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Honesty, Ability, Norm, and Socio-economic  
Status: Experimental Evidence from  
Bangladesh

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# Honesty, Ability, Norm, and Socioeconomic Status: Experimental Evidence from Bangladesh

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**Abstract:** In a real effort task experiment, we study the (dis)honesty of undergraduate students in Bangladesh. Consistent with earlier studies, when they self-report their performance, a significant fraction of students cheats to varying degrees. We find that an individual's own ability, as well as social norms in terms of beliefs about peers' behavior, are the two most important factors influencing (dis)honesty in our experiment. In particular, a higher actual performance in the real effort task reduces both the likelihood and extent of cheating, while the belief that peers are cheating increases both the likelihood and extent of cheating. Additionally, a lower perceived fear of detection increases the extent of cheating, but does not increase the likelihood of cheating. Among the two most important indicators of socioeconomic status that we considered, such as parents' education and income, only mother's level of education shows a significant negative effect on the likelihood of cheating.

JEL Classifications: D90; D91; C90; C91

*Keywords:* honesty; cheating; social norm; ability; socioeconomic-status; economics experiment

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## 1. Introduction

It is well accepted that corruption and fraudulence can create enormous economic costs to a society and become major obstacles to growth and development (Fagan, Lesné, & Weth, 2010; Olken, 2006). Unethical practices in any form increase inefficiency in resource distribution and utilization. According to an estimation by the World Economic Forum, the annual cost of corruption is at least 5 per cent of global GDP.<sup>1</sup> Poorer nations or poorer segments of the population are hit hardest by the cost of corruption.<sup>2</sup> Therefore, fighting corruption has been at the top of the agenda for many nations and for international organizations such as the United Nations and the World Bank. One of the necessary conditions for designing effective policies to fight corruption is proper understanding of the individual and social environmental factors affecting moral attitude of the citizens. Because promoting honest behavior can be challenging under weak institutions that already allow corrupt practices, moral incentives can strengthen financial as well as legal incentives, in fighting corruption.

In this paper, we study the moral behavior of young Bangladeshi students in an experimental setting. Bangladesh was ranked 149 out of 180 countries in the Transparency International 2018 Corruption Perception Index. As observed by many, corruption and fraudulence are widespread in every important sector, including law enforcement, public and financial services, health, and education (Chaudhury et al., 2006; Emran et al., 2013; TIB, 2014; Wickberg, Chene, & Zinnbauer, 2012).<sup>3</sup> Past literature suggests that the prevalence of rule violations such as corruption or fraudulent practices can compromise individual intrinsic honesty (Gino et al., 2009; Hauk & Saez-Marti, 2002). Gächter and Schulz (2016) suggest that there are no intrinsic moral values independent of social influence. Their study links the level of intrinsic honesty in an anonymous die-rolling experiment to the prevalence of rule violations in 23 countries and shows that individual intrinsic honesty is stronger in countries with lower levels of economic and political corruption. Also, corruption perceptions (or the expectation of corrupt behavior by others) in a society can provide justification for ones' own corrupt behavior (Bardhan, 1997). Individual preferences and beliefs can make corrupt behavior more or less

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<sup>1</sup> <https://www.un.org/press/en/2018/sc13493.doc.htm>.

<sup>2</sup> <http://www.worldbank.org/en/topic/governance/brief/anti-corruption>.

<sup>3</sup> The estimated cost of bribery was reported to be 2.4 percent of GDP in a 2012 survey by the Transparency International Bangladesh (TIB 2012).

morally costly under a given incentive structure (Besley, 2005). It is not unlikely that experiences and/or a knowledge of corruption affects citizens' attitudes towards institutions, as demonstrated through lower evaluations of institutional quality (Mahmud & Sawada, 2018).

Therefore, it is important to study factors that might influence the moral attitudes of citizens, in order to design effective anticorruption policies. Using standard economic experiments, we set out to shed light on some of the individual and socioeconomic factors that may affect the intrinsic honesty of young Bangladeshi students.

Our participants are undergraduate students in Bangladesh at two prestigious universities housing thousands of students from all over the country. This student sample is representative of the next-generation decision makers of the country. The students participate in a real effort task experiment with incentives and different degrees of opportunity to cheat. In accordance with the existing literature, a fraction of the students cheats when self-reporting performance, though to different degrees. We investigate whether the unethical behavior of these students relates to individual ability or achievement in the task and whether different socioeconomic factors play a role in it.

The literature is inconclusive on the question of how the ability to perform relates to ethical behavior. Individuals who find a task difficult may resort to unethical means to succeed in it. Therefore, low performers can be expected to be more likely to cheat. This hypothesis has been supported by several empirical studies. For example, Nowell and Laufer (1997) find the likelihood of cheating in self-corrected classroom quizzes to be lower among high achievers. Schwierien and Weichselbaumer (2010) show that individuals with a lower ability to perform an experimental task significantly increase their cheating behavior under competitive pressure compared to a noncompetitive environment. However, in a classroom task experiment, Yaniv, Siniver, and Tobol (2017) find that individual cheating is positively correlated with three intellectual achievement measures.<sup>4</sup> Alan, Ertac, and Gumren (2019) study cheating behavior among elementary school children in a creative performance task and find that “children with higher IQ and higher socioeconomic status have a higher likelihood of cheating.” As Alan et al. (2019) argue, this correlation may arise because higher-ability students care more about a good outcome, or they may be better at the art of cheating, as well. In our study, we look

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<sup>4</sup> These measures are the academic grade point average, the high-school matriculation average grade and the psychometric exam score.

directly into the relationship of performance in an incentivized task and cheating in reporting the achievement.

It is also quite widely accepted that social, economic, and cultural factors shape our moral behavior. A lack or abundance of certain socioeconomic factors, such as wealth, power, and education, may affect ethical behavior in society. This mechanism of social change will imply differences in ethical behavior across different socioeconomic status groups. In this case, the distribution of these socioeconomic factors can be a catalyst to changing society's moral character. On the other hand, social norms can create more pervasive practices of unethical behavior throughout a society, and therefore the society's moral character needs to be guarded with strong institutions.

We use parents' income and educational levels to represent the student's socioeconomic status. Predicting the effect of socioeconomic status on moral behavior is not straightforward. As mentioned above, Alan et al. (2019) find, in a creative performance task, elementary school children from relatively wealthier families are more likely to cheat. Piff et al. (2012) report seven studies that reveal positive relationships between socioeconomic status and unethical behavior. In these studies, upper-class individuals (defined in terms of wealth, occupational prestige, and education) behave more unethically than do lower-class individuals in contexts such as working, following the rules while driving, depriving others, negotiating, and competing for a prize. Three of these studies suggest that a positive attitude toward greed partly explains this tendency.

On the other hand, higher socioeconomic status often comes side by side with higher education. Education is expected to positively affect society's social and moral character. In support of such a hypothesis, Helliwell and Putnam (2007) find that education produces positive externalities for the accumulation of social capital, such as trust and social engagement. If a similar positive externality of education extends to morality, we can also expect that belonging to a more educated social group may have a positive effect on individual honesty. If more educated people are more honest, parents' education may have a direct positive effect on children's morality through teaching and an indirect positive effect through their belonging to a more educated society.

