level committees for social accountability. An extreme example of the "social movement" approach would be the Naxalite movement in the late 1960s which tried to organize the peasants of Bihar for violent revolution to overthrow the upper castes, but with little success and much tragic turmoil. While these social movements may have contributed to political institutions becoming more inclusive, the problem of the zero-sum game remains, as described in Santhosh Mathew's and Mick Moore's analysis of how after gaining power the lower caste political parties deliberately destroyed state capacity in the interest of continuing the caste struggle. If this politics of how state personnel are managed does not change, large scale improvements in service delivery and human development outcomes cannot happen through social mobilization alone, and especially so in a resource constrained environment like rural Bihar's.

Second, let's contrast against approaches of technical support— engaging non-state actors to work closely with state governments on the technical aspects of service delivery. While this approach can be helpful to reform leaders, it does not address the fundamental problems of lack of trust, low expectations and low performance which constrain the taking-up and effective implementation of technical solutions. Without addressing the problem of norms and motivation, external efforts to build technical capacity are unlikely to have sustained impact. Furthermore, addressing the problem of motivation may enable locally embedded actors (the doctors, nurses, ANMs, ASHAs and AWWs who live and work in their communities) to find some technical solutions that are more appropriate to their context than what less embedded and less experienced actors bring from the outside.

Third, let's contrast against approaches of management reforms within bureaucracies using core performance indicators. Without complementary investment in communication campaigns targeted at the problem of zero-sum norms, these management approaches alone may re-enforce the current equilibrium uncovered in the survey— health workers' views that too much is being asked of them without proper support, rendering them unable to improve outcomes however hard they try. Failure to meet core performance stan-

dards may be the norm, further fueling low expectations and lack of trust, and keeping the "system" trapped in the low equilibrium of low performance.

Going forward then, we propose workshops with policy-makers and researchers in Bihar to discuss these emerging survey results, how they fit with the broader story of Bihar from Gupta-Ghosh and Banerjee-Iyer, and what this means for policy directions. Below, we outline three broad categories of interventions for policy dialogue:

- **Infuse messages into management meetings with health workers:** the survey has found that across all cadres of health workers, there are regular meetings held with district and block-level management (75 percent of sub-center ANMs say they have weekly meetings; 86 percent of ASHAs say they have at least monthly meetings with the MOIC at the Block PHC), and a significant proportion of health workers are part of WhatsApp groups (39 percent of village-ANMs and 52 percent of block-ANMs say they belong to a health workers' WhatsApp group.). This context provides opportunity to leverage external influence and credibility about the state of health services and outcomes, because evidence-based credible messages can be crafted for sharing at meetings that are already happening organically and provide an institutionalized space to try-out different messages. Contrast this against the lack of such institutionalized space for social accountability—86 percent of citizens respond that they have never heard of a village committee on health and nutrition.
- **Newspaper and TV campaigns:** as discussed in the section on Media Consumption, Bihar provides a context in which readership of hindi-language daily newspapers provides a platform to share complex messages that require reading and discussion among people. Again, newspaper reading is already happening as a way of finding out local, Bihar-specific news, and thus presents an organic platform that external agents can use to disseminate credible, data-based messages. At the same time, the relative importance of TV viewing among the poorer groups of respondents in villages suggests a role for inserting Bihar-specific information as sponsored programs or ads into national TV channels (the ones people report watching). Such media campaigns are not only hypothesized to reduce rent-seeking by village politicians, and strengthen local incentives for health services, but also to strengthen the hands of state-level reform leaders to invest in human capital and build state capacity for delivery. Research suggests that public health issues do not enjoy political salience in India because of differentiated demands across socio-economic classes. Upper and middle classes in urban India may lack pertinent information about the value of public health systems in reaching poor households in rural India. Campaigns deployed through the mainstream media in Bihar that reaches citizens across

these different socio-economic classes can, potentially, increase the political salience of public health and enable reform leaders to effectively invest in it.

- **Steady wages to community health professionals (but crucially, accompanied by the two communication campaigns above):** as reviewed in Khemani (2019) the economics literature on managing principal-agent relationships in the public sector suggests that there is considerable scope for improving bureaucratic productivity by reducing reliance on incentives and strengthening intrinsic motivation and professional norms. Yet, RCTs that focus on incentives alone, with no comparable arm on strengthening professional norms, have captured the policy imagination, to the detriment of trying out different approaches with potential. Financing incentive payments, as well as implementing them with fidelity to the design, require considerable resources. It should be of value to the state to test whether lower cost management reforms can improve service delivery.

