Institutions, Culture and Blowing the Whistle on Corruption: 
An Experiment with Northern and Southern Italians

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Abstract

Why do some people choose to blow the whistle on corruption, while others do not? Does the willingness to engage in grassroots monitoring differ culturally between high-corruption and low-corruption societies? And does the answer depend on whether individuals in these societies have access to effective and efficient enforcement institutions? This paper contributes to the nascent literature on whistleblowing in the anti-corruption context by comparing individual decision-making across cultures and institutions. Employing an experimental methodology, I examine how the propensity to report corruption differs between Northern and Southern Italians, two groups that experience very different levels of corruption in everyday life. The experiment measures behavior under two different institutional environments: a “strict enforcement” condition where reports always result in sanctions against perpetrators, and a “lax enforcement” condition where 50% of reports are ignored. I find no difference in the behavior of Northern and Southern Italians in the lax enforcement condition, but in the strict enforcement condition, Southerners were much more likely to denounce wrongdoing, while the behavior of Northerners remained unchanged. These results suggest that the experience of corruption shapes the willingness to engage in anti-corruption monitoring, but that the effect depends upon the quality of enforcement institutions.

Keywords: Corruption, Institutions, Culture, Experiments, Punishment
JEL Classification: C91 D73 K42 Z13

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1 Introduction

The past two decades have witnessed a proliferation of research on possible approaches to combat corruption. While one branch of this literature focuses on the design of optimal institutions to reduce opportunities for graft and increase incentives for honesty (Andvig et al. 2001; Klitgaard 1988; Rose-Ackerman 1978), other work highlights the many ways in which ordinary citizens can bring about greater governmental accountability (Adserà, Boix and Payne 2003; Besley 2006; Grimes 2013; Olken 2007; Rose-Ackerman 1999; World Bank 2004). And amongst the many possible actions that citizens can take, one of the most important involves the reporting of corruption to formal oversight agencies.

As many scholars have noted, law enforcement authorities seldom have adequate time and resources to investigate all potential instances of malfeasance (McCubbins and Schwartz 1984; Sunshine and Tyler 2003; Tyler 2010). Many oversight agencies must therefore depend upon citizens to sound “fire alarms” to expose corruption and provide evidence against wrongdoers. Furthermore, while political elites may have incentives to block reform, the same is not true for citizens, who are often corruption’s primary “victims,” and therefore ideally placed to push for change (Mungiu-Pippidi 2006). Indeed, case studies of successful anti-corruption campaigns have highlighted the importance of grassroots monitoring in improving accountability (Grimes 2013; Manion 2009; Peruzzotti and Smulovitz 2006).

Yet, though the literature often assigns citizens (or civil society) a central role in controlling corruption, individuals’ motivations to engage in such actions (particularly in endemically-corrupt societies) remain poorly understood. Why do some citizens choose to blow the whistle on corruption, while others do not? Does the willingness to engage in grassroots monitoring differ culturally between high-corruption and low-corruption societies? And does the answer depend on whether individuals in these societies have access to effective and efficient enforcement institutions?

This article explores theoretically and empirically the relationship between institutions, culture and anti-corruption monitoring. I report results from an economic experiment involving participants from both the North and the South of Italy. Importantly, research has shown that the level of corruption differs significantly across these regions (Banfield 1958; Chang, Golden and Hill 2010; Golden and Picci 2005; Putnam 1993), and participants who grew up in these separate environments are likely to have internalized different norms about corruption tolerance. The experimental design allows me to isolate the effect of these norms by holding the quality of enforcement institutions constant. Further, in a second treatment, I also vary the probability that someone reported for corruption will be formally sanctioned, and thereby test whether cultural effects depend upon the effectiveness of formal oversight agencies. By comparing individual decision-making across cultures and institutions, this paper contributes to the nascent literature on whistleblowing in the anti-corruption context (Barr, Lindelow and Serneels 2009; Cameron et al. 2009).

