Dishonesty and Selection into Public Service: Evidence from India

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Online Appendix A: Model Extension

Thus far, we have assumed that ability only matters in determining the wage returns in the private sector. However, many developing countries use civil services exams to screen for high-ability candidates and taking these exams is costly: individuals in India spend substantial amounts of time, even years studying, and considerable amounts of money to pay for preparation assistance.[1] Assume that high-ability individuals need to exert less effort to pass the exam: the cost of taking the exam, $e(A_i)$, depends on ability such that $e'(A_i)<0$ and $e(A_i) \geq 0$. Individuals will take the exam if and only if:

$$k+g(P_i,C_i)-e(A_i)>f(A_i). \quad (1)$$

Under these assumptions, the earlier prediction that among those that will apply for a government job, higher A_i corresponds with higher levels of P_i or C_i now holds only if $f'(A_i)>-e'(A_i)$, i.e. if the wage returns to ability are greater than the degree to which ability helps in the exam process. If $f'(A_i)=-e'(A_i)$, then among those who prefer a government job, there will be no correlation between ability and these other characteristics, pro-social preference and propensity for corruption. Finally, if $f'(A_i)<-e'(A_i)$, we would expect that high-ability candidates would have relatively lower P_i and C_i.

An alternative interpretation of the function e(.) is that it represents the returns to ability in the government sector rather than the cost of effort of preparing for an exam. In this case, the earlier predictions about the types of individuals who apply for jobs in the government sector may not hold if the returns to ability in the government sector are greater than or equal to the returns to ability in the private sector.

This relationship has significant policy implications: it implies that the propensity for corruption of those who want to enter public service will be determined in part by the relative

[1] For example, see Mohanty (2013).

returns of ability in the private sector versus taking the civil service exams. Moreover, depending on this relationship, hiring exams that only screen on ability—within the given candidate pool—may ultimately exacerbate or mitigate this propensity for corruption. The impact on corruption among civil servants depends on the sign and the degree of correlation between ability and propensity for corruption.

Online Appendix B: Experimental Methods and Data Collection (Extended Section III from Paper)

We conducted a series of surveys and lab experiments with both college students and government nurses in Karnataka, India, to measure the propensity for corruption, pro-social preferences, and ability. We describe the procedures below. Survey documents are also available upon request to the authors.

A. Student Sample

As we want to examine individual behaviors prior to entering the civil service, our sample is drawn from university students. We recruited seniors from seven large, mid-tier universities within the city of Bangalore in Karnataka, India. Six were mixed gender schools and one was a women's college. We obtained permission from each university to recruit subjects from classrooms and from recruitment booths on campus; our project team spoke to the rector at each university so that they understood the study and agreed to take part. We obtained IRB approval from Harvard and New York University for the study, and then subsequently from the University of Pennsylvania.

We chose to recruit from classes comprised of seniors in majors where both government and private sector jobs were viable options. To maximize power, we avoided majors in which all of the students within the major would enter one sector (public or private). This allows us to make within-major comparisons of career preferences.[2] We informed students that the sessions would explore the "cognitive skills, aspirations, background, and personality characteristics of

[2] To identify target majors, we conducted polling in classrooms prior to the recruitment stage to ask students whether they preferred government or private sector jobs. In the end, about 80 percent of the survey respondents were in the Commerce Stream, while the remaining were in Science. We did not survey Arts students, as few entered government service.

graduating students," that the sessions would take about one hour and that they would be paid INR 20 (about USD 0.45) upon arrival to the session and up to an additional INR 392 (USD 8.71) depending on the session tasks; the average payment was INR 216 (USD 4.80).[3]

In August and September 2012, 669 students from 7 colleges participated in 28 sessions (Appendix Table 1).[4] These schools comprise about 3,215 students (Appendix Table 1). We designed the sessions to be close to the university and to not conflict with class times. In total, 1,081 students signed up to attend a session, but not everyone attended. While we do not have data on the students who did not attend, we can compare them to the student body population (in Appendix Table 5): the sampled students appear comparable in terms of economic background to those of students in Karnataka as a whole, with the caste distribution nearly identical across both groups. However, the sampled students are less likely to be male (40 percent versus 53 as a whole). And, the students in our sample are more likely to be from the commerce major than science major, which is an artifact of our sampling strategy. We do not observe any heterogeneity in the main findings based on these two factors, suggesting that these characteristics are not driving observed effects in the sample.[5]

We made a large effort to make it easy for recruited students to attend the sessions. We conducted the sessions at rooms at the university or in restaurants and other event spaces close by, and at any given time, there were up to four separate rooms in use for each session. We placed the times at the sessions when students were free from class (after class times or weekends). When students arrived at the sessions, we first checked them in. Since friends often attended the sessions together, we tried to separate them into different survey rooms within the sessions. The students were then organized into groups; each group had an enumerator team that ran that group's session (there were 9 possible enumerator teams). All enumerator teams were monitored by a project manager who was present at all time at the survey site. Informed consent procedures were first conducted. Then, the survey commenced. The subjects filled out the

[3] We designed the financial incentives to be in a range that would appeal to students to participate, but not too large that it would be coercive. For comparison, the price of a ticket to a high end movie theater is about INR 400.

[4] These schools comprise about 3,215 students (Appendix Table 1). We designed the sessions to be close to the university and to not conflict with class times. In total, 1,081 students signed up to attend a session, which implies that 61 percent of those who signed up attended one. As Appendix Table 2 shows, the sessions ranged from 6 to 39 students; the final sessions tended to have lower attendance due to university protests and a city-wide transit strike.

[5] Note that in order to increase the generalizability of the sample, we recruited students at 7 different schools. The show-up rate differed across these different universities, so we can examine the heterogeneity of the results by the fraction of students who showed up. We find not significant differences (in fact, if anything, the findings are stronger in schools where more people showed up). Thus, the incomplete show-up rates does not drive the findings.

surveys forms on their own (with enumerators providing oral directions for the tasks). We provided the subjects with cardboard folders as dividers across students to ensure additional privacy as they filled out the survey forms.