Here is a quick example of what the messages being communicated might consist of, using the survey data: One, sharing the survey results of cynicism and lack of self-efficacy among health workers, including at the district-level, among doctors and medical officers in charge. In addition, sharing the results of citizens' demand for health services, and reliance on ASHAs and AWWs for maternal and child health, together with the need for investments in these services to address the disease burden, stunting and malnutrition in Bihar. Two, springboarding from these survey results to communicating the state leadership's intent to turn the situation around by empowering health workers to take charge as professionals, and providing them with more resources to accomplish the objectives of better health. But crucially, the messages would need to highlight that the new approach to management and the additional resources provided would only be continued if there is clear evidence that health outcomes are improving as a result of better service delivery performance.

The policy package described above is similar to what Brazilian Governors in the state of Ceara adopted over 1987-1994, as they confronted a situation of poverty recently made worse by a drought; some of the highest rates of infant mortality (102 deaths per 1,000) in the world; and no functioning public health system. Tandler and Freedheim (1994) provide a case study of how these reformers built state capacity to deliver health services and dramatically turned around health outcomes in the state within a span of a few years. Infant mortality fell by 36 percent and vaccination coverage increased from 25 to 90 percent. Perhaps even more importantly, the Ceara model was scaled-up across Brazil as the country's Family Health Program (now called Family Health Strategy), relying on state-recruited community health agents

to deliver basic services targeted at poor households. Rochas and Soares (2010) estimate that this program has been successful in improving health outcomes in poor areas. A study-tour for Bihar's reform leaders to Brazil may be helpful.

An experimental roll-out of this Ceara-style package of interventions in a few districts in Bihar would need to be accompanied by an assessment of its impact on health outcomes through the medium of improved service delivery performance. This assessment of impact is also crucial to the design of the intervention—to credibly convey to health workers that in the absence of significant improvements, any program of providing them steady wages cannot be justified. As part of the policy experiment, it may be useful to contrast the Ceara-type package of interventions with those of high-powered incentives that have been tried in other studies (Singh and Masters, 2017; Muralidharan and Sundararaman, 2011). Which management approach—flat versus high-powered incentives—is more effective when combined with communication campaigns that make health spending politically and socially salient? This is a crucial policy question for health systems in resource-constrained environments.

## 25 References

Acemoglu, D., Johnson, S. and Robinson, J.A., 2001. The colonial origins of comparative development: An empirical investigation. *American economic review*, 91(5), pp.1369-1401.

Acemoglu, D., Johnson, S. and Robinson, J.A., 2002. Reversal of fortune: Geography and institutions in the making of the modern world income distribution. *The Quarterly journal of economics*, 117(4), pp.1231-1294.

Afridi, Farzana. 2017. *Governance and Public Service Delivery in India*. S-35407-INC-1, International Growth Centre (April).

Afridi, F., Dhillon, A. and Solan, E., 2018. Electoral Competition and Corruption: Theory and Evidence from India. Paper presented at Annual Bank Conference on Development Economics (ABCDE), World Bank, Washington DC

Banerjee, Abhijit, Esther Duflo, and Rachel Glennerster. 2008. "Putting a Band-aid on a Corpse: Incentives for Nurses in the Indian Public Health Care System." *Journal of the European Economic Association* 6 (2-3): 487-500.

Banerjee, Abhijit, and Lakshmi Iyer. 2005. "History, Institutions, and Economic Performance: The Legacy of Colonial Land Tenure Systems in India." *American Economic Review* 95 (4): 1190–213.