In Section 2, I discuss the relevant literature on corruption and cultural norms, focusing particular attention on how greater exposure to corruption in everyday life may shape individuals’ willingness to participate in grassroots monitoring. Section 3 describes the experimental design and the two participant populations, while Section 4 presents the results. In Section 5, I offer several conjectures to account for the experimental findings, before concluding with some suggestions for future research.
2 Related Literature

Several recent studies have examined the relationship between cultural norms and corruption (Barr and Serra 2010; Cameron et al. 2009; Fisman and Miguel 2007; Paldam 2002; Treisman 2000). For example, Fisman and Miguel (2007) investigate the parking behavior of United Nations diplomats during a period in which they were immune from enforcement actions. Even in the absence of legal constraints, diplomats from low-corruption countries accumulated significantly fewer unpaid parking violations (a form of abuse of office), suggesting an important role for cultural norms in constraining opportunistic behavior. Barr and Serra (2010) report similar findings from a laboratory experiment in the UK: higher exposure to a “culture of corruption” in students’ home countries is associated with a greater propensity to bribe in the lab.¹

However, while recent studies focus on cultural variation in corrupt behavior, relatively little research has examined how corruption tolerance may also vary across societies (Cameron et al. 2009). However, even though individuals in high-corruption societies may be more likely to engage in illicit behavior themselves, this does necessarily not mean that they are more likely to accept such behavior on the part of others. Indeed, ethnographic research has shown that people can perceive the same corruption scenario as right or wrong, depending on whether they are the victims or the beneficiaries of the transaction (Hasty 2005; Olivier de Sardan 1999; Smith 2010). Therefore, it is important to study how everyday exposure to corruption shapes the norm of accountability.

In theory, greater exposure to corruption in daily life can affect accountability norms in one of two ways. On the one hand, citizens in high-corruption countries may have a more intimate understanding of corruption’s costs for society, which can fuel greater public anger and indignation (Hasty 2005; Miller 2006; Olivier de Sardan 1999; Persson, Rothstein and Teorell 2012; Rothstein and Torsello 2013; Smith 2010). As forcefully argued by Olivier de Sardan (1999) with regards to Sub-saharan Africa:

> Corruption is...as frequently denounced in words as it is practised in fact [...] At the everyday level, there is scarcely a conversation without hostile or disgusted references to corruption, either the petty type of which one claims to have been a victim, or the upper crust type about which one has rumours to spread. [This condemnation] must be taken seriously, and not just brushed off as mere superficial rhetoric. (p.29)

Given the degree of public discontent, individuals in high-corruption societies may be more willing to take a stand against malfeasance, as compared to their counterparts in countries with lower levels of graft.

On the other hand, an alternative argument holds that socialization into a “culture of corruption” may increase individuals’ acceptance of wrongdoing (Barr, Lindelow and Serneels 2009). This may be especially true if individuals come to believe that bribery is a routine strategy, employed by all “normal” citizens, to gain access to public services (Cameron et al. 2009; Miller 2006; Persson, Rothstein and Teorell 2012). In this context, to sanction someone for accepting a “gift” would seem overly-scrupulous, hypocritical, or even

¹The correlation is significant only for undergraduate students, but not graduate students. One explanation may be that home-country norms converge to the UK norm over time.
insensitive to “the way things work.” In this way, cultural beliefs about the ubiquity of illicit payments serve to justify and excuse such behavior, thereby weakening the norm of accountability.

Empirical evidence from large-N cross-national studies would seem to support this later argument. Figure 1 graphs the relationship between corruption tolerance and country corruption rankings, as measured by Transparency International (TI)’s 2013 Corruption Perceptions Index. The y-axis displays the percentage of individuals who indicated that they would be willing, hypothetically, to report a incident of corruption. The data are drawn from TI’s 2013 Global Corruption Barometer, and are available for over 100 countries. The figure shows that the higher level of corruption in a country, the less willing its citizens are to report malfeasance, suggesting that corruption exposure and corruption tolerance are directly related.

However, this relationship is complicated by the fact that individuals in different societies face different sets of institutional constraints. In particular, while citizens can report corruption, they cannot directly enforce the law. Instead, they must depend upon formal oversight agencies to act upon their complaints and sanction the perpetrators (Grimes 2013). Yet, in countries where corruption is pervasive, such offices may be lacking, ineffectual, or themselves deeply corrupted (Bauhr and Grimes 2014: 296). As a consequence, citizens may be outwardly tolerant of corruption not out of any moral lassitude, but rather because they perceive efforts to sound the alarm as futile (Persson, Rothstein and Teorell 2012).