Finally, we look into the students' perceived social norms among their peers as related to ethical behavior. The social psychology literature identifies three possible motivations for individuals to conform to a social norm (Cialdini & Goldstein, 2004). Social information can help provide an accurate understanding of reality and give direction on how to react, particularly in situations involving uncertainty. Conformity to a social norm can be motivated by the desire to fit in or to be approved by others. Social norms can also play a role in the process of maintaining a positive self-concept by revealing what is socially approved or disapproved. Developing a social norm is one of the channels through which a society can foster immoral and unethical behavior. As evidence suggests, individual behavior is influenced by the norms of the social group they identify themselves with. Gino, Ayal, and Ariely (2009) present experimental evidence on how exposure to unethical behavior by others can affect individual behavior. The behavior of the students in their experiment confirms the social-norm theory by increasing cheating after observing an in-group member do so. Wenzel (2004) finds that the tax-compliance behavior of their survey respondents in Australia concurs with the reference group norms. Chetty, Mobarak, and Singhal (2014) present the effect of peer behavior on tax compliance by firms in a randomized controlled trial in Bangladesh. They find that the promise to make the tax payment information of each firm available to the other firms in the neighborhood increases the tax compliance by noncompliant firms, when in that neighborhood, some other firms are complying. Wenzel (2005) provides experimental evidence to establish a causal link between social norms and tax compliance. They use the observation in the tax compliance literature that "taxpayers perceiving other people to accept tax cheating to a greater degree than they themselves do." In their field experiment with Australian taxpayers, they provide taxpayers with "feedback about this discrepancy between their personal views and the views they attribute to others" and find a significant effect on subsequent tax return lodgment. This adjustment in behavior may indicate conforming to shifting perceived social norm. Charness and Sontuoso (2018) report an even more specific effect of social norm. The trustors and trustees in their trust game experiment reveal "opportunistic" conformism. That is, they are more likely to conform to peer behavior if doing so implies an increase in their expected payoff.

In our experiment, we find an individual's own ability and social norm in terms of a belief about peers' behavior are the most important factors influencing honesty. A higher level of performance in the real effort task reduces both the likelihood and extent of cheating, while a higher expectation of average reporting by peers increases both the likelihood and extent of



cheating. Socioeconomic status cannot explain the behavior in our study to any great extent. Among the two important indicators of socio-economic status we considered, parents' education and income, we find that only the mother's education shows some significant negative effect on the likelihood of cheating. We also find that a decrease in the fear of detection encourages cheaters to cheat more. However, such a fear or lack of fear does not affect the decision whether or not to cheat.<sup>5</sup>

Section 2 and Section 3, respectively, describe our experimental design and procedure. We present our results in Section 4 and conclude the paper in Section 5.

## 2. Design of the Experiments

### 2.1. Cheating Experiment

We use an experimental design varying that used in Mazar, Amir, and Ariely (2008) to elicit students' cheating behavior. In a real effort task, the participants are given two sets of papers (the "task sheet" and the "answer sheet"). The task sheet has 20 matrices, each based on a set of 12 three-digit numbers (Figure 1). The students are told that there are only two numbers in each matrix, adding up to 10, and are given four minutes to find those two numbers in as many matrices as possible. The answer sheet is for the participant to report their performance after they have finished the task. They can earn Taka 20 for each correct pair of numbers (adding up 10).

*Figure 1. An example of the matrices used in the real effort task.*

2.24	6.67	6.19
4.19	7.76	4.51
2.69	0.79	4.09
3.28	5.14	3.35

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<sup>5</sup> We also find association between honesty in the real effort task and trustworthiness in trust game.

After four minutes, their performance in the real effort task is assessed in three different ways to create three treatments with different degrees of opportunity (in terms of getting caught by the experimenter) to cheat (in reporting correct answers).<sup>6</sup>

1. *Baseline Treatment:* After completing the task, the subject writes down the number of correctly solved matrices on the given answer sheet. The experimenter then collects both the task sheet and the answer sheet and later checks the task sheet to confirm the answer on the answer sheet to determine the subject's payment for this task.
2. *Shredded Treatment:* After completing the task, the subjects are instructed to destroy the task sheet by shredding it using the shredding machine placed in the corner of the room. This eliminates any possibility that the experimenter will check whether the number of correct matrices claimed by the participant is true or not, which would create a clear opportunity for cheating. After shredding the task sheet, the subject returns to his/her desk, writes down the number of correctly solved matrices on the answer sheet, and gives it to the experimenter. Later, the experimenter calculates the payment for this task in reference only to the answer sheet that the subject has submitted.
3. *Recycle Treatment:* The recycle treatment is very similar to the shredded treatment except that, rather than shredding the task sheets, the subjects throw them into a recycle bin placed in the corner of the room. After throwing task sheet into the recycle bin, the subject returns to his/her desk, writes down the number of correctly solved matrices on the answer sheet, and gives it to the experimenter. Later, the experimenter calculates the payment for this task in reference only to the answer sheet the subject has submitted. This treatment facilitates a similar opportunity for cheating as does the shredded treatment. But the possibility of detection is not completely removed. This particular treatment allows us to study individual cheating behavior rather than predicting cheating behavior from the distributions. This is because, once the subjects have left the experimental session, we collect the recycled task sheets to record the actual number of corrected matrices to compare with the reported number.

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<sup>6</sup> Our treatments are similar to the treatments in Experiment 1, in Ariely, Kamenica, and Prelec (2008). Their experimental task is different from ours. Their paper uses a real effort task to look into effect of meaningfulness of the work on reservation wage. Our baseline treatment is similar to their 'acknowledged' treatment, in the sense that the work of the participant is examined by the experimenter. Our recycle and shredded treatments are similar to their 'ignored' and 'shredded' treatments, in the sense that the work of the participant is not examined by the experimenter. In the first case the work is just ignored and in the second case it is completely destroyed.

## 2.2. Trust Experiment

After the real effort task, subjects in our study participate in a classic trust game/investment game (Berg, Dickhaut, & McCabe, 1995). The game is played against a stranger as a one-shot game. In the basic trust game, the players are randomly assigned the role of either a trustor or trustee. The trustor is asked to allocate a fixed endowment  $S$  between herself and a trustee. The trustee receives  $3X$  when  $X$  is sent by the trustor. The trustee could send back any amount of money  $Y$  between 0 and  $3X$ . The trustor's earning is  $S-X+Y$  and the trustee's earning is  $S+3X-Y$ . The amount sent,  $X$ , by the trustor captures the level of trust and the amount returned divided by the amount received,  $Y/3X$ , gives a measurement of trustworthiness.

The instructions do not identify the roles as trustor and trustee. The trustor is called Participant-1 and the trustee is called Participant-2. The fixed endowment in our game is Taka 300. The amount Participant-1 can send is restricted to multiples of Taka 20. That is, there are only 16 possibilities, ranging from Taka 0 to Taka 300. In the case of Participant-2, we use the strategy method to collect information on the return amount specific to the sender's original sent amount (or trustworthiness). Participant-2 is asked to write down how much they are willing to send back (in multiples of Taka 20) for every possible amount sent by Participant-1.

The trust game provides a measure of trustworthiness as well as of trust. While honesty is a higher moral standard in all contexts, trustworthiness is about being favorable to someone who has put faith in you. Trustworthiness derives from an obligation towards others. Honesty implies appropriating only what is rightfully yours without any role of sacrifice, while trustworthiness implies not taking away something that is rightfully someone else's, even when this involves personal sacrifice. Trustworthiness has a social dimension that is not necessary for honesty. Honesty and trustworthiness have the potential to reinforce each other. In general, we expect that the more trustworthy an individual is the less dishonest he or she will be.<sup>7</sup>

## 2.3. Socio-demographic Survey

At the end of the experimental session, the participants fill out a questionnaire.<sup>8</sup> The questionnaire includes several questions related to the students' perceptions and attitudes

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<sup>7</sup> Maggian and Villeval (2015) present evidence for "coevolution of social preferences and lying behavior". In their study children showing other-regarding preference are also less likely to lie.

