Corruption Experiences and Attitudes to Political, Interpersonal, and Domestic Violence

Abstract

It is understood that corruption can change the incentives to engage in political violence. However, the scope for corruption to change attitudes towards the permissibility of violence has received less attention. Drawing on Moral Foundations Theory, we argue that experiences of corruption in the social environment are likely to shape individual attitudes towards violent behavior. Using Afrobarometer data, we document a statistically significant and sizable relationship between an individual's experience of paying bribes and their attitudes to political, interpersonal, and domestic violence. These relationships are evident, and not significantly different, for men and women and are robust to the inclusion of variables capturing the local incidence of corruption, local norms regarding violence, and a proxy for the local incidence of violence with the community. Corruption is associated with permissive attitudes to violence even after controlling for the perceived legitimacy of the police and courts.

Keywords: Corruption; Bribery; Violence; Political Violence; Revenge; Domestic Violence; sub-Saharan Africa

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1. INTRODUCTION

Corruption, commonly defined as the abuse of public power for private gain, can change the incentives that people face in relation to violence by lowering the costs and increasing the benefits. Police corruption can foster violence, particularly intimate partner violence, by deterring victims lacking in monetary or political resources from reporting crimes (Annan and Brier, 2010). In a corrupt society, control over the levers of the economy can be lucrative. For example, Baev (2018) points to corrupt elite competition for control of resources as being a key driver of Georgia's post USSR armed conflicts. Corruption also changes the trade-offs faced by potential revolutionaries by undermining economic growth (Mauro, 1995) and fostering poverty and inequality (Gupta et al, 2002). In transition economies, perceived corruption has also been shown to reduce evaluations of both local and national government performance (Moldogaziev and Liu, 2020) and even in a long standing democracy such as Sweden, perceptions of corruption undermine support for the democratic system (Linde and Erlingsson, 2013). As regard for incumbent governments or the system itself decreases, the external and internal costs faced by potential revolutionaries may also decrease. Corruption has also been shown to undermine subjective wellbeing in some contexts (Tavits, 2008; Djankov et al, 2016; Gillanders, 2016) which may lead to people feeling that they have less to lose. Indeed, the Arab Spring revolutions of 2011 can, in part, be traced to dissatisfaction with entrenched and pervasive corruption (Mansfield and Synder, 2012).

While this compelling literature does point to a clear link between corruption and the economic, social, and institutional incentives to commit acts of violence, we know much less about how corruption changes *attitudes* to the permissibility violence. Social psychology points to mechanisms that can give rise to a relationship between corruption experiences to attitudes to violence. Drawing on Moral Foundations Theory, we present an argument that experiences of corruption in the social environment help to shape the moral foundations on which individuals base their attitudes and behavior. Specifically, we propose that corruption impacts the development of moral principles related to submission to authority, care and protection of others, attitudes towards abhorrent behavior

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or action and the coercion of less dominant individuals. In turn these foundations provide a basis from which individual attitudes towards political, domestic and interpersonal violence develop.

This paper builds on current understanding of the impact of corruption by proposing a theoretical link between corruption and the foundations of moral behaviour and testing this new mechanism through which corruption can foster violence. Our study also goes beyond political violence, which, along with corruption enabled drugs violence, has been the focus of the extant literature. Using Afrobarometer data, we show that experiencing corruption is a statistically significant predictor of attitudes to violence and that the magnitude of the association is meaningful. Respondents are 7% more likely to view political violence as justifiable if they have been exposed to corrupt public officials. We show that attitudes to interpersonal violence and domestic violence are also significantly associated with exposure to corruption. Respondents who have experienced corruption are approximately 3% more likely to feel that such violence is acceptable. The fact that corruption influences attitudes to violence beyond the political domain suggests that this association is not a simple artefact of diminished state legitimacy or increased sense of grievance with government.

Our findings, particularly those relating to domestic violence, point to what is to the best of our knowledge a previously undocumented cost of corruption. Acts of petty corruption are associated with the bribe payers being more likely to view acts of violence against others, including wives and children, as acceptable in some circumstances. This finding adds to the weight of evidence that the burden of corruption tends to fall most heavily on already vulnerable groups such as victims of crime (Hunt, 2007), and infants (Azfar and Gurgur, 2008; Dincer and Teoman, 2019) and speaks to the important debate about how individually beneficial acts of corruption can still be harmful to others and on aggregate (Marquette and Peiffer 2018; Persson, Rothstein, and Teorell, 2019).

Our findings are robust to the inclusion of competing explanations which are plausibly correlated with one's own likelihood of paying a bribe and attitudes to violence. Specifically, personal corruption experiences are still significant even when controlling for the local incidence of corruption, local violence norms, and a control for local violence. We also show that our results are robust to the inclusion of the perceived legitimacy of the courts and police. This suggests that our results are not

simply capturing an effect of corruption on the willingness to comply with the law. While our findings support the direct relationship between corruption and attitudes to violence, contrary to previous research in other contexts (e.g. Blinkhorn, Lyons, and Almond, 2016), these relationships exist for both men and women with no significant gender difference.

In Section 2, we discuss the mechanisms through which corruption can plausibly influence attitudes to violence. Section 3 describes our data and approach, the results of which are presented in Section 4. Section 5 discusses the limitations of our study and the implications of our results for policy.

2. THEORY

Violence can be defined as behaviour that involves the use of physical force against oneself or another causing significant harm, injury or death (Ferguson, 2010). Although violence exists in many forms, our interest in this paper is in understanding the correlates of political, interpersonal and domestic violence. Given the heavy costs and harm that is associated for unwilling victims with each of these forms of violence, they are typically viewed as an immoral behaviour (Bratton, 2008). It has become clear in the extant literature that individual and collective levels of violence cannot be explained by a combination of motivation and opportunity but that factors influencing perception and ideas of violence influence the subsequent development of these immoral attitudes and behaviour (Bhavnani and Backer, 2007). We argue that permissive attitudes towards violence are likely to be related to factors which influence the development of morality perceptions.