We had initially planned to conduct the surveys and tasks in electronic form (and even programmed the survey module). However, during piloting, we realized that this was not feasible, due to electricity issues and internet issues at the sites we chose to run the sessions in. We could run the sessions in our office, which would have eliminated these problems, but we were afraid that fewer students would travel to attend the sessions. Thus, we switched to pen-and-paper surveys. Note that all documents were available in both Kannada and English, after piloting suggested that there was heterogeneity in preferences for language.

The survey questions covered demographics, work experience and post-graduation plans, preferences and expectations. We asked questions covering several psychology measures including locus of control (Rotter 1966). We included some commonly used survey questions to assess attitudes about cheating and corruption, such as what percent of individuals in the classroom would cheat during an exam and whether they thought that most businesses paid bribes. We also inquired about actual corrupt behavior, such as hiring an illegal agent who facilitates bribes to obtain a government service. Finally, we collected extensive contact information for the students, their relatives, and their friends in order to be able to track them in several years in the future to ascertain their ultimate job outcomes.

Ideally, we would have randomized the order of the survey questions to ensure that certain questions on the survey did not prime answers on other questions. For example, we would not want explicit corruption questions to change how people played the various games and tasks. However, given the limitations of conducting laboratory games in rented rooms near the colleges, we were not able to randomize the ordering. The data were collected in the following order:

- background information (age, academic and work experience)
- memory task
- family employment history
- personality questions
- dice task
- demographics (marriage and children)

- message game (sending messages)
- career preferences and expectations
- civil service exam questions
- cheating scenarios and corruption beliefs,
- locus of control questions
- continuation of the message game (receiving messages and making choices)
- questions on actual corrupt behavior (using agents)
- pro-social preferences game
- risk aversion questions.

Note that we had specifically had them complete the dice task and the key (sending) part of the message game before answering questions about their job preferences to ensure that stated work preferences did not affect the behavior on the task and game that we were the most interested in.

The crux of the surveys was a series of laboratory experiments designed to measure honesty, pro-social behaviors, and ability. Each experimental measure is outlined below:

The Dice Task.—To obtain an individual measure of dishonesty, we asked each participant to privately roll a six-sided die 42 times and to record the outcome of the die after each roll. For each value of 1 reported, we paid the participants INR 0.5; the payment increased by INR 0.5 for each higher value on the die, up to INR 3 for each reported roll of 6. Thus, the minimum possible payment is INR 21 and it occurs if the participant reports rolling all 1's, while the maximum payment (for all 6's) is INR 126. The monetary amounts were chosen to fit inside our total expected budget for the project. Appendix Figure 1 provides the task directions.

We ensured privacy: in addition to the cardboard folders, we instructed the survey team to either exit or be on the opposite side of the room during this task. Thus, participants could be assured that it would impossible for us to know *for certain* if they lied. However, we can determine how far the distribution of each individual's outcomes is from the uniform distribution.[6] Thus, even though we cannot say with *certainty* who cheated, this provides a measure that is strongly correlated with doing so.

[6] To detect non-random shifts in the value of the dice rolls per individual, we conducted power calculations using the effect sizes observed in Fischbacher and Föllmi-Heusi (2013), which ranged from 0.7 to 0.15. Using a conservative effect size of 0.7, along with a power level of 0.8 and an alpha equal to 0.05, the one-sided required sample size was 37. We rounded up to 42 as it was evenly divisible by 6.

This task is adapted from Fischbacher and Follmi-Heusi (2013). One key difference is that they asked participants to roll the dice only once. This allows them to make statements about the group of individuals in each session they conduct, but not about each individual in the group. Their methodology is well suited to the laboratory context, where one can induce variation in treatments at the group level and the outcomes in lab behavior can be observed at the aggregate level. The innovation in our approach is important in that it allows us to examine the empirical relationship between an individual's revealed levels of dishonesty with real world outcomes and choices.

The Message Game.—Another experimental approach to examining lying behavior is to implement a cheap talk sender-receiver game where individuals with private information have the choice of whether to send an honest or dishonest message to another player. We implement a game that was developed by Gneezy (2005) and that has also been used, for example, by Sutter (2009) and Hurkens and Kartik (2009). We present the sender in the game with two possible pay-offs associated with a binary choice made by the receiver (see Appendix Figure 2). The sender then has a choice of two messages to send:

Message 1: "Option A will earn you more money than option B."

Message 2: "Option B will earn you more money than option A."

The sender is told that the receiver will not see the actual pay-offs associated with each choice, but will only see their message. The sender can choose either to send an honest message that indicates the choice that will give the receiver more money and the sender less, or a dishonest message that indicates the opposite. We implement three rounds with variation in the pay-offs as shown in Appendix Table 3. We stressed that neither party will ever know who they were paired with, although they did know that it was someone from within their session and that our enumerators saw their choices (which was an artifact of conducting the sessions on paper rather than on computers).

We are interested in whether the sender chooses to lie during the game. Every participant plays the role of the sender first. This is a slight departure from previous studies where half of the participants are senders and the rest are receivers. Our method ensures that we have outcome data for all subjects, thereby increasing our ability to correlate the key outcome with individual

preferences. Later in the session, each participant also plays the role of the receiver, mainly to ensure that the payoffs are realistic.

The Pro-Social Preferences Game.—We used a dictator game to measure willingness to give to others (see Camerer, 2003, for an overview). We instructed participants that they can divide INR 50 between themselves and a charity of their choice from among seven well-known, respected charities (UNICEF, Child Rights and You, Being Human, Help Age INDIA, CARE India, Red Cross and Save the Children).[7] For each rupee that they donated rather than kept for themselves, the amount given to the charity was doubled. The appropriate charitable donations were made.

For this measure to be interpreted as a measure of "pro-social behavior," the subjects must believe that the charities are doing good work, rather than being seen as incompetent or a waste of money. India has a well-respected non-profit sector, and according to 2014 data from the Charities Aid Foundation, citizens donate much more to charity than in countries of comparable income levels. Moreover, in order to choose charities with good reputations, we chose the listed charities by asking local students and staff for their opinions on the most respected charities in Bangalore in order.