<sup>8</sup> The English version of the survey is reproduced in Appendix 2.

related to honesty and trust. Also, we collect information on the students' socioeconomic backgrounds.

As the evidence suggests, an individual's behavior is influenced by the norms of the social group with which they identify themselves (Cohn et al., 2019; Gino, Ayal, & Ariely, 2009; Wenzel, 2004, 2005). There are two questions in our survey that are used to understand the students' perceived social norms among their peers in a context such as that of our cheating experiment. One of the survey questions asked, "To what extent do you agree that the number of correctly solved matrices will be over-reported by a participant?" The answer is taken on a six-point scale from "strongly agree" to "strongly disagree." The other question asks the students to predict the average number of matrices claimed to be correctly solved in the answer sheet by a participant. A significant difference in the responses to this later question in the recycle and shredded treatments compared to the baseline will indicate the students' belief that their peers will resort to cheating as the opportunity arises.

We consider parents' education and income to capture the possible influence of social status on moral behavior. We also collect information on several other factors, such as gender, religiosity, training in economics, exposure to a different culture or to more real-life interaction, that have been reported in the literature to affect prosocial and moral behavior.<sup>9</sup> We also collect data on social engagement, such as volunteering experience and club membership.<sup>10</sup>

### **3. Experimental Procedure**

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<sup>9</sup>Many studies have found behavioral differences between male and female in social and economic contexts (Buchan et al., 2008, Dollar et al., 2001; Swamy et al., 2001). Experimental literature on gender differences in honesty is inconclusive (Arbel et al., 2014; Yaniv, Siniver, & Tobol, 2017; Cohn & Maréchal, 2018).

The literature in general tends to support the hypothesis that the belief of supernatural monitoring preached by religions tends to influence moral behavior (Johansson-Stenman, Mahmud, & Martinsson, 2013; Norenzayan, 2014; Arbel et al., 2014).

In the context of honesty, Frank and Schulze (2000) found economics students are to be more corrupt than others in their bribery game. Though, they attribute such behavior to self-selection rather than to their training. Nowell and Laufer (1997) do not find any significant effect of economics majors on their cheating likelihood in the classroom experiment.

While interaction with a different culture may dilute the effect of norms in one's own culture, engaging in economic activities in own culture tunes one more to own cultural norms (Barr & Serra, 2010). There is some evidence in the literature that differences in real life experiences can influence behavior (Alatas et al., 2009, Fehr & List, 2004; Nowell, & Laufer, 1997).

<sup>10</sup> Glaeser et al. (2002) claim that "organisation membership measure strongly predicts other measures of social capital."

Initially, first-year undergraduate students at the University of Dhaka and BRAC University in Dhaka were reached out through flyers requesting they sign up on a given website link if they were interested in participating in a paid economics experiment. Once we had a database of interested students, we sent them invitations for participation through emails. Students were randomly assigned to the baseline, recycle, and shredded treatments. 577 students from these two universities participated in 16 experimental sessions between August 2016 and June 2017. 12 of these sessions were small, with on average 13 participants, while four of these sessions were large, with on average 105 participants.<sup>11</sup>

We dropped observations for 29 students because of technical problems (e.g., mismatched IDs on the task sheets and questionnaire), resulting in 548 students for our analysis. Among these students, 131 students participated in the benchmark (baseline) treatment sessions for Task-1, 243 students participated in the recycle treatment, and 174 students participated in the shredded treatment.

Each session lasted about two hours in three segmented experimental sessions.<sup>12</sup> In the first part of the session, they participated in Task -1, where they were presented with the real effort task of solving matrices, as described in Section 2. In the second part, they participated in a neutrally framed trust game (called Task – 2) and then filled out a questionnaire while the experimenters prepared their payments. Each participant’s payment consisted of a participation fee of Taka 200, and earnings from Task -1 and the trust game.

## **4. Results**

### **4.1. Treatment Effect**

Figure 2 and Table 1 compare the distributions of the reported number of correct matrices by the participants in the control and treatment sessions. The graph shows that in the control treatment, more than 11% of participants could not solve any matrix in the given time. In the recycle and shredded treatments, this percentage comes down to less than 2%. Also, in the

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<sup>11</sup> The study has been approved by Institutional Review Board at American University of Sharjah. Informed consent of the participants have been obtained.

<sup>12</sup> The experimental instructions for the shredded treatment are reproduced in Appendix 1. We provided both English and Bengali versions of the instructions to the participants.

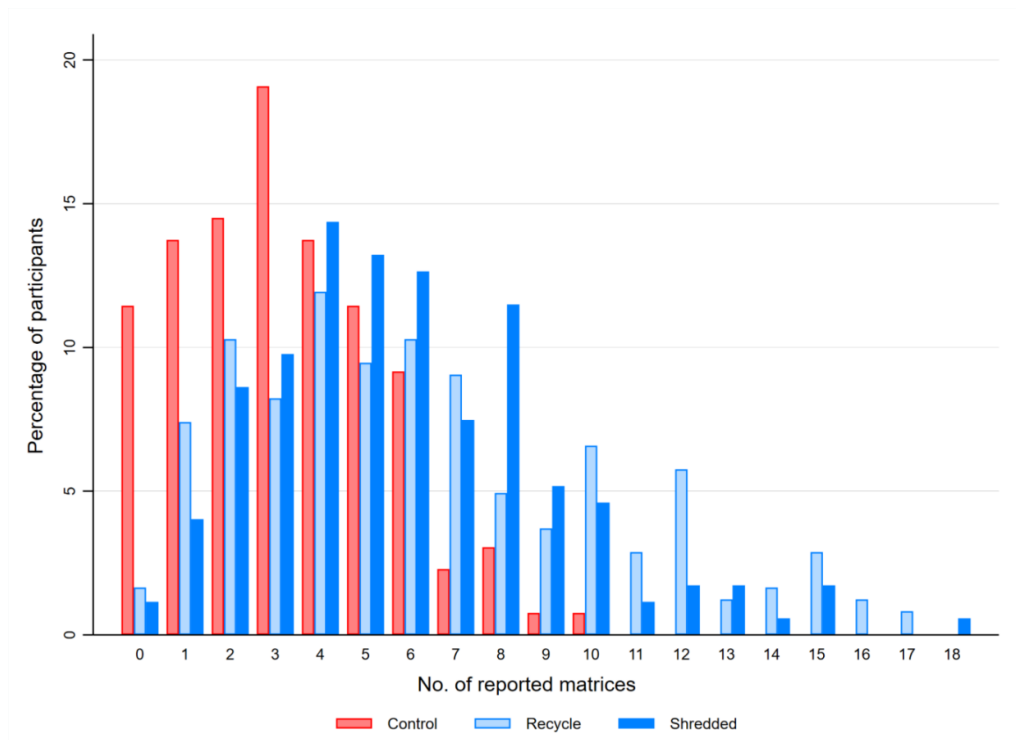
control, the highest number of correct matrices is 10, while in the recycle and shredded treatments, the highest numbers claimed are 17 and 18, respectively. The Wilcoxon-Mann-Whitney (WMW) test rejects the null hypothesis of similarities between the distributions in the control sessions and the treatment sessions ( $p_{(WMW, recycle)} < 0.0001$  and  $p_{(WMW, shredded)} < 0.0001$ ). The average number of reported matrices in the control treatment is 3.22, which is similar in magnitude to the average number of matrices in Mazar, Amir, and Ariely (2008) in control conditions. However, in the recycle treatment, the average number of matrices increases to 6.28, which is significantly higher than that in the control treatment ( $p_{(t-test, recycle)} < 0.0001$ ). In the shredded treatment, the average number of matrices, 5.87, is also significantly higher than control ( $p_{(t-test, shredded)} < 0.0001$ ). However, we cannot reject the null of equality between the averages in the recycle and shredded treatments. Therefore, in both treatments we find evidence of cheating to a similar extent ( $p_{(WMW)} = 0.63$  and  $p_{(t-test)} = 0.26$ ).