Morality refers to the social norms that guide behaviour whereby certain actions are prohibited and others prescribed (Yoder and Decety, 2018). Moral Foundations Theory (Haidt and Joseph, 2004; Haidt, 2007; Haidt and Graham, 2007) proposes that moral perceptions and judgements are based on six key principles that humans are innately prepared to develop due to their alignment with recurrent social challenges (Haidt, 2012). These six moral principles or foundations are harm/care, fairness/reciprocity, ingroup/loyality, authority/respect, liberty/oppression and purity/sanctity. Of particular interest to our paper are the principles of authority and respect which relates to submission to tradition and the legitimacy of authority; sanctity and purity which relates to an objection to

disgusting behaviour and degradation; care which relates to the protection of others and prevention of harm; and liberty which concerns the coercion or oppression of less powerful individuals.

Haidt and colleagues argue that although all humans are innately prepared to develop a moral position in relation to these principles, this position develops over time as a result of experiences of the social world (e.g. Haidt and Joseph, 2007). This idea of social environments and exposure as sharping morality is mirrored across many theories of moral development (Decety and Wheatley, 2015). The findings of Bucheli et al (2019) that return migrants reduce violence by injecting social capital into their communities can be interpreted in this light. Previous research has demonstrated repeatedly that experiences of corruption in the social environment are powerful in shaping attitudes and behaviour. Indeed, research suggests that levels of corruption are linked to violence in the context of natural resources (Berman et al., 2017). We build on this literature to propose that experiences of corruption in the social environment are likely to influence attitudes to violence by challenging the moral foundations outlined by MFT.

In particular, the abuse of power inherent in the definition of corruption suggests that personal experiences of corruption are likely to undermine the authority foundation. Corruption is known to undermine the trust in, and the perceived legitimacy of, the state including politicians, officials, and the police (e.g. Seligson, 2002; Anderson and Tverdova, 2003; Chang and Chu, 2006; Morris and Klesner, 2010). The seminal study of Fisman and Miguel (2007) pointed to the importance of norms in determining corrupt behaviour and provided an observational counterpart to the experimental finding of Abbink et al. (2002) that the threat of punishment can have a significant deterrent effect. The experimental work of Boly et al. (2019) points to a legitimacy effect whereby deterrent policies enacted by a corrupt policymaker have no effect on the embezzlement behaviour of others. Importantly, Vecina and colleagues argue that a lack of deference to a legitimate authority is crucial in predicting violent behaviour (Vecina, Marzana and Paruzel-Czachura, 2015). This may be influenced partially by the process of moral disengagement that allows people to engage in immoral actions which is commonly influenced by a displacement of responsibility to authority figures who have

explicitly or implicitly condoned that action (Moore, Detert, Trevino, Baker and Mayer, 2012). In line with this, we hypothesize:

H1- Experienced corruption is positively related to attitudes to political violence

Although political violence has received considerable attention in the extant literature, our paper also aims to examine the correlates of domestic and interpersonal forms of violence. Domestic violence refers to violence specifically directed towards an intimate partner (McClennan, 2005). In contrast, interpersonal violence is a term used to describe violence directed at another individually more generally. While the authority foundation is central to attitudes to political violence, in these more personal instances of violence, other moral foundations are likely to play a more central role. Specifically, experiences of corruption in the social environment are also likely to impact beliefs about the responsibilities of dominant individuals to protect others (care foundation) and to avoid disgusting actions (purity foundation) or coercion of less dominant individuals (liberty foundation).

Empirical research suggests that challenges to these foundations are likely to have important consequences for more personal forms of violence. Although previous work on domestic violence has not yet considered the role of corruption experiences, evidence suggests that moral foundations play an important role in predicting domestic violence. Vecina and Pinuela (2017) demonstrate that differences in moral foundations influence hostile sexism and suggest that a focus on moral foundations might be a useful mechanism for treating people who engage in domestic violence. Relatedly, the purity foundation which concerns beliefs about disgusting actions and degradation is closely linked with attitudes towards women and sexism (Sakalh-Ugurlu and Glick, 2003). Furthermore, Gage (2005) reports that need for control and coercion is related to experiences of domestic violence. This need for control is likely to be underpinned by the liberty/oppression moral foundation particularly given the patriarchal power differentials that characterise many domestic violence cases (McClennan, 2005). As a result, we expect that as corruption undermines moral foundations related to care, purity and liberty, it will influence attitudes towards domestic violence. Accordingly, we hypothesise:

H2 – Experienced corruption is positively related to attitudes to domestic violence

The consequences we have considered thus far have related to attitudes towards the behaviour of others, we propose that experienced corruption also has the potential to influence attitudes towards our own interpersonal violent behaviour. One aggressive interpersonal behaviour that is particularly susceptible to moral values and experiences of morality is revenge (Jackson, Choi and Gelfand, 2019). Measures of revenge include a judgement about the extent to which it is acceptable to enact revenge in response to violent crime or whether one should go to the police. In this instance, moral foundations related to authority, purity and care are all likely to be important in influencing attitudes. Specifically, experiences of corruption and abuse of power will shape individual perceptions of the need to submit to authority, avoid abhorrent behaviour and protect others. Impact on the care/harm foundation of moral behaviour is in line with social capital perspectives which suggest that corruption undermines people's willingness to cooperate and make themselves vulnerable to others (Bhayani and Backer, 2007; Kelly et al., 2010). We expect the impact on these moral foundations will be associated with a more permissive attitude to interpersonal violence as a means of revenge and a decreased likelihood of turning to the authorities. In line with this, we hypothesise:

H3 – Experienced corruption is positively related to attitudes to revenge

Although moral foundations are universally relevant to all humans, the development of moral positions on the basis of these foundations differs across individuals. Previous theoretical work on moral foundations theory argues that gender plays an important role in this process. In the empirical literature, Graham et al. (2011) demonstrate that women are more concerned with moral foundations related to harm, fairness and purity. More recent empirical work supports this distinction and demonstrates gender differences where women reported higher morality in the foundations of care/harm, fairness, sanctity and authority (Niazi, Inam and Akhtar, 2020). Gender differences in moral foundations are also supported more generally by the broader literature on moral dilemmas and ethical behaviour. Women are thought to be more likely to value care/harm related considerations rather than justice related considerations when choosing action in the face of a moral dilemma (Rothbart, Hanley and Albert, 1986). Meanwhile, men are less likely than women to judge specific

business practices as being unethical or immoral (Franke, Crown and Spake, 1997). Similarly, neuroscience suggests significant gender differences in moral sensitivity and appraisals and call for more exploration of gender differences in moral behaviours in a field setting (Harenski, Antonenko, Shane and Kiehl, 2008).

Taken together, this evidence suggests that women are likely to hold higher initial positions on moral foundations, including authority, care and purity, and that those moral positions are less sensitive to change in response to external stimuli. Furthermore, women are generally less likely to hold permissive attitudes towards violence (Blinkhorn et al., 2016) and more likely to see interpersonal and particularly domestic violence as a personal threat (Jewkes, Levin and Penn-Kekana, 2002). As a result, it is reasonable to expect that the impact of experienced corruption on attitudes towards violence will be weaker for women than for their male counterparts.

> H4 – Gender will moderate the relationship between experienced corruption and violence such
> that the effect will be weaker in women compared to men.

3. DATA AND APPROACH

The Afrobarometer provides us with the opportunity to quantitatively test the hypotheses developed in Section 2. The Afrobarometer is a series of representative household surveys of political attitudes and economic conditions that has been carried out in an increasing number of African countries since the turn of the century. The data are collected from face to face surveys with respondents randomly chosen to ensure a nationally representative sample. The response rate to the survey averages in excess of 75%. In particular, we employ Round 2 of the Afrobarometer which was conducted in 2002 and 2003 in 16 countries in sub-Saharan Africa. We use this round for our analysis as in this round of the survey respondents were asked a series of questions relating to their attitudes to violence in three distinct arenas – political, interpersonal, and domestic.

Each of the three questions asks respondents to identify which statement they agree with from a pair capturing attitudes regarding the acceptability of violence in different contexts. Our measure of attitudes to political violence, *political,* takes a value of 1 if the respondent agrees (or very strongly

agrees) with the statement that *"In this country, it is sometimes necessary to use violence in support of a just cause"* and zero if the respondent agrees (or very strongly agrees) with the statement that *"The use of violence is never justified in [their country's] politics."* Similarly, *revenge*, takes a value of 1 if the respondent agrees (or very strongly agrees) with the statement that *"If you were the victim of a violent crime, you would find a way to take revenge yourself"* and zero if the respondent agrees (or very strongly agrees) with the statement that *"If you were a victim of a violent crime, you would go to the police for help."* Finally, *domestic*, takes a value of 1 if the respondent agrees (or very strongly agrees) with the statement that *"A married man has a right to beat his wife and children if they misbehave."* and zero if the respondent agrees (or very strongly agrees) with the statement that *"No-one has the right to use physical violence against anyone else."*

[TABLE 1]

Table 1 displays summary statistics for our key variables and Table A1 in the online appendix provides full definitions. Table 1 shows that 22% of our sample hold the attitude that political violence is sometimes justifiable and that there is little difference between the attitudes of men (22%) and women (21%). Far fewer people (11%) express the view that taking revenge oneself is appropriate and once again there is little difference between the expressed attitudes of men (12%) and women (10%). However, the share of people who agree that there are circumstances in which a man can beat his wife and children is somewhat higher at 28%. There are also differences of opinion between male and female respondents with 31% the former agreeing versus 25% of the latter. Domestic violence is the domain in which violence has the most acceptance – by men and women.

It is possible that in some places, fear of revealing oneself to have committed a crime may lead people to hide their true views and so controlling for unobserved country effects in our models is important. Local norms may also be influential in this respect (and may also serve to change the mental cost of committing violence) and so we will control for the local average of each of these variables in robustness tests. We also cluster standard errors by local region. Table 2 presents the correlations between these three variables. These correlations are all rather low suggesting that people can and do

hold different attitudes towards the acceptability of violence in different contexts, and that it makes sense to look at these as distinct outcomes.

[TABLE 2]

Our main explanatory variable of interest captures whether the respondent has had to pay a bribe to public officials in the past year. The Afrobarometer asks a series of questions of the form *"In the past year, how often (if ever) have you had to pay a bribe, give a gift, or do a favour to government officials in order to …."* We create a dummy variable, *bribe*, which takes a value of one if the respondent reports having had to pay a bribe (with any frequency) in any of the following contexts; avoiding problems with the police; seeking to obtain documents or permits, a school placement, or a household service (such as piped water or electricity); or "anything else." *bribe* therefore captures a wide range of interactions between citizens and the state.[i] Table 1 shows that 25% of our sample have experienced bribery in the past year. Men are more likely to report experiencing this sort of corruption (29%) than women (22%). Much as in the case of attitudes to violence, in certain environments people may misrepresent their experiences for fear of exposure or being seen to break a norm. This is a valid concern and so it is worth noting that the bribery information in the Afrobarometer has been used in a variety of studies (Bratton and Mattes, 2003; Nunn and Wantchekon, 2011; Cho, 2012). Moreover, our inclusion of country fixed effects allows us to account for any systematic misreporting across countries.