Cognitive Ability Measures.—We employed two incentivized tests to measure cognitive ability:

- We administered a digit span memory test in which participants listened to a series of digits and, after ten seconds, were asked to write down the number. We conducted five rounds, where the first round contained 5 digits and each subsequent round increased the number of digits by 2. The students were paid INR 2 for each correct round.
- We adapted a test of cognitive ability from Ariely, Gneezy, Loewenstein and Mazar (2009). We gave participants a set of matrices, with 12 numbers displayed in each matrix (Appendix Figure 3). They were asked to identify the two numbers in each matrix that add to 10. Participants were given 12 matrices to solve within 3 minutes, and received INR 2 for each correct answer.

[7] In the classic version of this type of dictator game, player 1 chooses how much of an endowment to keep for themselves or to share with other participants in the session, and the outcome is determined only by player 1's actions. The subsequent adaptation to giving the money to a charity rather than other individuals is also fairly common in the literature (e.g. Eckel and Grossman, 1996; Carpenter, Connolly and Myers, 2008).

B. Nurse Sample

We aimed to validate the dice task in a real world setting. Being able to conduct surveys with a large number of government officials is hard to gain permission for. It is even harder to then systematically measure a form of corruption or leakages that is directly attributable to a specific government employee, and link it back to collected survey data. Absenteeism is, thus, an attractive form of leakage to study since in addition to having real effects on service provision and outcomes, it can also be traced back to an individual employee using random check methods. As one of the coauthors of this paper (Rema Hanna) had another project where she was (1) interviewing government staff and (2) measuring their attendance behavior as part of a collaboration with a state government in India, it was a great opportunity to try to validate the dice task that we may not otherwise had.

We administered the dice task to government nurses within the context of a broader experiment that is described in detail in Dhaliwal and Hanna (2013), where we had a real measure of corruption. The experiment spanned 333 primary health centers (PHC) across five districts in Karnataka and focused on understanding whether increased attendance monitoring of health care workers through the use of a biometric device improved access to medical services.

We focus on absenteeism, a pervasive form of corruption both in India and in the developing world in general (Chaudhury et al., 2006). Government employees have a particular number of days that they are allowed to be absent and they have to record their absences for these days. If they are absent more than the prescribed number of days, their salary should be deducted for each additional absence, and they can cash out a certain number of their "sick days" if they do not take them. In practice, very few individuals report absence days and many cash out their "sick days," despite *very* high absence rates.[8]

As Banerjee, Hanna, and Mullainathan (2012) point out, bureaucratic absenteeism is an attractive form of corruption to study because one can measure, by cross-checking, whether the

[8] Staff often claim that they are missing since they are "in the field" tending to the sick (even when their job responsibility requires them to be in the office). However, most accounts suggest this is not the case: for example, Banerjee, Deaton and Duflo (2004) did a tracer study with *sub-center* nurses who were absent during their random checks and found that they were only in their assigned villages 12 percent of the time that they were absent. The rate is likely to be much lower for staff nurses in our study because sub-center nurses do have job duties in the field while staff nurses do not.

bureaucrat is fraudulently collecting a paycheck for a day not worked and it has real implications on health. Dhaliwal and Hanna (2013) conducted this cross-checking: they implemented 9 rounds (two baseline, 7 post-intervention) of independent random checks of the PHC staff between July 2010 and November 2012.

PHCs within the same sub-district were generally surveyed at the same time; we randomly assigned the time of day that PHCs were checked so that no PHC was always checked at the same time of day. Note that although they were infrequent checks, there was a concern that the monitoring associated with the random checks could affect attendance as well; therefore, 50 percent of the sample was randomly selected to be visited in every other follow-up survey round. Dhaliwal and Hanna (2013) show that the monitoring frequency does not impact the absence rate. Some larger PHCs had multiple staff nurses; however, for budgetary reasons, we only interviewed one nurse per PHC. We tried to interview the nurses who were typically staffed during the day to correspond to the time when Dhaliwal and Hanna (2013) conducted the random checks. In many cases, the doctor gave us permission as to which nurse we could talk to at his or her PHC. In Appendix Table 4, Column 2, we regress the attendance rate on an indicator variable for being surveyed, PHC fixed effects, and the survey controls. We find no difference in the attendance rates between those nurses that were interviewed with the other nurses within their PHC.

The random checks proceeded as follows: the enumerator conducts a surprise visit to the PHC and records the staff attendance at the moment of arrival; if the PHC was closed on arrival, everyone is considered absent. Individuals who were transferred or resigned were subsequently dropped from the sample from then on.

Between November 2012 and January 2013, they conducted a series of endline surveys with the health center staff for their experiment. For the staff nurses, we obtained permission from the government to add the dice task and the memory test to their survey. The sample consisted of nurses in the 185 PHCs where the position was not vacant. Unlike the random checks, we made appointments to ensure that the nurses would be present and conducted revisits when possible if the nurse was absent. We interviewed staff nurses at 165 PHCs; Appendix Table 4, Column 1, shows that there is no significant difference between the attendance rates of nurses at PHCs that

we were able to interview and those that we were unable to do so (either because they left the PHC or because we could not secure an appointment with them).[9]

We aimed to design the nurses' tasks to be comparable to those of the students, but there were several differences. Most importantly, we could not pay government workers in cash for ethical reasons. Instead, we obtained permission from the government to pay them in *candy* (Appendix Figure 4). One piece of candy is worth about Rs 1, and therefore, we offered double the amount for the nurses for the tasks than for the students, but in candy rather than cash.

In addition, the memory test differed from the student test in three ways. First, while the students' test started with a 5 digit sequence, piloting with non-sample nurses informed us that this was already quite difficult. Therefore, we started with a 3 digit sequence for the nurses. Second, we gave the students five rounds of number sequences, but increased it to nine rounds for the nurses in order to increase the measured variation in ability. Third, because the enumerators read out the numbers to the students as a group and then the students individually filled out their forms, the students were asked all five rounds; for the nurses, the test ended as soon as they incorrectly remembered a sequence.