**Table 1**  
**Average Number of Matrices Reported and Predicted by the Participants**

	Control (N = 131)	Recycle (N = 243)	Shredded (N = 174)				
Reported	3.22 (2.22)	6.28 (4.01)	5.87 (3.24)				
	<table border="1"> <thead> <tr> <th>No cheating (N = 101)</th> <th>Cheating (N = 142)</th> </tr> </thead> <tbody> <tr> <td>4.10 (2.48)</td> <td>7.84 (4.17)</td> </tr> </tbody> </table>		No cheating (N = 101)	Cheating (N = 142)	4.10 (2.48)	7.84 (4.17)	
No cheating (N = 101)	Cheating (N = 142)						
4.10 (2.48)	7.84 (4.17)						
Correct	3.22 (2.22)	3.56 (2.43)	NA				
Predicted	5.47 (2.35)	7.77 (3.67)	7.29 (2.91)				

Notes: 1. Standard deviations are given in brackets. 2. “No Cheating” refers to the participants in the recycle treatment who did not cheat, and “Cheating” refers to the participants who cheated in the same treatment.

**Figure 2. Distribution of number of matrices reported by treatment.**



In the recycle treatment, as we can check the actual performance of the participants post-experiment, we can directly verify whether a participant cheated or not. Out of 234 participants, 124 reported one or more extra matrices than they corrected. The average correct number of matrices in this treatment is 3.56, which is very similar to the control treatment ( $p_{(WMW)} = 0.23$  and  $p_{(t-test)} = 0.18$ ). When we compare the averages in control and no cheating subgroup in recycle treatment, we see that the average number of matrices solved in the latter group is significantly higher ( $p_{(t-test)} = 0.0049$  and  $p_{(WMW)} = 0.0087$ ). If we compare the actual number of matrices solved correctly in the “no cheating” and “cheating” subgroups in the recycle treatment, we again find that on average the number of matrices solved in the former group is significantly higher ( $p_{(t-test)} = 0.0004$  and  $p_{(WMW)} = 0.0006$ ). We explore this result further in the next section. The participants who cheated in the recycle treatment, cheated on average by 4.74 matrices. Similar to the results reported by Mazar, Amir, and Ariely (2008), the participants in our experiment did not cheat to the highest extent possible. In the survey, the participants were asked to predict the average number of matrices to be claimed in the real effort task. The average predictions are reported in the last row of Table 1. The average predictions are significantly higher in the recycle and shredded treatments, compared to the control.<sup>13</sup> This significant difference implies that the students expect their peer to cheat to some extent when they have the opportunity. In the recycle treatment, the students who did not cheat predict their peers will claim significantly more on average compared to themselves (mean prediction = 6.83,  $p_{(one\ tail\ t-test)} < 0.0001$ ,  $p_{(Wilcoxon\ signed-rank)} < 0.0001$ ). On the other hand, students who cheated themselves do not predict their peers will claim on average significantly higher than themselves (mean prediction = 8.46,  $p_{(one\ tail\ t-test)} = 0.062$ ,  $p_{(Wilcoxon\ signed-rank)} = 0.141$ ). This result suggests that students who did not cheat expected at least some of their peers to cheat, while students who cheated themselves seemed to expect everyone else to cheat as well. We can gain more understanding of this expectation of peer behavior from the regression result in Table 2 for the recycle treatment. The dependent variable is the deviation of the prediction from the student’s own claim, and the explanatory variables are whether the student cheated and whether the student agreed that others will cheat. We find that students who do not cheat and expect others not to cheat makes a prediction higher than their own claim by 1.7 matrices on average,<sup>14</sup> while the students who do not cheat but expect others to cheat makes a prediction

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<sup>13</sup> P values for both t-test and WMW are all equal to 0.000.

<sup>14</sup> We need to read this result with some caution. The response to the question “To what extent do you agree that the number of correctly solved matrices will be over reported by a participant?” varies from 1= strongly agree to 6 = strongly disagree. Later we group the responses strongly disagree, disagree and slightly disagree in category “disagree”. There is no way to know the degree to which the students disagree that others will cheat. Therefore,



higher than their own claim by 3.08 matrices on average, though this increase from the first group is not statistically significant. The students who cheat seem to cheat on average up to the point or less than they expect the average claim to be.

**Table 2**

*Deviation of Expected Claim by Peers from Own Claim and Cheating*

Dependent variable = predicted average no. of matrices claimed - no. of matrices claimed	
Cheat (yes = 1)	- 1.90* (1.08)
Others will cheat (agree = 1)	1.38 (0.93)
Cheat X Others will cheat	- 0.43 (1.23)
Intercept	1.70** (0.81)
No. of observations	237
R-squared	0.09

\*\* p-value < 0.05, \* p-value < 0.1.

In the survey the students were asked, “How often did you cheat (such as, copying someone else’s work) in examinations/assignments?” About 29% of the students reported they never did so, while 63.5% admitted doing so at least few times. Table 3 compares the average number of matrices claimed in different treatments by self-reported cheating. In the baseline and shredded treatments, the two abovementioned categories are not significantly different from each other, while in the recycle treatment, the students admitting to past cheating reported a significantly higher number of matrices on average. In the recycle treatment, 52% of the students who reported never cheating before, and 61% of the students who admitted to cheating at least few times before, cheated in our experiment. This difference is not significant ( $p_{\text{Fisher's exact}} = 0.198$ ). Interestingly, in this treatment, if they cheated in our experiment, the students

this over prediction can be the result of their expectation that others or at least some of them will cheat to some degree.

who reported never cheating before cheated on average by a lower number of matrices than did the students who admitted to cheating at least a few times before ( $p_{(t\text{-test})} = 0.029$ ,  $p_{(WMW)} = 0.04$ ).

**Table 3**  
*Average Number of Reported Matrices by Self-Reported Cheating*

Treatment	How often did you cheat		P-value*
	Never	At least a few times	
Baseline	2.82 (0.35)	3.39 (0.24)	0.187
Recycle	5.45 (0.37)	6.85 (0.35)	0.007
Shredded	5.52 (0.46)	6.23 (0.32)	0.212

\*Two-sample, two-tail t-test with unequal variance. WMW test produces qualitatively similar results.

## 4.2. Honesty, Ability, Social Norm, and Socioeconomic Status

In this section, we discuss the effects of ability, social norm, and socioeconomic status on cheating behavior. We consider three dependent variables to represent cheating. The first dependent variable is the number of matrices reported by the student, as higher reported numbers are more likely to involve cheating. In this case, we can consider all treatments. The second dependent variable is an indicator variable of individual cheating in the recycle treatment. And the third dependent variable is over-reporting the number of solved matrices in the recycle treatment, which is a measure of the extent of cheating.