While our main focus is on experienced corruption, we also control for individual perceptions of corruption. A perception of corruption could inform attitudes to violence independently of any actual experience and so we are interested in this relationship in its own right. By controlling for perceptions of corruption, which can differ from reality (Seligson, 2006), we can examine whether the experience predicts attitudes to violence over and above any effect of change in attitudes to the state's rulers. The survey asks *"How many of the following people do you think are involved in corruption, or haven't you heard enough about them to say?"* in relation to "The President and Officials in his Office", "Elected leaders, such as parliamentarians or local councillors", and "Government officials." Each of the questions can be answered "none", "some of them", "most of them" and "all" to which we assign

the values from 0 to 3 respectively. Our measure of perceptions of corruption, *perceptions*, therefore takes values between 0-9 with larger numbers indicating a more pronounced sense that corruption is common in the country's leadership.

The final key control variable, *history*, is included to capture the respondent's history of violence within the family. Simon et al (2001) find in their data from, the United States that recent victims of violence are more likely to display attitudinal acceptance of intimate partner violence. Moreover, people who have been exposed to violence within their family may be both more accepting of violence as a solution in general and more vulnerable to, or willing to engage in, corruption. The variable takes a value of one if the respondent answers "sometimes" "often" or "always" to the question *"In your experience, how often do violent conflicts arise between people ... [w]ithin your own family?"* and zero if they answer "never" or "rarely." Approximately one fifth of our sample can be categorised as having a history of violence according to this criterion.

When studying attitudes to domestic violence we also employ an additional control variable, *misogyny,* which takes a value of one if the respondent agrees (or very strongly agrees) with the statement that *"Women have always been subject to traditional laws and customs, and should remain so."* and zero if the respondent agrees (or very strongly agrees) with the statement that *"In our country, women should have equal rights and receive the same treatment as men do."* Table 1 shows that such views are common in our sample with 33% of males and 24% of females agreeing with the first statement.

We estimate probit models in which the dependent variable is one of our three measures of attitudes towards violence. We report the marginal effects obtained from these probit models and focus on the relationship between *bribe* and each of the violence variables. As noted above, we include country dummies and cluster the standard errors by groups defined by the survey respondent's region. We control for age, gender, a dummy capturing an urban location, broad profession indicators, and an index of lived poverty that captures how often the respondent has had to go without food, water, medical care, electricity, fuel for cooking, and a cash income. Larger values of this last variable indicate greater levels of deprivation. We also control for education as more educated people may

have different views of violence and may also be less willing to reveal permissive attitudes to violence, particularly domestic violence.

4. RESULTS

4.1 Main Results

Table 3 presents our main results in testing Hypotheses 1, 2 and 3. We begin in Column 1 by examining attitudes to political violence. People who have experienced bribery are 7% more likely to express the view that violence can be justified for political ends. For comparisons sake, women are 1% less likely to hold this view. Corruption perceptions are also a significant predictor, with every unit increase on our 0-9 *perceptions* index associated with a 1% increase in *political*. We can also see that *history* has a significant and sizable marginal effect on *political*. People with a history of violence in their families are 6% more likely to accept the validity of political violence. The comparable sizes of the *bribe* and *history* marginal effects reinforces the conclusion that corruption experiences play a large role in shaping attitudes to political violence.

[TABLE 3]

The second column acts as a robustness check of this result by employing a dummy variable which equals one if the individual admits to having used violence or that they would do so if they had the chance and zero if they claim that they would never do this. Both corruption variables and *history* are significant predictors of this self-reported willingness to engage in violence. This finding that corruption influences peoples' willingness to admit to engaging in violence for political ends adds weight to our conclusion that, on average, corruption experiences change people's attitudes towards violence. An additional explanation for this particular result is that, as noted in Section 1 above, corruption may lower the expected cost or increase the expected benefit from engaging in violence.

Column 3 finds a similar relationship for the variable capturing attitudes to revenge, though the estimated marginal effect of *bribe* is smaller at 0.03. Once again, *perceptions*, *history*, and gender are strong predictors of one's attitude to violence with the results pointing towards both an experience of

corruption and a perception of corruption increasing the likelihood that people will think it acceptable to take the law into their own hands.

The final columns of Table 3 examine attitudes towards domestic violence. Column 4 finds that those who have paid a bribe are more likely to think it is acceptable for a man to beat his wife and children under certain circumstances. Also, a greater perception of corruption is associated with holding this view regarding domestic violence. Not surprisingly, women are significantly and substantially less likely to agree with the acceptability of violence. The final column includes the additional control variable, *misogyny*. Holding this view is associated with a 20% increase in the likelihood of viewing domestic violence as acceptable. However, our conclusions regarding corruption are not changed by the inclusion of this variable.

Recall that (with the exception of Column 2) we are not looking at the incidence of violence which could be influenced by corruption changing the likelihood or severity of punishment. Rather we are looking at attitudes to violence. The results with respect to *political* and *revenge* can be understood in principle through the lens of disgust with the state and its agents. People who have been victims of malfeasance by state officials may view the state as less legitimate and its mechanisms for peaceful change as broken or rigged. Likewise, corruption may delegitimise law enforcement in the eyes bribe payers, leading them to view revenge actions as justifiable. These stories are less easy to tell when it comes to *domestic*. We interpret this to mean that corruption changes attitudes to violence over and above any change in attitudes regarding the legitimacy or efficacy of the state. We explore the legitimacy mechanism further below.

In terms of control variables, our lived poverty index is not a significant predictor of attitudes to violence. Nor is urban status except for the case of *domestic* which concludes that urban dwellers are less likely to view domestic violence as justifiable. More educated people are less likely to find domestic violence excusable though the pattern is less clear cut when it comes to *political* and *revenge*. Interestingly, while older people are less likely to view political violence or revenge as acceptable, older people are more likely to view domestic violence as justifiable. However when we control for *misogyny,* age is not a significant predictor of attitudes to domestic violence.