Since we surveyed nurses at work, we had to be cognizant of both time and logistical factors. Thus, we could not administer all of the experimental tasks that we gave to the students. We administered the dice task since it was our key indicator of interest. However, we did not administer the message game because it requires two players, and takes a long time to play. Piloting informed us that the nurses found the matrices test too difficult and thus we did not administer it.

Note that in terms of the ordering, the attendance measures were collected prior to the tasks (since they were in the endline). It is possible that nurses who were absent on the attendance measures would have felt more comfortable cheating on the tasks. However, had it been the opposite, those who clearly identified themselves as cheaters on the tasks may have thus felt more comfortable being absent at work. Thus, for this and other reasons, the analysis should be taken as descriptive, and not causal.

[9] Some larger PHCs had multiple staff nurses; however, for budgetary reasons, we only interviewed one nurse per PHC. We tried to interview the nurses who were typically staffed during the day to correspond to the time when Dhaliwal and Hanna (2013) conducted the random checks. In many cases, the doctor gave us permission as to which nurse we could talk to at his or her PHC. In Appendix Table 4, Column 2, we regress the attendance rate on an indicator variable for being surveyed, PHC fixed effects, and the survey controls. We find no difference in the attendance rates between those nurses that were interviewed with the other nurses within their PHC.

Finally, the survey also included questions on the nurses' basic demographic characteristics and on their beliefs on statements such as "It is possible to operate a business in India without bribing" and "Promotions should be based primarily on job performance rather than seniority."

Appendix Figure 1: Dice Task Instructions (Student Sample)

THIRD TASK

D5.0 *Here, we will ask you to throw a die. Report the number outcome on the top of the dice after it lands. For example, the outcome is "4" if the top of the die looks like:*

We will ask you to do this 42 times, and write the outcome each time. You will receive .5 INR for each point rolled.

Roll	**1**	**2**	**3**	**4**	**5**	**6**
Payout	INR 0.5	INR 1.0	INR 1.5	INR 2.0	INR 2.5	INR 3.0

You would receive 2.0 INR for this round

You can earn between INR 21 and 126. Write down the numbers that you rolled in the table.

Roll Number	**Outcome (from 1-6)**
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
Total (A)	

Roll Number	**Outcome (from 1-6)**
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
Total (B)	

Roll Number	**Outcome (from 1-6)**
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
Total (C)	

Total Payment (A+B+C)x0.5 =

Appendix Figure 2: Message Game Instructions (Student Sample)

PART F		
F0.1	**FOURTH TASK**	
	Here, you will be sending a message to another participant. You are not playing against any of your friends. ***You will never know who the other participant is and the other participant will never know who you are****. There are two payment options, which YOU CAN see but the other participant CAN NOT SEE.* ***Different people get different payment options.*** **Example** ***Step 1:*** ***Look at the payment options below****. Under Option A you earn 10 INR and the other participant earns 25 INR. Under Option B you earn 15 INR and the other participant earns 10 INR.* ***Only you can see this****; the other participant cannot see this.* **Option A:** Rs 10 to you and Rs 25 to the other participant **Option B:** Rs 15 to you and Rs 10 to the other participant ***Step 2:*** ***You pick a message to send*** *to the other participant about the payment options.* **Message 1:** "Option A will earn you more money than option B." **Message 2:** "Option B will earn you more money than option A." ***Step 3:*** ***The other participant only sees the message you send****. Based on your message,* ***they will then pick an option****, either Option A or Option B.* ***Step 4:*** *You and the other participant will receive money* ***based on which option the other participant picks****.* *Remember,* ***you will not pick an option****.* ***You will only pick a message to send to the other player****. Now suppose Participant 1 sends the message 2 "Option A will earn you more money than option B" to Participant 2 and participant 2 picks up option A. In this scenario Participant 1 will earn 10 INR and Participant 2 will earn 25 INR.*	

Appendix Figure 3: Matrices Game Instructions (Student Sample)

PART C

SECOND TASK

In the next task we will see a set of matrices with 12 numbers each. You will be asked to find the two numbers in each of the matrices that add up to 10. You will be given 3 minutes, and you will be paid 2 INR for each you solve. ***Please circle only two numbers in each matrix****.*

Here is an example:

9.38	6.74	8.17
5.15	6.61	3.06
9.17	0.91	4.88
3.58	4.87	6.42

Here 3.58 and 6.42 are the numbers that add up to 10

Appendix Figure 4: Dice Task Instructions (Nurse Sample)

Enumerator Instructions: *Please request the staff nurse to throw a die and report the number outcome on the top of the die after it lands.*

Here, we will ask you to throw a die. Report the number outcome on the top of the dice after it lands. For example, the outcome is "4" if the top of the die looks like:

We will ask you to do this 42 times, and write the outcome each time. You will receive 1 Candy for each point rolled

Roll	1	2	3	4	5	6
Number of candies						

Thus, you can earn candies between 42 and 256 depending on the numbers you roll.

Please write down the numbers that you rolled in the table provided.