Economic experiments can help resolve this problem by teasing apart the influence of institutional and cultural factors on the willingness to blow the whistle on corrupt behavior. For example, Cameron et al.
(2009) compared participants from four societies with different corruption levels (Australia, India, Indonesia and Singapore) in terms of their propensity to both engage in and punish bribery. Because participants in all four countries were presented with equivalent incentives and opportunities, the resulting behavior arguably reflects the influence of cultural norms alone. Surprisingly, Cameron et al. (2009) find support for both of the arguments above: while Australians tended to be more critical of corruption than Indians (which would support the acceptance hypothesis), Singaporeans appeared to be more tolerant of bribery than Indonesians (which would support the indignation hypothesis). Given these inconclusive results, more cross-cultural research examining how exposure to corruption affects accountability norms is needed. The experiment described the following section contributes to filling this gap.

3 Methodology

3.1 The Corruption Game

My experiment consists of a very simple bribery game which simulates petty corruption within a public hospital setting. Although standard practice is to use neutral language, I deliberately chose to frame my experiment in order to simulate a real-life corrupt transaction. Moreover, I chose the hospital setting because the medical sector is regarded as amongst the more corruption-ridden institutions in Italian society. Further, while we may doubt that ordinary citizens have encountered corruption in other scenarios (e.g. public procurements), participants are likely to have a more concrete idea of how corruption in the health sector operates. Finally, since public hospitals in Italy are public institutions, individuals should expect impartial treatment, and any personal favoritism is likely to be understood as corruption. Overall, the framing brings a measure of realism, and affords us greater confidence that behavior in the lab will more faithfully reflect choices in real life.

Within the experiment, participants were randomly assigned to one of three roles: Nurse, Early Patient (PE), or Late Patient (PL). Essentially, PLs must decide whether to offer (and Nurses must decide whether to accept) a “gift” in exchange for faster service. PEs are harmed by this transaction, and must decide whether to punish corrupt Nurses by reporting them to the hospital administration.

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2As noted by Harrison and List (2004), abstract, context-free experiments do not necessarily provide more general findings, if the context itself is relevant to the decision-problem facing participants. On the other hand, Abbink and Hennig-Schmidt (2006) find that loaded language does not make a difference in the corruption game they study.

3A 2013 survey by Transparency International revealed that 54% of Italians rated the medical services in their country as either “corrupt” or “very corrupt.”

4As one participant noted in a follow-up survey: “...in real life, I encountered a similar example [as the one described in the game].”

5Another participant stated that: “I pretended to place myself in exactly the same situation as described in the game. If in real life I would have had to confront such a scenario, I would have behaved [in the way I did in the game].”
The full game is described below. However, in this paper, I am mainly interested in how culture and institutions affect the decision to blow the whistle on corruption. Therefore, in my analysis, I focus attention only on the behavior of PEs, and the main dependent variable under consideration is the rate at which PEs report corrupt transactions.

Overall, the experiment is very similar to the designs employed by Barr and Serra (2010) and Cameron et al. (2009). As in Cameron et al. (2009)’s experiment, the victim of corruption (the PE) is allowed to punish the beneficiaries. However, the imposition of sanctions here is dependent upon an exogenous institution (the hospital administration), which may or may not act on the report. In addition, as in the previous two studies, all interactions are anonymous and one-shot. This ensures that punishment conveys no economic benefit, such that the decision to denounce corruption is not affected by the anticipation of possible future economic gains. Therefore, PEs’ willingness to report should directly reflect of norms of accountability.

Both PE and PL begin each round with an initial endowment of 32 experimental currency units (ECU). Patients were told to imagine that they are waiting in line to see the doctor. Waiting is costly for Patients, but because PEs have arrived early at the hospital, they face a very short wait and can keep their entire initial endowment. However, PLs face a very long wait and, as a result, will lose 16 ECU. PLs thus retain 32 - 16 = 16 ECU in the round.

However, PLs can potentially the line and avoid this loss. Each PL is randomly matched to one Nurse, and has the option of offering this Nurse a “gift” worth 6 ECU, in exchange for being allowed to jump the queue. In other words, if the PL makes an offer and the Nurse accepts, the PL no longer has to wait, and consequently earns 32 - 6 = 26 ECU. Although in this case the PL pays the cost of the gift, he is much better off at the front of the queue (with 26 ECU) than at the back (with 16 ECU). Offering a gift is a dominant strategy in the game: if the PL chooses not to offer, he is sure to lose 16 ECU. The same result obtains if the PL offers a gift, but his offer is rejected by the Nurse (however, having your offer rejected carries no additional cost). On the other hand, the PL’s earnings increase from 16 to 26 if his offer is accepted. Therefore, PLs can only gain by offering.