As discussed in Section 2, we ask two questions in our survey that are used to understand the students perceived social norms among their peers in a context like our cheating experiment. One of them asked, “To what extent do you agree that the number of correctly solved matrices will be over reported by a participant?” on a six-point scale from strongly agree to strongly disagree. It is difficult to know the difference between strongly agree and agree and so on. Therefore, we group the responses strongly disagree, disagree, and slightly disagree in the category “disagree” and group responses similarly for “agree.” The regressions labeled (1) use answers to this question to represent social norm as an independent variable. But it is also difficult to know the difference between slightly agree and slightly disagree. Given the relative

and dubious nature of this variable, when interpreting the results, we focus more on the regressions labeled (2), where social norm is represented by the students' prediction of the average number of matrices to be claimed to be correctly solved on the answer sheet by a participant.

**Table 4**  
***Ability, Social Norm, and Socioeconomic Status and Cheating***

Dependent variable	(a) No. of matrices (Linear regression)		(b) Cheat (yes = 1) (Probit)		(c) Over-reporting (Tobit)	
	(1)	(2)	(1)	(2)	(1)	(2)
Treatment	2.88*** (0.37)	1.95*** (0.36)				
No. of correct matrices			- 0.05*** (0.01)	- 0.06*** (0.01)	- 0.72*** (0.18)	- 0.79*** (0.17)
Norm	- 0.61 (0.37)	0.38*** (0.05)	- 0.006 (0.09)	0.04*** (0.01)	-0.64 (1.06)	0.57*** (0.10)
Father's education						
- Higher secondary	- 0.19 (0.67)	-0.50 (0.63)	0.17 (0.16)	0.13 (0.16)	2.42 (2.07)	1.64 (1.92)
- Bachelor's	0.02 (0.68)	-0.06 (0.64)	0.11 (0.15)	0.10 (0.15)	1.81 (1.96)	1.34 (1.79)
- Master's and above	0.42 (0.70)	0.07 (0.66)	0.16 (0.15)	0.12 (0.15)	2.36 (1.98)	1.49 (1.80)
Mother's education						
- Higher secondary	0.20 (0.56)	0.43 (0.53)	- 0.22** (0.10)	- 0.19* (0.11)	- 2.39 (1.53)	- 1.58 (1.40)
- Bachelor's	- 0.07 (0.61)	0.41 (0.58)	- 0.22* (0.12)	- 0.19 (0.12)	- 2.49 (1.73)	- 1.07 (1.59)
- Master's and above	- 0.10 (0.64)	0.28 (0.61)	- 0.23* (0.12)	- 0.18 (0.12)	- 3.06* (1.79)	- 1.72 (1.63)
Parent's income (in taka)						
- 40,000 – 80,000	- 0.30 (0.51)	- 0.004 (0.48)	- 0.23** (0.11)	- 0.20* (0.11)	- 2.14 (1.33)	- 1.34 (1.23)
- 80,000 – 150,000	- 0.10 (0.56)	- 0.11 (0.52)	- 0.01 (0.11)	- 0.01 (0.11)	0.25 (1.36)	0.55 (1.25)
- above 150,000	0.02 (0.59)	0.03 (0.55)	- 0.15 (0.12)	- 0.19 (0.12)	- 0.69 (1.51)	- 0.58 (1.40)
Gender (male = 1)	0.93*** (0.33)	0.74** (0.30)	0.06 (0.07)	0.05 (0.07)	1.69* (0.88)	1.08 (0.81)
Session size (large = 1)	2.17*** (0.61)	1.51*** (0.57)	0.12 (0.10)	0.08 (0.10)	3.77*** (1.33)	2.43** (1.21)
Intercept	1.87 (1.68)	0.04 (1.58)			1.83 (2.75)	- 2.08 (2.59)
No. of observations	502	492	219	215	219 (127)	215 (124)

*Notes:* 1. Standard errors reported in parentheses. 2. In case of probit model, the average marginal effects are reported. The Tobit regression has a 0 lower bound. 3. \*\*\* p-value < 0.01, \*\* p-value < 0.05, \* p-value < 0.1. 4. In regression (1) norm = 1 if agreeing to the question “To what extent do you agree that the number of correctly solved matrices will be over reported by a participant?”. 5. The baseline category in parents’ education is less than higher secondary and in parents’ income is less than Tk 40,000. 6. In the case of Tobit regressions, the uncensored number of observations is given in brackets.

The number of matrices reported is significantly higher in regressions (a) in Table 4 reconfirming cheating in the treatment sessions. Social norm in terms of expected claim by peers significantly increases the self-reported number of solved matrices (regression (a (2))), the likelihood (regression (b (2))) and extent of cheating (regression (c (2))). The results in Table 2 suggest that this peer effect is generated through a “social conformity” mechanism, where the students tend to match their behavior to what they think others would do, rather than through the “false consensus effect,” where a student would project her own behavior onto others (Charness & Sontuoso, 2018).

Ability or accomplishment in the task stands out as a strong predictor of the cheating behavior in our data. Both the likelihood (regression (b (2))) and extent of cheating (regression (c (2))) decrease with the number of successes in solving the matrices. Socioeconomic status does not seem to greatly influence morality in our setting. Father’s education is insignificant in all of the regressions. Higher education of mother shows consistently negative effects on dishonesty, but significantly only in a few cases.

Students who participated in large sessions cheated to a significantly higher extent, but there is no significant difference in the likelihood of cheating between students in large sessions and in small sessions. The large session-size most likely reduces the fear of detection, if any is left, in the treatment environments and encourages the cheaters to cheat more. However, such a fear or lack of fear does not affect the decision to cheat or not.

Male students report a significantly higher number of matrices than do female students, but there are no significant differences in the likelihood and extent of cheating. Other control variables not reported in the table are higher secondary curriculum, university, field of study, and father’s and mother’s work sector (private vs. public). These variables mostly remain insignificant across the regressions. The results reported in the table are from the regression dropping the variables religiosity, single child dummy, and lived in a foreign country dummy. The inclusion of these variables reduces the sample size because of many missing observations. The regressions controlling for these factors give qualitatively same results, however; none of these three variables is significant in any of the regressions.

### 4.3. Honesty and Other Social Capital

In this section we look into the association between honesty and commonly used measures of social capital, trust, trustworthiness, and social engagement (Helliwell & Putnam, 2007) from our second experiment and the survey. We only concentrate on the observations from the recycle treatment, which allows us to identify individual cheating. Among these 243 students, 121 students played the role of a trustor in the trust game, and 122 students played the role of a trustee.<sup>15</sup>