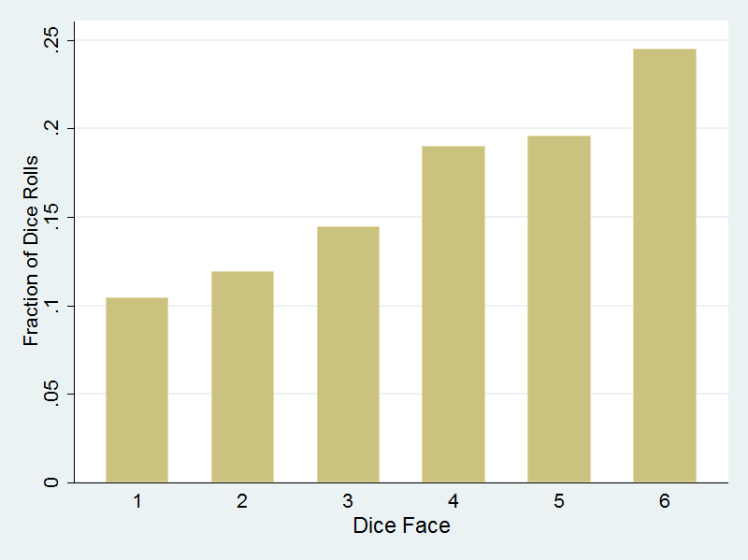
Roll Number	Outcome (from 1-6)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
Total (A)	

Roll Number	Outcome (from 1-6)
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
Total (B)	

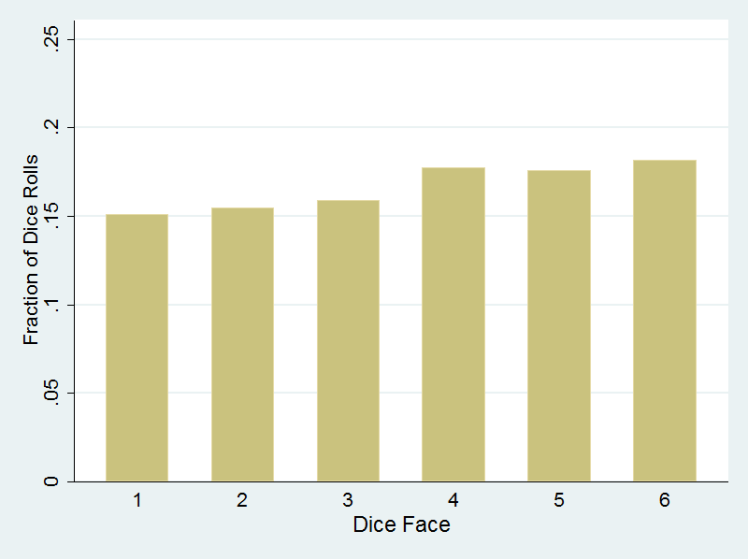
Roll Number	Outcome (from 1-6)
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
Total (C)	

Appendix Figure 5: Distribution of Rolls in Dice Task

(a) Student Sample



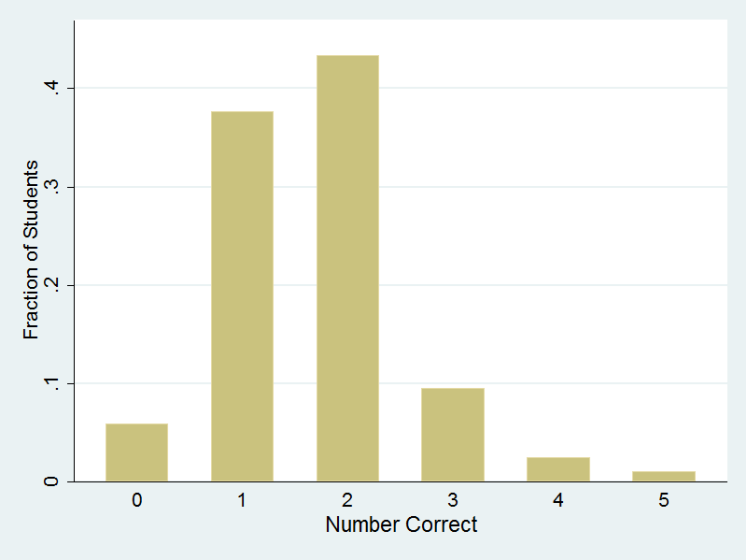
(b) Nurse Sample



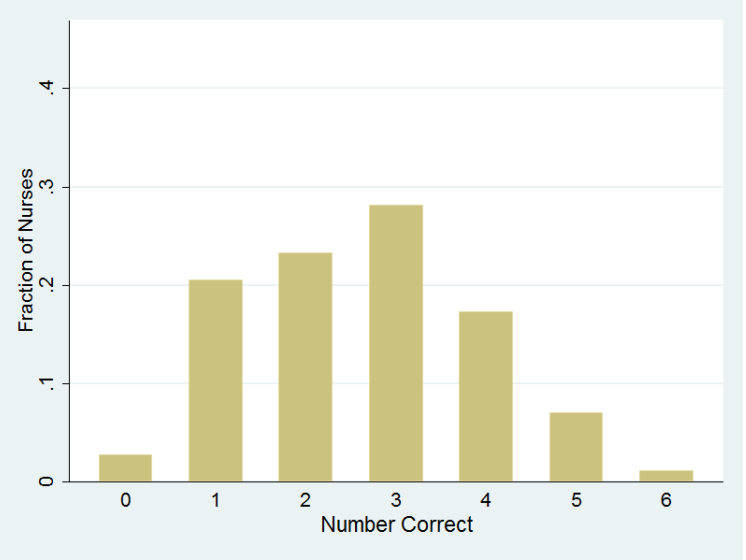
This figure provides the distribution of numbers rolled in the dice task for the student (Panel A) and nurse (Panel B) samples.