4.2 Do Men and Women Respond Differently to Experiencing Corruption?

We have established that there is a robust correlation between corruption experiences and perceptions and attitudes to violence. We have also seen that women are less likely to view violence as acceptable. Next we test Hypothesis 4 and investigate the possibility of gender differences in response to corruption. Table 4 splits our sample by gender and estimates the baseline models from Table 3 for each group. *bribe* is a significant variable in each of our specifications and the estimated marginal effects for men and women are very similar. More conclusively, the interaction term between corruption experiences and gender that is included in columns 3, 6, and 9 is not significant in any instance. We therefore conclude that, contrary to Hypothesis 4, there are no significant gender differences in the extent to which corruption experiences influence attitudes to violence.

[TABLE 4]

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4.3 Local Conditions and Norms

Table 5 considers potential confounding factors related to local conditions and norms. The first of these is how corrupt the respondent's locality is. Living in a corrupt area could influence both one's own chances of being asked for a bribe and one's willingness to do so. Likewise, those more deeply embedded in corrupt networks may find corruption less objectionable (Chang and Kerr, 2017) and therefore an experience of corruption may do little to undermine their moral foundations. Columns 1-3 of Table 5 address this concern by including the local incidence of corruption as an additional control variable. This variable, *meanbribe*, is simply the average of *bribe* for all those in the same region as the respondent. While the regions in the survey need not correspond with actual administrative divisions, they do allow us to capture some information as to how prevalent bribery is in the respondent's broad geographical region. While the local incidence of corruption is a significant predictor of attitudes to political and domestic violence, the inclusion of this variable does not alter our conclusions in relation to the importance of one's own experience.

[TABLE 5]

We next examine the role of local norms regarding the acceptability of violence. People living in areas in which attitudes to violence are more permissive may face a lower barrier or mental cost to holding and expressing such views themselves (Clark et al., 2018). Corruption could also change the local norms over time and so it is important to see if individual corruption experiences correlate with violence attitudes holding local norms constant. To this end, we average each of our outcome variables over the respondent's region. This results in three variables, *politicalnorm, revengenorm,* and, *domesticnorm,* which capture the share of people in the respondent's region who express the view that political violence, revenge, and domestic violence are acceptable. Columns 4-6 of Table 5 show that while local norms are a significant and strong predictor of individual attitudes, our results are robust to this exercise. Individual experiences of corruption are a statistically significant predictor of each of our outcomes.

The final local variable we consider is the extent of violence in the community. As noted above, corruption could lead to increased conflict and this in turn could influence attitudes to violence. To rule out this mechanism as being the driver of our results showing a correlation between one's experience of corruption and attitude to violence, columns 7-9 of Table 5 include a variable, *violentcommunity*, which captures the share of people in the respondents region who express the view that violent conflicts arise between people within the community where they live "sometimes", "often", or "always." While this variable is a significant predictor of *political,* it does not predict *revenge* or *domestic*. In all of our models, *bribe* remains a statistically significant and meaningful correlate of attitudes to violence.

4.4 Legitimacy of Law Enforcement and Crime

As noted above, several studies have pointed to the deleterious effect that corruption can have on trust in the state in general and on law enforcement institutions in particular. The perceived legitimacy of actors and institutions has also been shown to be important in terms of compliance with and efficacy of policy (Boly et al., 2019). Furthermore, Kirwin and Cho (2009) show that perceptions of state legitimacy predict attitudes to political violence using Afrobarometer data. To account for this potential effect of corruption on the perceived legitimacy of law enforcement, we generated variables

reflecting respondent's attitudes to the police and the courts. The first of these, *policelegit,* takes a value of one if the respondent agrees or strongly agrees with the statement that "The police always have the right to make people obey the law" and zero otherwise. Similarly, *courtslegit* takes a value of one if the respondent agrees or strongly agrees with the statement that "The courts have the right to make decisions that people always have to abide by" and zero otherwise.

[TABLE 6]

The first two columns of Table 6 demonstrate that these attitudes towards the police and courts are indeed shaped in part by one's experiences of corruption with victims of corruption significantly and meaningfully less likely to view these institutions as legitimate. The local incidence of bribery, *meanbribe*, is not a significant predictor. We also control for the respondent's history of experiencing other types of crime (being attacked or being the victim of theft) directly or in their family. This too strongly predicts holding negative views as to the legitimacy of the police and courts.

These results reinforce the need to control for legitimacy in our analysis of the links between corruption experience and attitudes to violence as it may be the case that corruption operates on such attitudes through an effect on legitimacy. Moreover, Jackson et al (2013) find that attitudes to violence amongst young males in London are associated with the perceived legitimacy of the police. The remaining columns of Table 6 do find that perceived legitimacy informs attitudes to violence in the cases of *political* and *revenge* but *bribe* remains a meaningful and statistically significant predictor. Over and above the potential effect on legitimacy, corruption is a significant correlate of attitudes to violence. Being a victim, or at least party, to corruption is also different to being exposed to other criminal activity as we find little evidence that *crime* predicts attitudes to violence, though we do find an association with attitudes to political violence in line with Kirwin and Cho (2009).

4.5 Other Rounds of Afrobarometer

Rounds three (2005-2006, 18 countries) and five (2011-2013, 34 countries) of the Afrobarometer allow us to examine whether our relationship of interest is evident in more recent data that also covers substantially more countries in the case of Round 5. Both of these later rounds contain questions that

can be used to create an outcome variable that captures attitudes to political violence.[ii] Round 5 also asks a question that allows us to examine attitudes to revenge.[iii] While neither round has information that can be used to study attitudes to domestic violence and the contexts in which corruption is asked about can vary from round to round, Table A2 in the online appendix demonstrates that our conclusions regarding *political* and *revenge* are evident in these larger samples from later years. We conclude that the relationship between an experience of corruption and attitudes to violence is not an artefact of either the given time period or the set of countries covered in Round 2 of the Afrobarometer.