For their part, Nurses must decide whether to accept gifts from Patients. Nurses begin the game with 24 ECU, and retain this amount if they are offered no gifts, or if they refuse to accept PL offers. On the other hand, if they decide to accept gifts (and in exchange permit PLs to skip the line), they will receive 6 additional ECU for each gift they receive. Nurses do not know exactly how many PLs they are interacting with in each round, but must choose what they would do in case any gifts are offered.

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6 By contrast, in a multi-period game, individuals may choose to punish in the hopes of deterring corruption and decreasing future harm (Heckathorn 1989).

7 A technical note on the matching procedure: every PL is assigned to play with exactly one Nurse. However, it could very well be the case that a particular Nurse has more than one PL matched to him, and also that some Nurses have no PLs matched with them.

8 All exchanges are phrased as “gifts” or “favors” in the game. At no point in the experiment was the word “bribe” used.

9 Recall that Nurses can have more than one PL matched to them, and so receive more than one offer of a gift. To be exact, Nurses must decide whether to accept all gifts that are offered, or to accept none.
As a consequence of the exchange between the PL and the Nurse, all of the PEs must wait a little longer in line and each suffers a small loss of 3 ECU. However, PEs are not merely passive bystanders in the game, but rather operate as potential monitors. Specifically, each PE is randomly matched to one Nurse, and is told that he can “overhear” conversations between this Nurse and other patients, such that he will know if this Nurse has exchanged any favors. PEs can then report this Nurse to the hospital administration, which may or may not impose a fine. If the Nurse is fined, he forfeits any gifts he has received, and also pays a fine of 9 ECU, such that he retains only 24 - 9 = 15 ECU at the end of the round.

However, reporting is always costly to the PE, who must pay a reporting “fee” of 3 ECU regardless of whether the Nurse is actually punished. In fact, from the PE’s perspective, reporting is never rational in a one-shot game: even if the Nurse is fined, PLs who have skipped the line still remain at the front. In other words, PEs will always lose for every PL that skips the line, irrespective of their own actions. All players make their decisions simultaneously, and the one-shot game has a single equilibrium outcome: all PLs offer gifts, no PEs report corrupt exchanges, and all Nurses accept offers.

Finally, the experiment is implemented under two different conditions, which simulate two different levels of institutional effectiveness. In the “lax enforcement” version, the PE’s report results in the imposition of a sanction only 50% of the time. The other 50% of the time, the Nurse pays no fine and keeps whatever gifts he has received. However, in the “strict enforcement” version, a Nurse who is reported by a PE is sanctioned 100% of the time. However, although the incentives facing Nurses change across the two conditions, the monetary payoffs facing PEs remain identical: any indication of a willingness to punish corruption costs 3 ECU, regardless of whether the punishment is actually imposed.

3.2 Procedure

The experiments reported in this paper were conducted as part of a larger research project on corruption which I implemented at [Northern Italian university] in 2013. [Northern Italian university] maintains an electronic database of students who have signed up to participate in behavioral experiments (Greiner 2004). Several days prior to the start of the experiment, individuals in the database receive an email informing them of the opportunity to take part in an upcoming research project, and inviting them to subscribe to an experimental session at a particular date and time. The email also includes information on the estimated length of each session, as well as the expected earnings per participant.

Once subjects have arrived at the laboratory at the appointed date and time, they are provided with a randomly-drawn, anonymous ID number, and assigned to a corresponding personal computer terminal. Subjects undertake all experimental tasks via computer, and the terminals are partitioned to ensure that individuals could not communicate during the experiment, nor observe what other subjects are doing. Subjects were also informed that they would have the opportunity to earn ECU during the experiment, which would be converted into real money at the end of the session. At this point, participants were asked to sign a consent form informing them that their decisions and payments would remain anonymous, and that they

10 The experiment was programmed in zTree (Fischbacher 2007).
could discontinue participation in the experiment at any time. Individuals who wished to leave the experiment early could elect to receive a 3 euro show-up fee. However, in practice, every participant remained until the end of the session.