Appendix Figure 6: Distribution of Experimental Ability Measures

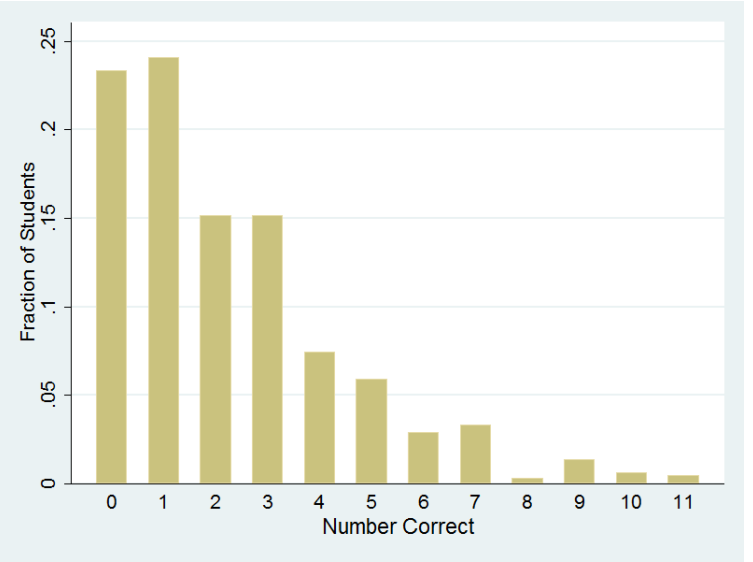
(a) Memory Test, Student Sample



(b) Memory Test, Nurse Sample



(c) Matrices Test, Student Sample



This figure provides the distribution of outcomes of the ability measures. Panels A and B graphs the distribution of the number of correct answers in the memory game for the student and nurse samples, respectively. Note that the memory test given to the nurses was a simplified version of the student test, which may account for their higher average scores. Panel C provides the results of the matrices test for the student sample.

Appendix Table 1: Student Recruitment

Number of Schools	7
Number of Sessions	28
Total Number of Seniors in Surveyed Schools	3215
Number Who Signed Up For Survey	1081
Number Who Came to Take Survey	669

This table provides descriptive statistics on student recruitment and sessions.

Appendix Table 2: Dishonest Behavior Observed, by Session - Student Sample

	(1) Total Students	(2) Was Caught Cheating	(3) Asked if Could Lie (Message Game)	(4) Asked to Leave Early
1101	15	3	1	0
1102	26	5	0	0
1103	28	6	0	0
1104	28	4	2	0
1105	21	5	0	0
1201	28	1	0	0
1202	24	3	0	0
1203	28	2	0	0
1204	28	4	0	0
1205	28	3	0	0
1206	29	2	0	0
1301	19	2	0	0
1302	27	0	0	0
1303	39	3	0	0
1304	15	3	0	0
1401	30	6	7	0
1501	30	3	3	1
1502	32	2	0	0
1503	32	0	0	0
1504	32	2	0	0
1505	32	4	0	0
1601	6	0	0	0
1602	10	0	0	0
1603	12	0	0	0
1604	18	3	0	0
1605	14	0	0	0
1701	10	2	0	0
1703	25	1	0	0

This table provides descriptive statistics on student sessions, where each row represents a separate session.

Appendix Table 3: Payoffs Used in the Message Game

Round	Option	Payoff To: Sending Player	Payoff To: Receiving Player
Treatment 1			
1	A	10	15
	B	15	10
2	A	15	10
	B	10	20
3	A	10	22
	B	15	2
Treatment 2			
1	A	15	10
	B	10	20
2	A	10	22
	B	15	2
3	A	10	15
	B	15	10

This table provides the payoffs used in the message game.

Appendix Table 4: Test for Selection of Nurses into Endline Survey

	Nurse Sample Attendance	
	(1)	(2)
PHC Surveyed	0.014	
	(0.051)	
Nurse Surveyed in Endline		0.026
		(0.033)
PHC Fixed Effects	No	Yes
Dependent Variable Mean	0.426	0.414
Observations	1941	1779

In this table, we explore whether the surveyed nurses systematically differed from those that were not surveyed in terms of their presence. In Column 1, we test whether nurses that work at the surveyed PHC had different attendance rates than the 16 PHCs that we were unable to survey at. In Column 2, the sample is restricted to the PHCs where we surveyed, and we test whether the nurse that was surveyed different systematically in terms of attendance rates from the other nurses that work at that PHC. The coefficients are marginal effects evaluated at the means from a probit regression. We include the survey design and treatment controls described in Table 3A except that we exclude enumerator controls. Standard errors clustered at the PHC level are provided in parentheses.

Appendix Table 5: Demographic Characteristics

	Mean	SD	N
Panel A: Student Sample			
Male	0.40	0.49	661
Age (Years)	19.65	0.80	638
Parent is a Government Employee	0.24	0.43	659
Relative is a Government Employee	0.68	0.47	633
Caste: Scheduled Tribes	0.03	0.16	640
Caste: Scheduled Castes	0.11	0.31	640
Caste: Other Backward Castes	0.37	0.48	640
Caste: General	0.50	0.50	640
Commerce Major	0.81	0.39	661
Science Major	0.19	0.39	661
Grade Point Average	69.36	10.39	616
Panel B: Nurse Sample			
Male	0.05	0.23	165
Age (Years)	34.20	8.78	165
Tenure in Government (Years)	8.61	7.77	157
Tenure in PHC (Years)	4.75	4.07	164
Panel C: College Students in Karnataka State			
Male	0.53		
Caste: Scheduled Tribes	0.04		
Caste: Scheduled Castes	0.12		
Caste: Other Backward Castes	0.38		
Caste: General	0.50		
Panel D: College Students in India			
Commerce Major	0.55		

This table provides descriptive statistics on the demographic characteristics of subjects in our student (Panel A) and nurse (Panel B) samples. Using statistics from the All India Survey of Education (2011-2012), Panel C shows summary statistics for college students in Karnataka and Panel D shows summary statistics for college students in India.

Appendix Table 6: The Relationship Between Different Measures of Ability Student Sample

	Grade Point Average	High Score in Memory Test	Number Correct in Memory Test
	(1)	(2)	(3)
High Ability	3.245		
	(1.059)		
High Score in Matrices Test		0.070	
		(0.043)	
Number Correct in Matrices Test			0.080
			(0.024)
Dependent Variable Mean	69.36	0.570	1.689
Observations	597	637	637

This table tests the relationship between the different ability measures in the student sample. In Column 1, we regress the students' self-reported GPA on a dummy for high ability, which is constructed by taking the average of the z-scores from their memory and matrices tests and generating a dummy variable if the students' score is greater than the median. In Columns 2 and 3, we explore the relationship between the students' score on the memory and matrices tests. Coefficients are from OLS regressions with indicators for gender, major and caste, a quadratic in age, an indicator for missing age and surveyor fixed effects. Standard errors clustered at the session level are in parenthesis.