5. CONCLUSIONS

Using several rounds of representative household survey data for sub-Saharan African countries, this paper has shown that men and women that have experienced petty corruption are more likely to view violence as justifiable. Our results, particularly those in relation to domestic violence, uncover previously hidden costs of corruption that are not an artefact of the local incidence of corruption or violence, the prevailing norms regarding violence or erosion of the perceived legitimacy enjoyed by law enforcement. Drawing on Moral Foundations Theory we predicted that experiences of corruption undermine the moral foundations that provide a basis for our attitudes and behavior. Our findings indicate that this new theoretical mechanism is supported by direct relationships between corruption and attitudes to political, domestic and interpersonal violence. Contrary to our predictions, we did not find gender differences in these effects. The application of Moral Foundation Theory to the study of corruption opens up new avenues of research into attitudinal and behavioral responses to corruption and mis-governance.

While the Afrobarometer affords us a first opportunity to examine these previously unexplored links, it is important to note the limitations of our study. We lack a panel dimension that would allow us to control for individual fixed effects and it is conceivable that certain unobservable characteristics could lead to some people being both more likely to hold the view that violence is acceptable and being

more likely to be asked for or willing to pay a bribe. Therefore, we refrain from making causal claims or statements. While the Afrobarometer is a representative survey, it must also be noted that it is representative only for the African countries covered. As always, one must be aware of the limits of any single study in terms of generalisability. Future work should explore the issue in other parts of the world, ideally with bespoke panel data. Field experiments could also test the effect of anti-corruption interventions on attitudes to and the incidence of violence.

Even with these limitations, the immense social and personal costs of violence means that our results still offer valuable insights to policymakers and civil society actors as they identify a set of previously undocumented indirect costs of corruption. To the extent that people incur disutility from carrying out acts that they view as hard to justify, our results could also be viewed as pointing to a mechanism linking corruption to violent outcomes via a reduction this psychological cost. Indeed, Shakya et al (2017) demonstrate that changes in the acceptance of intimate partner violence predicts its incidence. Existing studies identify a substantial mental health consequences of exposure to intimate partner violence (e.g. Beydoun et al. 2012). Thus, this study also adds to the existing literature by further reinforcing that fact that while acts of corruption may benefit the individual there are spill-over effects that impose real costs (Persson, Rothstein, and Teorell, 2019) and that that the burden of corruption tends to fall disproportionately on already vulnerable groups (Hunt, 2007; Azfar and Gurgur, 2008; Dincer and Teoman, 2019).

We contend that this cost of corruption should be taken into account in policymaking. Our findings add further weight to the case for devoting substantial resources to anti-corruption efforts and they support the targeting of resources at particular groups. Gains and Lowndes (2018) point to the importance of institutions and state agents at the local level in the fight against gender based violence. We agree with this and further suggest that governmental and non-governmental agencies wishing to curb domestic violence have common cause with anti-corruption advocates and practitioners.

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[i] It is not only the context of police corruption that drives our results. If we estimate our baseline models and include each context one at a time, we find that all are associated with attitudes to political violence, all bar the "anything else" context are associated with attitudes to revenge, and the contexts of documents and permits, household services and "anything else" are associated with attitudes to domestic violence.

ii In round three the survey asks "Which of the following statements is closest to your view? A: The use of violence is never justified in [your country's] politics. B: In this country, it is sometimes necessary to use violence in support of a just cause." In round 5 the survey asks "Which of the following statements is closest to your view? Statement 1: The use of violence is never justified in [your country's] politics today. Statement 2: In this country, it is sometimes necessary to use violence in support of a just cause." In both cases respondents are asked to indicate their views on a scale. We use this information in the same way as we did when using the round 2 data.

iii The survey asks "If you were a victim of crime in this country, who, if anyone, would you go to first for assistance?" We consider those who answer they "would personally take revenge" or "would join with others to take revenge" to hold the view that revenge is acceptable.

REFERENCES

Abbink, K., Irlenbusch, B., & Renner, E. (2002). An experimental bribery game. *Journal of Law, economics, and organization*, 18(2), 428-454.

Annan, J., & Brier, M. (2010). The risk of return: intimate partner violence in Northern Uganda's armed conflict. *Social science & medicine*, 70(1), 152-159.

Anderson, C. J., & Tverdova, Y. V. (2003). Corruption, political allegiances, and attitudes toward government in contemporary democracies. *American Journal of Political Science*, 47(1), 91-109.

Azfar, O., & Gurgur, T. (2008). Does corruption affect health outcomes in the Philippines?. *Economics of Governance*, *9*(3), 197-244.

Baev, P. K. (2018). Civil wars in Georgia: Corruption breeds violence. In *Potentials of disorder*. Eds. Jan Koehler and Christoph Zürcher, Manchester University Press.

Berman, N., Couttenier, M., Rohner, D., & Thoenig, M. (2017). This mine is mine! How minerals fuel conflicts in Africa. *American Economic Review*, *107*(6), 1564-1610.

Beydoun, H. A., Beydoun, M. A., Kaufman, J. S., Lo, B., & Zonderman, A. B. (2012). Intimate partner violence against adult women and its association with major depressive disorder, depressive symptoms and postpartum depression: a systematic review and meta-analysis. *Social science & medicine*, 75(6), 959-975.

Bhavnani R., and Backer, D., (2007). Social Capital and Political Violence in sub-Saharan Africa. Afrobarometer Working Paper No. 90

Blinkhorn, V., Lyons, M., & Almond, L. (2016). Drop the bad attitude! Narcissism predicts acceptance of violent behaviour. *Personality and Individual Differences*, *98*, 157-161.

Boly, A., Gillanders, R., & Miettinen, T. (2019). Deterrence, Contagion, and Legitimacy in Anticorruption Policy Making: An Experimental Analysis. *The Journal of Legal Studies*, 48(2), 275-305.

Bratton, M., & Mattes, R. (2003). Support for economic reform? Popular attitudes in Southern Africa. *World Development*, 31(2), 303-323.