- Berman, Peter, Rajeev Ahuja, Ajay Tandon, et al. 2010. "Government Health Financing in India: Challenges in Achieving Ambitious Goals." Health, Nutrition and Population (HNP) discussion paper. Washington, D.C.: World Bank.
- Berman, Peter. 2015. "India's Health: More Practical Solutions Needed." *The Lancet* 386 (10011): e58-e59.
- Bhawalkar, Manjiri, Rajesh Jha, and Peter Berman. 2016. "Tracking financial resources for PHC in Bihar, India." Working paper, Harvard T.H. Chan School of Public Health.
- Chaudhury, Nazmul, Jeffrey Hammer, Michael Kremer, Karthik Muralidharan, and F. Halsey Rogers. 2006. "Missing in Action: Teacher and Health Worker Absence in Development Countries." *Journal of Economic Perspectives*, 20 (1): 91-116.
- Das, Jishnu, Alaka Holla, Aakash Mohpal, and Karthik Muralidharan. 2016. "Quality and Accountability in Health Care Delivery: Audit-study Evidence from Primary Care in India." *American Economic Review* 106 (12): 3765-99.
- Dhaliwal, Iqbal, and Rema Hanna. 2014. "Deal with the Devil: The Successes and Limitations of Bureaucratic Reform in India." No. w20482. National Bureau of Economic Research.
- Dimble, Vlka, and Nidhiya Menon. 2017. Health Policy, Health Outcomes, and Economic Growth: Lessons from India. Policy Note, 35408, International Growth Centre.
- Donaldson, Dave. 2018. "Railroads of the Raj: Estimating the Impact of Transportation Infrastructure." *American Economic Review*, 108 (4-5): 899-934.
- Dave Donaldson, Richard Hornbeck, Railroads and American Economic Growth: A "Market Access" Approach, *The Quarterly Journal of Economics*, Volume 131, Issue 2, May 2016, Pages 799–858, <https://doi.org/10.1093/qje/qjw002>
- Flabbi, Luca, and Roberta V. Gatti. 2018. A Primer on Human Capital. Policy Research Working Paper No. 8309. The World Bank.
- Francois, Patrick. 2000. "'Public Service Motivation' as an Argument for Government Provision." *Journal of Public Economics* 78 (3): 275–99.
- Ghosh, P.P. and Gupta, S., 2009. Economic growth and human development in Bihar. Asian Development Research Institute.
- Gupta, Shaibal. 1981. "Non-Development of Bihar: A Case of Retarded Sub-Nationalism." *Economic and Political Weekly* 16 (37): 1496-1502.
- Gupta, Shaibal. 2001. "Bihar: New Panchayats and Subaltern Resurgence." *Economic and*

Political Weekly 36 (29): 2742-2744.

Gupta, Shaibal. 2002. "Subaltern Resurgence: A Reconnaissance of Panchayat Election in Bihar." Working paper No. 8. LSE Crisis States Programme, Development Research Centre.

International Food Policy Research Institute. 2016. Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030. Washington, DC.

Iyer, L., 2010. Direct versus indirect colonial rule in India: Long-term consequences. *The Review of Economics and Statistics*, 92(4), pp.693-713.

Kapur, D., Mehta, P. B., and Vaishnav, M. (2017). *Rethinking public institutions in India*. Oxford, UK: Oxford University Press.

Khemani, Stuti. 2019. "What is State Capacity?" Policy Research Working Paper no. WPS 8734. Washington, D.C. : World Bank Group

La Forgia, Gerard, Shomikho Raha, Shabbeer Shaik, Sunil Kumar Maheshwari, and Rabia Ali. 2015. "Parallel Systems and Human Resource Management in India's Public Health Services: A View from the Front Lines." *Public Administration and Development* 35 (5): 372-389.

Moore, Celia, James R. Detert, Linda Klebe Treviño, Vicki L. Baker, and David M. Mayer. 2012. "Why Employees Do Bad Things: Moral Disengagement and Unethical Organizational Behavior." *Personnel Psychology* 65:1-48.

Muralidharan, Karthik, and Venkatesh Sundararaman. 2011. "Teacher Performance Pay: Experimental Evidence from India." *Journal of Political Economy* 119 (1): 39-77.

Pandey, Priyanka. 2010. "Service Delivery and Corruption in Public Services: How Does History Matter?" *American Economic Journal: Applied Economics* 2 (3): 190-204.

Singh, Prakarsh, and William A. Masters. 2017. "Impact of Caregiver Incentives on Child Health: Evidence from an Experiment with Anganwadi Workers in India." *Journal of Health Economics* 55: 219-31.

Tendler, Judith, and Sara Freedheim. 1994. "Trust in a Rent-Seeking World: Health and Government Transformed in Northeast Brazil." *World Development* 22 (12): 1771-91.

WHO and World Bank, 2017. *Tracking Universal Health Coverage: Health Shocks and Poverty, Global Monitoring Report*, World Health Organization and International Bank for Reconstruction and Development

World Bank. 2015. *World Development Report 2015: Mind, Society, and Behavior*. Wash-

ington, DC: World Bank.