We began the session by conducting a short computerized survey to capture basic demographic characteristics (e.g. gender, age, etc.), before proceeding to explain the rules of the experiment. Participants make decisions for three rounds. In each round, players are randomly assigned to a (new) role, such that by the end of the game, players have had the chance to play in all 3 roles. Importantly, players were shown the results of each round only at the end of the entire session - i.e. after all of the experimental tasks had been completed. This feature, coupled with the fact that participants are randomly rematched in each period, means that behavior in the game should be unaffected by signaling, reputation formation, wealth effects and serial correlation in decisions (Cameron et al. 2009). Finally, since the rules are somewhat complex and the payoffs hard to keep track of, at the moment of making their decision, players were shown a summary of their choices and the possible consequences for themselves and for other participants. In general, the vast majority of participants rated their own understanding of the game as excellent.

Upon completion of the experimental tasks, subjects were shown feedback on their decisions, and informed of their total earnings. Participants then answered a short debrief questionnaire before receiving payment. On average, each session lasted 1 hour and 10 minutes and participants were paid approximately 13 euros (USD 17.50) for their time.

3.3 Participants

I employ a version of Barr and Serra (2010)’s recruitment strategy to capture cultural variation in the propensity to engage in whistleblowing. In particular, this strategy assumes that students in the same university may have been exposed to different levels of corruption in their home societies. If such differential exposure leads to the development of different norms, then such effects may manifest in behavior in the lab. Along these lines, [Northern Italian university] admits a large student body, and enrolls students not only from its surrounding region of [anonymized], but also from the South of Italy.11 Further, as shown in Table 1, citizens from the South tend to have much higher exposure to corruption (also with respect to the health sector) than their compatriots further North, which may be reflected in different accountability norms. Finally, if participants bring these norms into the experiment, then we should see differences in the reporting decisions of Northern and Southern Italians.

To ensure a rough geographic balance, recruitment to the experiment was stratified by participants’ region of origin, and the institutional treatments were randomly assigned within each stratum. In all, the data reported in this paper are drawn from ten different experimental sessions involving a total of 156 participants (44% from the North, and 56% from the South). In the overall sample, 51.3% of participants were male, and the

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11Universities in the North tend to be much better than those in the South. As a result, northward migration is quite common, but few Northerners make the opposite trek South.
Table 1: Perceptions of Corruption across Italian Regions

<table>
<thead>
<tr>
<th>Region</th>
<th>Others Corrupt</th>
<th>Self Bribe</th>
<th>Rating of Regional Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>Quality</td>
</tr>
<tr>
<td>Trento</td>
<td>0.87</td>
<td>-0.09</td>
<td>1.80</td>
</tr>
<tr>
<td>Bolzano</td>
<td>0.89</td>
<td>-0.02</td>
<td>1.77</td>
</tr>
<tr>
<td>Valle d’Aosta</td>
<td>0.55</td>
<td>-0.22</td>
<td>1.66</td>
</tr>
<tr>
<td>Friuli-Venezia Giulia</td>
<td>0.83</td>
<td>-0.58</td>
<td>1.10</td>
</tr>
<tr>
<td>Veneto</td>
<td>0.37</td>
<td>-0.93</td>
<td>0.69</td>
</tr>
<tr>
<td>Emilia-Romagna</td>
<td>0.07</td>
<td>-0.90</td>
<td>0.76</td>
</tr>
<tr>
<td>Lombardia</td>
<td>-0.31</td>
<td>-0.86</td>
<td>1.09</td>
</tr>
<tr>
<td>Toscana</td>
<td>0.42</td>
<td>1.19</td>
<td>0.13</td>
</tr>
<tr>
<td>Marche</td>
<td>C -0.04</td>
<td>-0.38</td>
<td>-0.20</td>
</tr>
<tr>
<td>Piemonte</td>
<td>N -0.02</td>
<td>1.00</td>
<td>0.37</td>
</tr>
<tr>
<td>Umbria</td>
<td>C -0.16</td>
<td>-0.64</td>
<td>-0.11</td>
</tr>
<tr>
<td>Liguria</td>
<td>N -0.09</td>
<td>1.29</td>
<td>-0.21</td>
</tr>
<tr>
<td>Abruzzo</td>
<td>S -0.44</td>
<td>1.58</td>
<td>-0.87</td>
</tr>
<tr>
<td>Sardegna</td>
<td>-0.25</td>
<td>1.42</td>
<td>-0.87</td>
</tr>
<tr>
<td>Lazio</td>
<td>C -0.54</td>
<td>1.67</td>
<td>-0.99</td>
</tr>
<tr>
<td>Basilicata</td>
<td>S -0.88</td>
<td>1.65</td>
<td>-0.53</td>
</tr>
<tr>
<td>Sicilia</td>
<td>S -1.05</td>
<td>1.49</td>
<td>-1.26</td>
</tr>
<tr>
<td>Molise</td>
<td>S -0.90</td>
<td>1.78</td>
<td>-1.54</td>
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<tr>
<td>Puglia</td>
<td>S -1.18</td>
<td>1.26</td>
<td>-1.46</td>
</tr>
<tr>
<td>Calabria</td>
<td>S -1.21</td>
<td>1.62</td>
<td>-2.08</td>
</tr>
<tr>
<td>Campania</td>
<td>S -1.63</td>
<td>2.03</td>
<td>-1.44</td>
</tr>
</tbody>
</table>