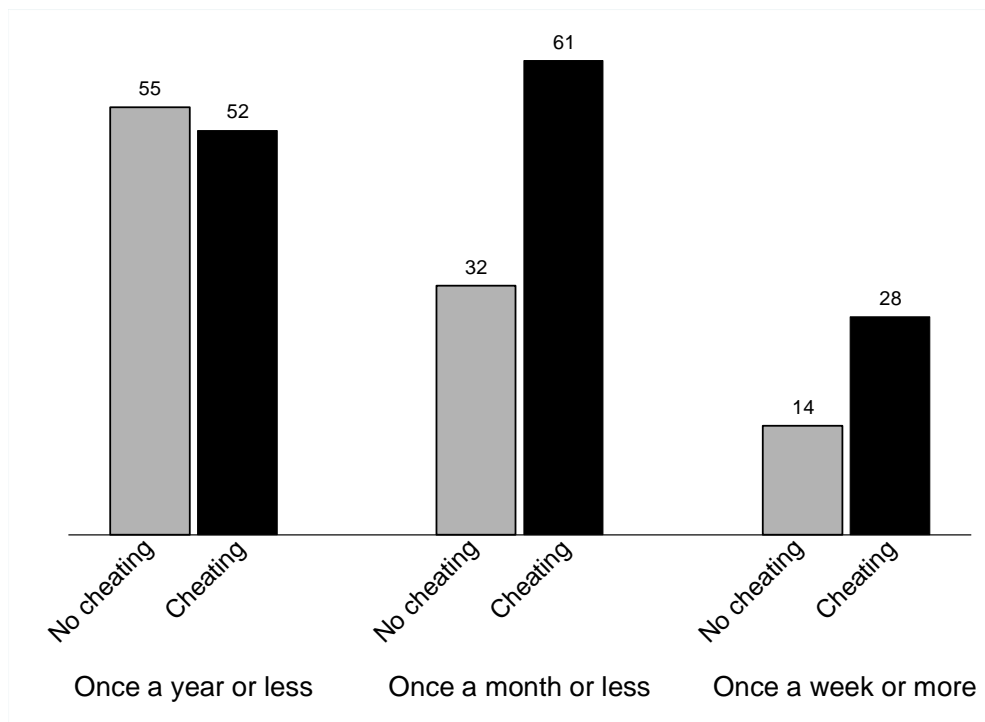
The trust level measured from the trust game, i.e., the percentage of the endowment sent by the trustor, is not significantly different between the students who cheated and the students who did not cheat in our experiment ( $p_{(t\text{-test})} = 0.513$ ,  $p_{(WMW)} = 0.499$ ), while trustworthiness (percentage of the received amount returned) significantly differs between the students who cheated and those who did not ( $p_{(t\text{-test})} = 0.013$ ,  $p_{(WMW)} = 0.039$ ). The students who cheated (mean = 7.17, s.d. = 2.08) sent back significantly less than the students who did not cheat (mean = 19.58, s.d. = 5.64). These results show that (dis)honesty and trustworthiness are related.

In the survey, we asked the students if they have ever been member of a club or similar organization(s), and how frequently they volunteer. If we assume that club membership represents a more cooperative attitude, and that volunteering signals altruism, then our study suggests some interesting relationships between honesty and these pro-social behaviors. The students who have never been a member of a club or similar organization do not seem to be more or less likely to be dishonest ( $p_{(\text{Fisher's exact})} = 1.00$ ). However, among the students who cheated, students who were never members of a club or similar entity cheated significantly more than the others ( $p_{(\text{one tail t-test})} = 0.028$ ,  $p_{(WMW)} = 0.040$ ). We find a counterintuitive relationship between volunteering and honesty. As Figure 3 suggests, students who volunteer more frequently seem to be more likely to cheat ( $p_{(\text{Fisher's exact})} = 0.026$ ). The relationship between honesty and other pro-social behavior could be an interesting topic for future research.

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<sup>15</sup> In our analysis, we had to drop 10 observations from the first session as we changed the implementation of the trust game slightly in later sessions. Also, we drop two observations as the students failed to follow the instruction.

**Figure 3. Cheating by volunteering frequency.**



## **5. Conclusion**

In this paper, we study the cheating behavior of young Bangladeshi students in an experimental setting to develop a better understanding of the individual and socioeconomic factors that may affect ethical decision making. The students participate in a real effort task experiment with incentives and different degrees of opportunity to cheat. A fraction of the students cheats when the opportunity is available, though to different degrees. A decrease in the risk of detection encourages the cheaters to cheat more. However, such a fear or lack of fear does not affect the decision to cheat or not. This finding lends support to the conjecture that morality of character is not only a function of material cost and benefit but also a complex accumulated construct of nature and the environment.

In our experiment, we find that the ability to successfully perform a task, and social norm in terms of the perception of peers' behavior, are the most important factors influencing honesty. Higher performance in the real effort task reduces both the likelihood and extent of cheating, while a higher expectation of average reporting by peers increases both the likelihood

and extent of cheating.<sup>16</sup> Socioeconomic status could not explain the behavior in our study to any great extent.

Recent experimental studies support the expectation that our insights from the experimental setting can be generalized to real life. For example, Cohn and Maréchal (2018) report that the laboratory cheating behavior of the middle and high school students' in their study could predict their school misconduct. Dai, Galeotti, and Villeval (2017) show that the dishonesty observed in a laboratory experiment by 279 public transport passengers in France correlates with their fare-dodging behavior in everyday life.

With regard to designing an effective policy to address the problems of corruption, fraudulence, cheating or generally unethical practices, our findings suggest that increasing/decreasing the cost/benefit of such behavior can provide only a partial solution. Building a norm of ethics through institutional reforms and social campaigns should be explored as an important potential avenue to address the issue. The treatment effect, showing that greater anonymity increases cheating, suggests that greater transparency should reduce dishonest behavior. On the other hand, the peer effect suggests that perceptions of greater cheating increase cheating, which could have different implications for transparency. If there are a great deal of corrupt and dishonest practices around, increasing visibility of these practices may amplify such behavior. It's an interesting multiple equilibria problem that has different policy and social implications.

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<sup>16</sup> The influence of ability on honest behavior suggests another channel through which assigning right person for the right job may increase efficiency.



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## Appendix 1: Instruction

Welcome to our experiment! Today you will take part in an Economics experiment. In this experiment you will be performing two separate problem-solving tasks and filling out one survey questionnaire.

You will be paid a show up fee of Tk200 for participating in the experimental session followed by a survey. You can earn an additional monetary payment based on your performance in the first experimental task. In the second experimental task your earning will depend on both your decision as well as decision made by your anonymous partner in the experiment.

In the first part of the experiment you will be asked to perform a very simple mathematical problem-solving task. Your monetary reward from this task will depend on your performance in it within the specified time period.

In the second task you will be paired randomly with another participant to make certain decision. The identity of the other participant you are paired with will not be disclosed to you. Your identity will also not be disclosed to the other participant you are paired with. Both your and your partner's earning will depend on the decisions made by both of you.

At the end of the experiment you will be asked to fill out a questionnaire. After that each of the participants will receive his/her total payment for participating in the experiment separately.

The experimental session and survey will last about two hours. Detailed instructions in Bengali for each task will be read out loud by the experimenter and also provided to you in English and Bengali in hard copy before each task. After the experimenter has finished reading the instructions to you, you may raise your hand if you have any questions and then an experimenter will approach you and address your question privately. It is important that you understand the instruction clearly.

Your individual privacy will be strictly maintained during the experimental session. Before the session starts you will be given a participation ID which is unrelated to any of your personal information. During the experimental session and data collection, storage, analysis and publication you will be identified with this ID to ensure your privacy.

**Important:** You must surrender your mobile phone or any handheld electronic devices including calculator before the session begins. If any of these are found in your possession during the experiment, you will be disqualified and excluded from participation immediately.

### **Task 1**

You are given two sheets in an envelope labeled “Task 1.” Please do not open the envelope before the experimenter tells you to do so.

The envelope contains:

The task sheet: The task sheet contains twenty 4 X 3 matrices, whereby each cell contains one three-digit number. In each matrix, you can find only one pair of cell numbers which add up to 10. For example, in the matrix below, you can see only two encircled cell numbers add up to 10.