Appendix Table 7A: Does Dishonesty in the Dice Task Predict Job Preferences and Worker Attendance? OLS

	Student Sample		Nurse Sample	
	Wants Government Job		Attendance	
	(1)	(2)	(3)	(4)
Dice Points/10	0.021		−0.030	
	(0.007)		(0.015)	
High Dice Score		0.060		−0.097
		(0.037)		(0.041)
Dependent Variable Mean	0.427	0.427	0.487	0.487
Observations	637	637	720	720
R^2	0.0403	0.0364	0.127	0.129

This table replicates Table 3A, but estimates all regressions using OLS rather than probit.

Appendix Table 7B: Is the Relationship Between Dishonesty and Outcomes Dependent on Ability? OLS

	Student Sample		Nurse Sample	
	Wants Government Job		Attendance	
	(1)	(2)	(3)	(4)
Panel A: Control for Ability				
Dice Points/10	0.021		−0.029	
	(0.007)		(0.015)	
High Dice Score		0.058		−0.095
		(0.037)		(0.041)
High Ability	0.006	0.010	−0.036	−0.035
	(0.052)	(0.052)	(0.044)	(0.043)
Panel B: Control for Ability Interaction				
Dice Points/10	0.022		−0.037	
	(0.011)		(0.022)	
High Dice Score		0.086		−0.119
		(0.045)		(0.069)
High Ability	0.046	0.043	−0.258	−0.056
	(0.326)	(0.079)	(0.403)	(0.056)
High Ability x Dice Points/10	−0.002		0.015	
	(0.019)		(0.027)	
High Ability x High Dice Score		−0.066		0.044
		(0.110)		(0.085)
Dependent Variable Mean	0.426	0.426	0.487	0.487
Observations	636	636	720	720
R^2	0.041	0.038	0.128	0.131

This table replicates Table 3B, but estimates all regressions using OLS rather than probit.

Appendix Table 8: Changing the Definitions of Government in Estimating Job Preferences

	(1) Government vs. Private	(2) Government or NGO vs. Private	(3) Exclude Government Enterprises
Dice Points/10	0.021	0.016	0.025
	(0.009)	(0.008)	(0.008)
Dependent Variable Mean	0.471	0.472	0.387
Observations	578	638	595

In this table, we explore whether changing the definition of government jobs matters. In Column 1, we exclude students who report NGOs as their first choice from the regression. In Column 2, a preference for working for either government or an NGO is coded as one. In Column 3, we exclude students who report government enterprises as their first choice from the regression. The coefficients are marginal effects evaluated at the means from a probit regression. The regressions include a quadratic in age and indicators for enumerator, gender, major, caste and missing age and are clustered at the session level.

Appendix Table 9: Does Dishonesty in the Dice Task Predict Job Preferences? Varying Controls

	Wants Government Job	
	(1)	(2)
Panel A: Enumerator FE Only		
Dice Points/10	0.021	
	(0.007)	
High Dice Score		0.066
		(0.033)
Panel B: All Controls + College FE		
Dice Points/10	0.019	
	(0.008)	
High Dice Score		0.054
		(0.038)
Dependent Variable Mean	0.427	0.427
Observations	637	637

This table replicates Columns 1 and 2 of Table 3A, but Panel A has no controls except enumerator fixed effects. Panel B includes all controls (gender, caste, major, enumerator, a quadratic in age, an indicator for missing age) plus college fixed effects.

Appendix Table 10: Does Dishonesty in the Dice Task Predict Worker Attendance? Varying Controls

	Nurses' Attendance	
	(1)	(2)
Panel A: Survey and Experiment Controls Only		
Dice Points	−0.019	
	(0.015)	
High Dice Score		−0.099
		(0.043)
Panel B: All Controls + District FE		
Dice Points	−0.034	
	(0.016)	
High Dice Score		−0.090
		(0.044)
Dependent Variable Mean	0.488	0.488
Observations	719	719

This table replicates Columns 3 and 4 of Table 3A, but Panel A controls for only for survey factors (survey round, month of the year, time of day, enumerators) and experimental treatments (treatment and the interaction of treatment with a dummy indicating that the survey was conducted post-treatment). Panel B controls for survey factors, experimental treatments, districts and demographic controls (gender, a quadratic in age and tenure and indicators for missing values of age and tenure).

Appendix Table 11: Do Pro-Social Preferences and Dishonesty Predict the Students' Expected Future Wage?

	Expected Log Wage				
	(1)	(2)	(3)	(4)	(5)
Dice Points/10	0.036			0.036	
	(0.011)			(0.011)	
INR Kept in Pro-Social Preferences Game		0.001		−0.000	
		(0.001)		(0.001)	
Always Lied in Message Game			0.010	−0.000	
			(0.059)	(0.058)	
Anti-Social Index					0.076
					(0.034)
Dependent Variable Mean	9.939	9.939	9.939	9.939	9.939
Observations	638	638	638	638	638
R^2	0.0601	0.0427	0.0421	0.0601	0.0497

This table explores the relationship between the experimental measures of pro-social behavior and dishonesty and expected wage for the student sample. The controls include enumerator fixed effects, indicators for gender, major and caste, a quadratic in age and an indicator for missing age, and the standard errors are clustered by session.

Appendix Table 12A: The Relationship Between Pro-Social Preferences and Dishonesty and Wanting a Government Job
Student Sample - OLS

	(1)	(2)	(3)	(4)
INR Kept in Pro-Social Preferences Game	0.003		0.003	
	(0.001)		(0.002)	
Always Lied in Message Game		0.010	0.001	
		(0.041)	(0.041)	
Dice Points/10			0.017	
			(0.008)	
Anti-Social Index				0.076
				(0.021)
Dependent Variable Mean	0.427	0.427	0.427	0.427
Observations	637	637	637	637
R^2	0.0404	0.0331	0.0453	0.0419

This table replicates Table 4A, but estimates all regressions using OLS rather than probit.