Data from the 2013 European Quality of Governance Index (Charron, Dijkstra and Lapuente 2013a,b). Scores are based on survey responses about the following topics: (1) the amount of perceived bribery by others in respondents’ area; (2) respondents’ own experience with bribery in public sector; (3) the quality of the public health care system in respondents’ area; (4) the impartiality of the public health care system in respondents’ area; and (5) perceived corruption of the public health care system in respondents’ area. All ratings have been standardized. Regional classifications are given by N = North, C = Central, and S = South.
average age was slightly over 25 years old (s.d. = 3.7 years). A large minority (39.7%) were undergraduate students, while the remainder were masters students.¹²

Table 2 compares demographic characteristics across Northern and Southern subjects and treatment groups, and reports p-values for differences in means.¹³ Reading each row from left to right, we see that Northerners and Southerners are roughly balanced on almost all characteristics in each of the treatment groups. Reading from top to bottom down the columns, we see no statistically significant differences for Northerners across institutional treatments. However, for Southerners, there are fewer undergraduates in the strict enforcement treatment. I control for this fact in the analyses reported in Section 4.

Table 2: Difference in Means (t-tests): Cultural and Treatment Groups

<table>
<thead>
<tr>
<th></th>
<th>Full Sample (N = 156)</th>
<th>North (N = 68)</th>
<th>South (N = 88)</th>
<th>North-South p-values (cultural effects)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Both Treatments Pooled</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.513</td>
<td>0.500</td>
<td>0.523</td>
<td>0.780</td>
</tr>
<tr>
<td>Age</td>
<td>25.263</td>
<td>25.059</td>
<td>25.420</td>
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</tr>
<tr>
<td>Undergrad</td>
<td>0.397</td>
<td>0.368</td>
<td>0.420</td>
<td>0.506</td>
</tr>
<tr>
<td>B. Lax Enforcement Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.534</td>
<td>0.500</td>
<td>0.565</td>
<td>0.546</td>
</tr>
<tr>
<td>Age</td>
<td>24.955</td>
<td>24.857</td>
<td>25.043</td>
<td>0.816</td>
</tr>
<tr>
<td>Undergrad</td>
<td>0.466</td>
<td>0.405</td>
<td>0.522</td>
<td>0.277</td>
</tr>
<tr>
<td>C. Strict Enforcement Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.485</td>
<td>0.500</td>
<td>0.476</td>
<td>0.852</td>
</tr>
<tr>
<td>Age</td>
<td>25.662</td>
<td>25.385</td>
<td>25.833</td>
<td>0.658</td>
</tr>
<tr>
<td>Undergrad</td>
<td>0.309</td>
<td>0.308</td>
<td>0.310</td>
<td>0.988</td>
</tr>
</tbody>
</table>

p-values (treatment effects)  

<table>
<thead>
<tr>
<th></th>
<th>North (N = 68)</th>
<th>South (N = 88)</th>
<th>North-South p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0.549</td>
<td>0.410</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.244</td>
<td>0.300</td>
<td></td>
</tr>
<tr>
<td>Undergrad</td>
<td>0.045*</td>
<td>0.044*</td>
<td></td>
</tr>
</tbody>
</table>

Asterisks (*) denote statistically significant differences at the 5% level.