2.24	6.67	6.19
4.19	7.76	4.51
2.69	0.79	4.09
3.28	5.14	3.35

You will be given ONLY four minutes to go through these twenty matrices and find the appropriate cells in each case (matrix) that added up to 10. Try to find such pairs in as many matrices as possible and circle the appropriate numbers, as shown in the example. For example, given that the task sheet contains 20 matrices and each matrix can contain only two cells that add up to 10, the maximum number of such pairs you can find is 20.

After completing the task you must destroy the task sheet by folding and then shredding it using the shredding machine placed at the corner of the room. It will ensure the anonymity of the task performance and prevent the disclosure of our mathematical task to possible future participants in the experiment.

The answer sheet: After shredding your task sheet you should come back to your desk and write down the number of correctly solved matrices on the answer sheet.

You must start working on the task sheet only when the experimenter instructs you to do so and stop working on it as soon as the experimenter declares that four minutes have passed. Please do not write your name or any personal information on the task sheet or the answer sheet.

After you have completed the answer sheet please put it back in the original envelope and raise your hand. An experimenter will approach you and collect the envelope. Later the experimenter will record your payment for this task in reference to the answer sheet you have submitted.

### **How your payment is determined**

Your payment = Number of matrices correctly solved times Taka 20. Each participant will receive his/her payment in cash at the end of the experimental session.

**If you have any question please raise your hand and one of the experimenters will attend to your question privately.**

### **Economic decision-making task**

**In this experiment, we would like to understand how people make decisions when their decision is consequential in terms of money. That is, in this experiment your earning will depend on how you and your anonymous partner take decision.**

At the beginning of this task each participant receives an endowment of Tk300.

For the purpose of this task we have randomly paired the participations. According to your participation ID you are assigned in a group of two with another participant in the session. In each pair one participant will be called “Participant 1” and the other “Participant-2.” Within your pair you are randomly assigned the role of “Participant-1” or “Participant-2.” Whether you have the role of Participant-1 or Participant-2 will be stated in a decision form provided to you. The identity of the other participant in your group will not be disclosed to you. Your identity will also not be disclosed to the other participant in the group.

If you are Participant-1, if you want you can send any amount in multiples of 20, such as Tk0, Tk20, Tk40, ....., Tk300, from your Tk300 endowment to the Participant-2 you are paired with. Whatever money Participant-1 sends will triple in amount as it gets to Participant-2. For example, if Participant-1 sends Tk20 to Participant-2 the money will be tripled in amount and Participant-2 will receive  $Tk3 \times 20 = Tk60$ . From this tripled amount if Participant-2 wants he/she can send back any amount in multiple of 20, such as Tk0, Tk20, Tk40, ....., to Participant-1 through the experimenter. If Participant-1 wants to send any money to Participant-2 please write down the amount in the decision form provided to you in an envelope labelled “Task 2” and put the form back in the envelope. When you have made your decision in private, close the envelope and raise your hand, and an experimenter will collect the envelope from you. All information about the rules of experiment are common knowledge to both Participant-1 and Participant-2.

If you are Participant-2 you are provided a decision form, listing all the possible amounts that Participant-1 may send to you, inside the envelope labeled “Task 2.” Please state your decision in every possible situation listed on the decision form. When you have made your decision in private, close the envelope and raise your hand, and an experimenter will collect the envelope from you.

After Participant-2 makes his/her decision the task will be over.

When all the participants have made their decisions, the experimenters will determine the earnings of the participants in a pair based on both Participant-1’s and Participant-2’s decisions.

**How your Task 2 payment is determined:**

Participant 1: Tk300 minus amount sent for Participant-2 plus the amount received from Participant-2

Participant-2: Tk300 plus triple the amount sent by Participant-1 minus the amount sent back for Participant-1

Each participant will receive his/her payment in cash at the end of the experimental session.

**If you have any questions, please raise your hand and one of the experimenters will attend to your question privately.**

**Survey Questionnaire**

You are requested to fill out a survey questionnaire. While you are filling out the questionnaire the experimenters will be calculating your total payment for participating in the experiment. After completing the survey questionnaire please raise your hand. An experimenter will collect the completed questionnaire from you.

Once the questionnaire has been collected from you, you should proceed to the person seated outside the experiment room with your Participation ID Card. The person will collect the Participation ID Card and write down your participation payment on a receipt and make the final payment to you. You will sign the receipt which will be kept as a record of payment with the experimental team. The payment receipt will not include your participation ID number. Therefore, your payment receipt cannot be connected to your responses in the experiment.

**If you have any questions please raise your hand and one of the experimenters will attend to your question privately.**

## Appendix 2: Survey Questionnaire

### Follow-up questions

**Please answer the following questions regarding the problem-solving exercises you have completed here today. We want to hear your opinion about others.**

**Q.1.** How sure are you that you have correctly solved the matrices as you claimed in the answer sheet in Task 1?

- Very sure
- Somewhat sure
- Not sure

**Q.2.** Do you think the time given to solve the matrices was enough in Task 1?

- Yes, the time was adequate
- The time was just okay
- The time was inadequate

**Q.3.** In your opinion, how many matrices can be correctly solved by a participant on average, given the 4-minute time in Task 1?

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**Q.4.** To what extent do you agree that the number of correctly solved matrices will be over reported by a participant?

- Strongly agree
- Agree
- Slightly agree
- Slightly disagree
- Disagree
- Strongly Disagree

**Q.5.** Task 1, how many matrices do you think on average will be claimed to be correctly solved in the Answer sheet by a participant?

--

**Q.6.** Approximately what amount from the endowment will a Participant 1 allocate for the partner Participant 2 in the experiment in Task 2, in your opinion?

<input type="checkbox"/> 0	<input type="checkbox"/> 80	<input type="checkbox"/> 160	<input type="checkbox"/> 240
<input type="checkbox"/> 20	<input type="checkbox"/> 100	<input type="checkbox"/> 180	<input type="checkbox"/> 260
<input type="checkbox"/> 40	<input type="checkbox"/> 120	<input type="checkbox"/> 200	<input type="checkbox"/> 280
<input type="checkbox"/> 60	<input type="checkbox"/> 140	<input type="checkbox"/> 220	<input type="checkbox"/> 300

**Q.7.** In Task 2 if Participant 1 sends Tk 'Y' from his/her endowment, Participant 2 receives three times that amount, which is Tk '3Y'. What amount from this received amount on average do you think will be sent back to Participant 1 by Participant 2 in this experiment?



The amount sent by Participant-1	Participant-2 receives	The amount of money Participant-2 will send to Participant-1, you think
20 Taka	$3 \times 20 = 60$ Taka	
40 Taka	$3 \times 40 = 120$ Taka	
60 Taka	$3 \times 60 = 180$ Taka	
80 Taka	$3 \times 80 = 240$ Taka	
100 Taka	$3 \times 100 = 300$ Taka	
120 Taka	$3 \times 120 = 360$ Taka	
140 Taka	$3 \times 140 = 420$ Taka	
160 Taka	$3 \times 160 = 480$ Taka	
180 Taka	$3 \times 180 = 540$ Taka	
200 Taka	$3 \times 200 = 600$ Taka	
220 Taka	$3 \times 220 = 660$ Taka	
240 Taka	$3 \times 240 = 720$ Taka	
260 Taka	$3 \times 260 = 780$ Taka	
280 Taka	$3 \times 280 = 840$ Taka	
300 Taka	$3 \times 300 = 900$ Taka	

**We will now ask you several questions regarding your attitude to different issues. Please read carefully and provide us your responses, for our research purposes only.**

**Q.8.** Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?

- Most people can be trusted
- Need to be very careful
- Don't know

**Q.9.** Do you think most people would try to take advantage of you if they got a chance, or would they try to be fair? Please choose your response from the following options, where 1 means that "people would try to take advantage of you," and 10 means that "people would try to be fair":

- 1: People would try to take advantage of you
- 2
- 3
- 4
- 5: Neutral
- 6
- 7
- 8
- 9
- People would try to be fair
- Don't know

**Q.10.** Would you say that most of the time people ...

- Try to be helpful?
- Are mostly just looking out for themselves?