Appendix Table 12B: The Relationship Between Pro-Social Preferences, Dishonesty, and Ability and Wanting a Government Job, Student Sample - OLS

	(1)	(2)	(3)	(4)
Panel A: Control for Ability				
INR Kept in Pro-Social Preferences Game	0.003		0.003	
	(0.001)		(0.002)	
Always Lied in Message Game		0.007	−0.002	
		(0.040)	(0.040)	
Dice Points/10			0.017	
			(0.008)	
High Ability	0.004	0.010	0.002	0.005
	(0.052)	(0.053)	(0.052)	(0.052)
Anti-Social Index				0.074
				(0.021)
Panel B: Control for Ability Interaction				
INR Kept in Pro-Social Preferences Game	0.003		0.002	
	(0.002)		(0.002)	
Always Lied in Message Game		0.021	0.010	
		(0.046)	(0.046)	
Dice Points/10			0.018	
			(0.012)	
High Ability	−0.030	0.019	0.002	0.005
	(0.111)	(0.055)	(0.317)	(0.052)
High Ability x INR Kept	0.001		0.001	
	(0.003)		(0.003)	
High Ability x Always Lied		−0.033	−0.028	
		(0.068)	(0.067)	
High Ability x Dice Points/10			−0.002	
			(0.019)	
Anti-Social Index				0.074
				(0.029)
High Ability x Anti-Social Index				−0.000
				(0.064)
Dependent Variable Mean	0.426	0.426	0.426	0.426
Observations	636	636	636	636
R^2	0.041	0.034	0.046	0.042

This table replicates Table 4B, but estimates all regressions using OLS rather than probit.

Appendix Table 13: Do Other Measures and Corruption Beliefs Predict Job Preferences and Worker Attendance? OLS

	Student Sample				Nurse Sample
	Wants Government Job				Attendance
	(1)	(2)	(3)	(4)	(5)
External Locus of Control	0.032			0.038	
	(0.012)			(0.012)	
Student Has Used Agent		0.059		0.045	
		(0.037)		(0.039)	
Classroom Cheating		−0.141		−0.139	
		(0.077)		(0.074)	
Promotions Based on Seniority			−0.008	−0.004	−0.012
			(0.020)	(0.019)	(0.026)
Success Requires Contacts			0.053	0.044	−0.011
			(0.021)	(0.022)	(0.024)
Bribes are Common			0.004	0.015	−0.017
			(0.027)	(0.025)	(0.024)
Bribes are Necessary			−0.045	−0.048	0.014
			(0.021)	(0.020)	(0.025)
Dependent Variable Mean	0.428	0.422	0.428	0.423	0.490
Observations	635	609	629	601	610
R^2	0.0395	0.0404	0.0560	0.0713	0.133

This replicates Table 5 but estimates all regressions using OLS rather than probit.

Appendix Table 14: Do Other Measures and Corruption Beliefs Predict Job Preferences and Worker Attendance (with Additional Variables)?

	Student Sample				Nurse Sample
	Wants Government Job				Attendance
	(1)	(2)	(3)	(4)	(5)
External Locus of Control	0.036			0.042	
	(0.013)			(0.013)	
Dice Points/10	0.022	0.020	0.020	0.021	−0.003
	(0.007)	(0.008)	(0.007)	(0.007)	(0.002)
High Ability	0.013	−0.001	0.017	0.011	−0.090
	(0.052)	(0.054)	(0.053)	(0.052)	(0.052)
Student Has Used Agent		0.068		0.056	
		(0.038)		(0.039)	
Classroom Cheating		−0.144		−0.149	
		(0.076)		(0.074)	
Promotions Based on Seniority			−0.008	−0.002	−0.018
			(0.021)	(0.020)	(0.029)
Success Requires Contacts			0.057	0.048	−0.014
			(0.021)	(0.022)	(0.025)
Bribes are Common			0.004	0.016	−0.021
			(0.028)	(0.026)	(0.025)
Bribes are Necessary			−0.040	−0.044	0.027
			(0.021)	(0.021)	(0.026)
Dependent Variable Mean	0.427	0.421	0.427	0.422	0.491
Observations	634	608	628	600	609

Columns 1 -4 explore the relationship between the students' personality measures and corruption beliefs and their preferences to enter government service. The coefficients are marginal effects evaluated at coefficient means from a probit regression, controlling for enumerator fixed effects, indicators for gender, major and caste, a quadratic in age and an indicator for missing age. Standard errors clustered at the session level are in parentheses. See Table 1A for more details on the measures. Column 5 provides the relationship between corruption beliefs and attendance for the nurse sample. The dependent variable is a binary variable equal to one if a nurse was present during a given survey round. We control for a quadratic in age and in tenure, indicators for missing values of age and tenure, gender, survey factors (survey round, month of the year, time of day, enumerator) and experimental treatments (treatment and the interaction of treatment with a dummy indicating that the survey was conducted post-treatment). See Dhaliwal and Hanna (2013) for a more detailed description of the data, and the notes for Table 1B for the full description of how the beliefs were measured.

Appendix Table 15: Correlation Matrix between Measures of Dishonesty and Corruption

	Dice Points	Student Has Used Agent	Classroom Cheating	Promotions Based on Seniority	Success Requires Contacts	Bribes are Common	Bribes are Necessary
Panel A: Student Sample							
Dice Points	1						
Student Has Used Agent	0.00887	1					
Classroom Cheating	-0.0388	0.116	1				
Promotions Based on Seniority	-0.0118	-0.00165	-0.0429	1			
Success Requires Contacts	0.0322	0.000581	-0.0480	0.0543	1		
Bribes are Common	-0.0526	0.00341	0.134	-0.157	-0.0647	1	
Bribes are Necessary	-0.134	0.0180	0.0968	-0.0364	-0.0900	0.154	1
Panel A: Nurse Sample							
Dice Points	1						
Promotions Based on Seniority	0.173			1			
Success Requires Contacts	-0.172			-0.274	1		
Bribes are Common	0.0305			-0.0734	-0.0164	1	
Bribes are Necessary	0.0198			0.177	0.104	0.133	1