Bucheli, J. R., Fontenla, M., & Waddell, B. J. (2019). Return migration and violence. *World Development*, *116*, 113-124.

Chang, E. C., & Chu, Y. H. (2006). Corruption and trust: exceptionalism in Asian democracies?. *Journal of Politics*, 68(2), 259-271.

Chang, E. C., & Kerr, N. N. (2017). An insider–outsider theory of popular tolerance for corrupt politicians. *Governance*, 30(1), 67-84.

Cho, W. (2012). Accountability or representation? How electoral systems promote public trust in African legislatures. *Governance*, 25(4), 617-637.

Clark, C. J., Ferguson, G., Shrestha, B., Shrestha, P. N., Oakes, J. M., Gupta, J., ... & Yount, K. M. (2018). Social norms and women's risk of intimate partner violence in Nepal. *Social science & medicine,* 202, 162-169.

Dincer, O., & Teoman, O. (2019). Does corruption kill? Evidence from half a century infant mortality data. *Social Science & Medicine*, 232, 332-339.

Djankov, S., Nikolova, E., & Zilinsky, J. (2016). The happiness gap in Eastern Europe. *Journal of Comparative Economics*, *44*(1), 108-124.

Ferguson, E. E. (2010). *Gender and Justice: Violence, Intimacy, and Community in Fin-de-Siècle Paris*. JHU Press.

Fisman, R., & Miguel, E. (2007). Corruption, norms, and legal enforcement: Evidence from diplomatic parking tickets. *Journal of Political Economy*, 115(6), 1020-1048.

Franke, G. R., Crown, D. F., & Spake, D. F. (1997). Gender differences in ethical perceptions of business practices: A social role theory perspective. *Journal of Applied Psychology, 82*(6), 920.

Gage, A. J. (2005). Women's experience of intimate partner violence in Haiti. *Social science & medicine*, 61(2), 343-364.

Gains, F., & Lowndes, V. (2018). Gender, actors, and institutions at the local level: Explaining variation in policies to address violence against women and girls. *Governance*, 31(4), 683-699.

Gillanders, R. (2016). Corruption and anxiety in Sub-Saharan Africa. *Economics of Governance*, *17*(1), 47-69.

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101(2), 366-385.

Gupta, S., Davoodi, H., & Alonso-Terme, R. (2002). Does corruption affect income inequality and poverty?. *Economics of governance*, *3*(1), 23-45.

Haidt, J. (2007). The new synthesis in moral psychology. *Science*, 316(5827), 998-1002.

Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 20(1), 98-116.

Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus*, 133(4), 55-66.

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion.* Vintage.

Harenski, C. L., Antonenko, O., Shane, M. S., & Kiehl, K. A. (2008). Gender differences in neural mechanisms underlying moral sensitivity. *Social Cognitive and Affective Neuroscience*, 3(4), 313-321.

Hunt, J. (2007). How corruption hits people when they are down. *Journal of Development Economics*, *84*(2), 574-589.

Jackson, J., Huq, A. Z., Bradford, B., & Tyler, T. R. (2013). Monopolizing force? Police legitimacy and public attitudes toward the acceptability of violence. *Psychology, public policy, and law*, 19(4), 479.

Jackson, J. C., Choi, V. K., & Gelfand, M. J. (2019). Revenge: A multilevel review and synthesis. *Annual Review of Psychology*, *70*, 319-345.

Jewkes, R., Levin, J., & Penn-Kekana, L. (2002). Risk factors for domestic violence: findings from a South African cross-sectional study. *Social Science & Medicine,* 55(9), 1603-1617.

Kelly, P. J., Rasu, R., Lesser, J., Oscos-Sanchez, M., Mancha, J., & Orriega, A. (2010). Mexican-American neighborhood's social capital and attitudes about violence. *Issues in mental health nursing*, *31*(1), 15-20.

Kirwin, M. F., & Cho, W. (2009). *Weak states and political violence in sub-saharan Africa.* Afrobarometer working paper No. 111.

Linde, J., & Erlingsson, G. Ó. (2013). The Eroding Effect of Corruption on System Support in S weden. *Governance*, 26(4), 585-603.

Mansfield, E. D., & Snyder, J. (2012). Democratization and the Arab Spring. *International Interactions*, *38*(5), 722-733.

Marquette, H., & Peiffer, C. (2018). Grappling with the "real politics" of systemic corruption: Theoretical debates versus "real-world" functions. *Governance*, 31(3), 499-514.

Mauro, P. (1995). Corruption and growth. *The Quarterly Journal of Economics*, *110*(3), 681-712.

McClennan, J. (2005). Domestic violence between same-gender partners: Recent findings and future research. *Journal of Interpersonal Violence*, 20, 149–154.

Moldogaziev, T. T., & Liu, C. Public sector corruption and perceived government performance in transition. *Governance*. https://doi.org/10.1111/gove.12519

Moore, C., Detert, J. R., Klebe Treviño, L., Baker, V. L., & Mayer, D. M. (2012). Why employees do bad things: Moral disengagement and unethical organizational behavior. *Personnel Psychology*, 65(1), 1-48.

Morris, S. D., & Klesner, J. L. (2010). Corruption and trust: Theoretical considerations and evidence from Mexico. *Comparative Political Studies,* 43(10), 1258-1285.

Niazi, F., Inam, A., & Akhtar, Z. (2020). Accuracy of consensual stereotypes in moral foundations: A gender analysis. *PloS one*, *15*(3), e0229926.

Nunn, N., & Wantchekon, L. (2011). The slave trade and the origins of mistrust in Africa. *American Economic Review,* 101(7), 3221-52.

Persson, A., Rothstein, B., & Teorell, J. (2019). Getting the basic nature of systemic corruption right: A reply to Marquette and Peiffer. *Governance*, 32(4), 799-810.

Rothbart, M. K., Hanley, D., & Albert, M. (1986). Gender differences in moral reasoning. *Sex Roles*, 15(11-12), 645-653.