3.4 Research Questions

If all PEs are perfectly selfish, nobody would report corruption in either of the institutional conditions, since reporting leaves PEs strictly worse off. However, if PEs are motivated by a norm of accountability, they may

¹²Importantly, none of the students considered here are economics majors. This was done to maximize behavioral variation across cultures. Many studies have shown that economists tend to look for the profit maximizing strategy in lab experiments, so including economists in the analysis would reduce the influence of cultural norms. Although I attempted to exclude economists at the recruitment stage, some showed up to the sessions nonetheless. I allowed them to participate in order to have a full session, but I exclude their data from the analysis.

¹³I also conducted Z-tests and non-parametric rank sum tests of differences in distribution. The results were very similar to the reported t-tests.
choose to denounce corrupt Nurses despite the monetary disincentives. Moreover, the literature also shows that accountability norms can differ across cultures (Herrmann, Thönig and Gächter 2008), in ways that may be related to the institutional environment (Bauhr and Grimes 2014; Persson, Rothstein and Teorell 2012). I therefore designed the experiment with the following research questions in mind:

1. Do subjects in societies with higher levels of corruption report bribery less frequently than subjects in societies with lower levels of corruption?

2. Do the cultural effects depend upon the quality of enforcement institutions (i.e. the probability that these reports will be acted upon)?

4 Results

The following analysis focuses on individuals’ decisions to report or tolerate corruption. A consideration of corrupt behavior is reserved for a companion paper. Overall, 90 out of 156 participants (57.7%) indicated a willingness to report a corrupt Nurse. Pooling both institutional conditions, we observe very little difference in the choices of Northerners and Southerners: 57.4% of Northerners indicated that they would make a report, compared to 58.0% of Southerners (p-value = 0.94). On the other hand, if we pool both cultural groups, we find weak evidence of an institutional effect: while only 52.3% of participants in the lax enforcement treatment were willing to report, this number rises to 64.7% in the strict enforcement treatment. However, this difference is not statistically significant at conventional levels (p-value = 0.12).

These comparisons obscure the fact that Northerners and Southerners may behave differently, depending upon the institutional condition to which they have been assigned. This interaction effect is illustrated in Figure 2. Here we see that while an approximately equal number of Northerners (57% - 58%) chose to report in both the lax and strict enforcement regimes, the reporting rate amongst Southerners is lower under lax enforcement (48%), but higher under strict enforcement (69%). In other words, it seems that the treatment effect is driven almost entirely by the behavior of Southern participants.

To check the robustness of these findings, I report the marginal effects and corresponding standard errors and significance levels from a series of Probit estimations in Table 3. Columns (1) and (2) confirm our null results with respect to the unconditional comparison of reporting rates across cultural and treatment groups, respectively. In column (3), I add an interaction term between Northern participants and assignment to the strict enforcement condition. The positive coefficient on North suggests that, under lax enforcement, Northerners are slightly more likely to report than Southerners, although this effect is also not statistically significant. By contrast, the estimated coefficient on Strict now indicates that, for Southern participants (i.e. North = 0), individuals in the strict enforcement treatment are significantly more likely to report than their peers in the lax enforcement treatment. Notice also that the coefficient on the interaction term is

14For more general research in behavioral economics on the costly punishment of anti-social behavior, see Fehr and Gächter (2000, 2002); Henrich et al. (2006).
### Table 3: Probit Analyses of the Willingness to Report

<table>
<thead>
<tr>
<th></th>
<th>Full Sample</th>
<th>Masters</th>
<th>Undergrads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>North</td>
<td>-0.006</td>
<td>0.091</td>
<td>0.088</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
<td>(0.142)</td>
<td>(0.145)</td>
</tr>
<tr>
<td>Strict</td>
<td>0.124</td>
<td>0.212*</td>
<td>0.220*</td>
</tr>
<tr>
<td></td>
<td>(0.094)</td>
<td>(0.120)</td>
<td>(0.114)</td>
</tr>
<tr>
<td>North*Strict</td>
<td>-0.212</td>
<td>-0.215</td>
<td>-0.101</td>
</tr>
<tr>
<td></td>
<td>(0.182)</td>
<td>(0.186)</td>
<td>(0.180)</td>
</tr>
<tr>
<td>Age and gender</td>
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<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Observations</td>
<td>156</td>
<td>156</td>
<td>156</td>
</tr>
</tbody>
</table>

Note: Robust standard errors, in parentheses, have been adjusted to account for clustering within sessions. I report marginal effects of continuous variables and the effect of a change from 0 to 1 for dichotomous variables. * Significant at 10%; ** significant at 5%; *** Significant at 1%.