**Q.11.** Have you ever spontaneously benefited from the generosity of someone you never knew before?

- YES
- NO

**Q.12.** How interested would you say you are in politics?

- Very interested
- Somewhat interested
- Not very interested
- Not at all interested

**Q.13.** How often do you pray?

- Several times a day
- Once a day
- Several times each week
- Only when attending religious services
- Only on special holy days
- Once a year
- Less often than once a year
- Never, practically never
- Not willing to respond

**Q.14.** Have you ever been a member of any club(s), organization(s) or political party?

- Yes (please specify)

Name(s)	Year(s)

- No

**Q.15.** How often do you spend ~~some~~ time volunteering?

- More than once a week
- About once a week
- About once a month
- About once every other month
- Once a year or less

**Q.16.** How justifiable do you think cheating (such as, copying someone else's work) in examinations/assignments is?

- 1: Never justifiable
- 2
- 3

- 4
- 5: Neutral
- 6
- 7
- 8
- 9
- Always justifiable
- Not willing to respond

**Q.17.** How often have you cheated (such as, copying someone else's work) in examinations/assignments?

- Never
- A few times
- Many times
- Not willing to respond

**Q.18.** To what extent do you agree with the following statement: You either lie or you don't, there are no degrees of lying?

- Strongly agree
- Agree
- Slightly agree
- Slightly disagree
- Disagree
- Strongly disagree

**Q.19.** How often do you lie?

- Never
- On very few occasions
- On many occasions
- Not willing to respond

**Q.20.** Upon graduation, would you like to work in the:

- Private sector
- Public sector
- Don't know

**Now we would like to know some basic information about yourself and your family. For the purpose of our research following information are is very important.**

**Q.21.** What is your age?

**Q.22.** What is your gender?

- Female
- Male

**Q.23.** What is your religion?

<input type="checkbox"/> Buddhist <input type="checkbox"/> Christian	<input type="checkbox"/> Hindu <input type="checkbox"/> Muslim	<input type="checkbox"/> Other; specify: <input type="checkbox"/> Not willing to answer
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**Q.24.** Please specify your higher secondary diploma, as appropriate, and mention the year of receiving it:

Alim

Year the diploma was granted:

A-level

Year the diploma was granted:

HSC

Year the diploma was granted:

Other (Please specify):

Year the diploma was granted:

**Q.25.** Which university you are currently attending?

**Q.26.** Which year of your undergraduate study you are currently in?

**Q.27.** What is your current field of study?

**Q.28.** Are you currently working for wages?

Yes

Full time

Part time

No

**Q.29.** If you have any, please specify the length of your paid work experience:

**Q.30.** If you are currently earning any income, please specify the range:

- More than Tk 0 but less than Tk 5,000
- More than Tk 5,000 but less than Tk 10,000
- More than Tk 10,000 but less than Tk 15,000
- More than Tk 15,000 but less than Tk 20,000
- More than Tk 20,000
- Not applicable
- Not willing to answer

**Q.31.** What is the highest level of education completed by your parents?

Father	Mother
<ul style="list-style-type: none"> <li><input type="checkbox"/> No formal education</li> <li><input type="checkbox"/> Primary Education</li> <li><input type="checkbox"/> Secondary Education (without diploma)</li> <li><input type="checkbox"/> Ebtedayee education</li> <li><input type="checkbox"/> Dhakhil level education (without diploma)</li> <li><input type="checkbox"/> S.S.C.</li> <li><input type="checkbox"/> Dhakhil Certificate</li> <li><input type="checkbox"/> O-Level</li> <li><input type="checkbox"/> H.S.C.</li> <li><input type="checkbox"/> Alim Certificate</li> <li><input type="checkbox"/> A-Level</li> <li><input type="checkbox"/> Bachelor's Degree</li> <li><input type="checkbox"/> Fazil Degree</li> <li><input type="checkbox"/> Master's Degree</li> <li><input type="checkbox"/> Kamil Degree</li> <li><input type="checkbox"/> M.Phil</li> <li><input type="checkbox"/> Ph.D</li> <li><input type="checkbox"/> Other (Please specify):</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> No formal education</li> <li><input type="checkbox"/> Primary Education</li> <li><input type="checkbox"/> Secondary Education (without diploma)</li> <li><input type="checkbox"/> Ebtedayee education</li> <li><input type="checkbox"/> Dhakhil level education (without diploma)</li> <li><input type="checkbox"/> S.S.C.</li> <li><input type="checkbox"/> Dhakhil Certificate</li> <li><input type="checkbox"/> O-Level</li> <li><input type="checkbox"/> H.S.C.</li> <li><input type="checkbox"/> Alim Certificate</li> <li><input type="checkbox"/> A-Level</li> <li><input type="checkbox"/> Bachelor's Degree</li> <li><input type="checkbox"/> Fazil Degree</li> <li><input type="checkbox"/> Master's Degree</li> <li><input type="checkbox"/> Kamil Degree</li> <li><input type="checkbox"/> M.Phil</li> <li><input type="checkbox"/> Ph.D</li> <li><input type="checkbox"/> Other (Please specify):</li> </ul>

**Q.32.** In which sector does your father work?

- Public
- Private
- Other (Please specify):

**Q.33.** In which sector does your mother work?

- Public
- Private
- Other (Please specify):

**Q.34.** Please specify you parents' professions:

Father:
Mother:

**Q.35.** Please specify in which monthly income range your parents belong to (to the best of your knowledge):

- More than Tk 0 but less than Tk 20,000
- More than Tk 20,000 but less than Tk 40,000
- More than Tk 40,000 but less than Tk 60,000
- More than Tk 60,000 but less than Tk 80,000
- More than Tk 80,000 but less than Tk 100,000
- More than Tk 100,000 but less than Tk 150,000
- More than Tk 150,000 but less than Tk 200,000
- More than Tk 200,000 but less than Tk 300,000
- More than Tk 300,000 but less than Tk 400,000
- More than Tk 400,000 but less than Tk 500,000
- More than Tk 500,000

**Q.36.** Please state the following information about your siblings. For each of your siblings fill out one of the rows in the table (if needed you can add more rows to the table):

Number of the sibling (e.g. Sibling 1)	Age	Gender	Highest level of Education Completed (please select from the below)

LIST: No formal education; primary Education; secondary Education (without diploma); Ebtedayee education; Dhakhil level education (without diploma); S.S.C.; Dhakhil Certificate; O-Level; H.S.C.; Alim Certificate; A-Level; Bachelors' Degree; Fazil Degree; Masters' Degree; Kamil Degree; M.Phil; Ph.D; Other (please specify).

**Q.37.** Have you lived in any other country other than Bangladesh? If yes, please specify which country and for how long.

- Yes

Country(ies)	from	to

- No

**Q.38.** How many years of your life you have spent in Dhaka?

**Q.39.** How many years of your life you have spent in another urban area other than Dhaka?

**Q.40.** How many years of your life you have spent in a rural area?

**Q.41.** Have you ever participated in an experiment similar to the one you are participating today?

- No
- Yes

If yes, please specify when?