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**Figure 2: Willingness to Report Corruption:**
Northerners and Southerners by Treatment Conditions
almost identical in size, except that it is negative, suggesting that the corresponding treatment effect for Northerners is close to zero (although the interaction is not significant at conventional levels).

Column (4) adds controls for age and gender (results are unchanged), but does not control for undergraduate status. This is because previous research has shown that the difference between undergraduate and graduate students may moderate cultural effects in corruption games, and therefore it may be appropriate to consider the two groups separate. For example, Barr and Serra (2010) find that, although the behavior of Oxford undergraduate students reflects the corruption norms of their home countries, the same is not true for graduates.

Figure 3: North-South and Treatment Effects by Educational Level

As shown in Figure 3, I find a similar effect in my experiment. Specifically, amongst masters students, there are basically no differences in the propensity to report across cultural and treatment groups (see also column (5) of Table 3). However, the main patterns from Figure 2 are even more starkly displayed amongst undergraduates: Southerners are significantly more likely to report in the strict enforcement condition, and this effect is much stronger than the corresponding effect for Northerners (as indicated by the now significantly negative coefficient on the interaction term in column (6) of Table 3.) In summary, it appears that the institutional effect of stronger enforcement is culture-specific, and applies only to the undergraduates in my sample.
5 Discussion and Conclusion

In this paper, I have investigated how the propensity to report corrupt behavior within an experimental setting varies between Northern and Southern Italians, two “cultural” groups that experience very different levels of corruption in everyday life. The experiment also varies the strength of enforcement institutions, which many scholars believe to significantly influence the willingness to denounce malfeasance. I show that while institutional quality does not affect the behavior of Northern participants, Southern participants are significantly more likely to report corruption under a strict enforcement regime. More specifically, this effect seems to be driven by the behavior of undergraduate participants - i.e. those individuals who have most recently moved from the South to [Northern Italian university].

One interpretation is that these findings merely reflect differing propensities to punish in general across societies, rather than different norms of accountability specific to corruption. For example, writing in the American context, Nisbett and Cohen (1996) argue that growing up in the U.S. South inculcates a “culture of honor” that makes individuals more likely to retaliate against perceived personal offenses. While the issue of whether Southern Italians are more honor conscious is certainly an interesting question worthy of additional research, this account cannot explain why Southern participants in this experiment are more likely to make a report in only the strict enforcement condition. Neither can this interpretation explain why the behavior of Northerners does not change under the different institutional conditions.

Interpreted another way, these results suggest that there is a baseline group of individuals (both Northerners and Southerners) who will denounce corruption regardless of the institutional environment. Amongst Southerners, this group is supplemented by an additional cohort who will only report malfeasance if they are sure that their actions will result in sanctions. However, amongst Northerners, the size of this second group is negligible. In other words, a significant number of Southerners appear to be pragmatists: they want to do something about corruption, but they are also deterred by the possible futility of their actions. Future research may want to specifically test for this possibility by examining the distribution of participant types in a different situational context (e.g. neutral framing) and with different population samples.

However, if this interpretation were correct, it would suggest that greater exposure to corruption does not necessarily lead to greater corruption tolerance. Rather, a reasonable conjecture may be that Southern Italians are, as a whole, even less accepting of corruption than their Northern counterparts, considering the greater harm it causes in their everyday lives. However, though Southerners are also willing to act on their indignation, they may only do so provided that they have the institutional means to effectively sanction the perpetrators.

Of course, this explanation ignores the problem of sample selection. In particular, it may be the case that the Southerners who choose to migrate to the North of Italy are especially fed up with corruption in their home regions, and therefore seize upon the opportunity to punish it. Future research might address this possibility by replicating the present experiment at a Southern university.

As noted by Cameron et al. (2009), the relationship between norms of accountability and corruption experience is extremely complex, and this paper is one the first to study this phenomenon with an eye towards incorporating institutional effects. While the results are certainly interesting, many outstanding questions
remain unresolved, and I therefore echo these earlier authors’ call for more research on a wider range of societies with differing levels of corruption and institutional effectiveness.

References