Sakalh-Uğurlu, N., & Glick, P. (2003). Ambivalent sexism and attitudes toward women who engage in premarital sex in Turkey. *Journal of Sex Research*, 40(3), 296-302.

Seligson, M. A. (2002). The impact of corruption on regime legitimacy: A comparative study of four Latin American countries. *The journal of Politics*, 64(02), 408-433.

Seligson, M. A. (2006). The measurement and impact of corruption victimization: Survey evidence from Latin America. *World Development*, 34(2), 381-404.

Shakya, H. B., Fleming, P., Saggurti, N., Donta, B., Silverman, J., & Raj, A. (2017). Longitudinal associations of intimate partner violence attitudes and perpetration: Dyadic couples data from a randomized controlled trial in rural India. *Social science & medicine*, 179, 97-105.

Simon, T. R., Anderson, M., Thompson, M. P., Crosby, A. E., Shelley, G., & Sacks, J. J. (2001). Attitudinal acceptance of intimate partner violence among US adults. *Violence and Victims*, 16(2), 115-126.

Tavits, M. (2008). Representation, corruption, and subjective well-being. *Comparative political studies,* 41(12), 1607-1630.

Vecina, M. L., Marzana, D., & Paruzel-Czachura, M. (2015). Connections between moral psychology and intimate partner violence: Can IPV be read through moral psychology?. *Aggression and violent behavior*, 22, 120-127.

Vecina, M. L., & Piñuela, R. (2017). Relationships between ambivalent sexism and the five moral foundations in domestic violence: is it a matter of fairness and authority?. *The Journal of Psychology,* 151(3), 334-344.

Wheatley, T., & Decety, J. (Eds.). (2015). *The moral brain: A multidisciplinary perspective*. MIT Press.

Yoder, K. J., & Decety, J. (2018). The neuroscience of morality and social decision-making. *Psychology, Crime & Law,* 24(3), 279-295.

Table 1: Summary Statistics

	Full Sample			Males			Females		
	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
political	14498	0.22	0.41	7607	0.22	0.42	6891	0.21	0.41
revenge	14699	0.11	0.31	7704	0.12	0.32	6995	0.10	0.30
domestic	14871	0.28	0.45	7770	0.31	0.46	7101	0.25	0.43
bribe	15196	0.25	0.43	7937	0.29	0.45	7259	0.22	0.41
perceptions	15196	3.73	2.24	7937	3.79	2.25	7259	3.67	2.22
history	15196	0.21	0.41	7937	0.21	0.41	7259	0.22	0.41
age	15196	35.36	14.06	7937	36.84	14.76	7259	33.75	13.07
female	15196	0.48	0.50						
Poverty Index (0-24 Scale)	15196	8.40	5.24	7937	8.42	5.25	7259	8.38	5.22
urban	15196	0.39	0.49	7937	0.38	0.49	7259	0.40	0.49
misogyny	14879	0.29	0.45	7762	0.33	0.47	7117	0.24	0.43

Table 2: Correlation between Attitudes to Violence in Different Contexts (N= 13,894)

	political	*revenge*	*domestic*
political	1		
revenge	0.2188	1	
domestic	0.0777	0.0923	1

	(1)	(2)	(3)	(4)	(5)
	political	*usedviol*	*revenge*	*domestic*	*domestic*
bribe	0.07***	0.05***	0.03***	0.04***	0.03***

Table 3: Main Results

	(1)	(2)	(3)	(4)	(5)
	(0.012)	(0.011)	(0.009)	(0.012)	(0.011)
perceptions	0.01***	0.01***	0.01**	0.01***	0.01**
	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)
history	0.06***	0.04***	0.02**	0.03**	0.03**
	(0.011)	(0.011)	(0.009)	(0.013)	(0.013)
misogyny					0.20***
					(0.014)
age	-0.00***	-0.00***	-0.00**	0.00**	0.00
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
female	-0.01*	-0.03***	-0.02***	-0.07***	-0.05***
	(0.008)	(0.005)	(0.006)	(0.010)	(0.009)
Did Not Complete Primary School	Ref	Ref	Ref	Ref	Ref
Primary or Some Secondary	0.00	0.02**	-0.01*	-0.05***	-0.03***
	(0.013)	(0.010)	(0.007)	(0.011)	(0.012)
Secondary	-0.01	0.01	-0.02*	-0.09***	-0.06***
	(0.018)	(0.013)	(0.010)	(0.017)	(0.018)
Post-Secondary Qualification	-0.02	0.02	-0.03***	-0.14***	-0.11***
	(0.015)	(0.018)	(0.009)	(0.017)	(0.018)
University and Postgraduate	-0.02	0.08**	0.00	-0.17***	-0.14***
	(0.027)	(0.033)	(0.019)	(0.017)	(0.019)
Poverty Index (0-24 Scale)	0.00	0.00	0.00	0.00	0.00
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
urban	-0.01	-0.01	-0.01	-0.05***	-0.05***
	(0.010)	(0.012)	(0.008)	(0.014)	(0.014)
Profession Dummies	YES	YES	YES	YES	YES
Country Dummies	YES	YES	YES	YES	YES
Observations	14,498	15,034	14,699	14,871	14,609

Notes: Probit marginal effects reported. The corresponding standard errors are clustered by region and reported in parentheses.*, **, and *** indicates significance at the 10%, 5% and 1% levels respectively.

Table 4: Do Men and Women Respond Differently?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:	Males	Females	Full	Males	Females	Full	Males	Females	Full
	political	*political*	*political*	*revenge*	*revenge*	*revenge*	*domestic*	*domestic*	*domestic*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
bribe	0.07***	0.07***	0.07***	0.03***	0.02**	0.02***	0.04***	0.03**	0.04***
	(0.013)	(0.015)	(0.0124)	(0.010)	(0.011)	(0.009)	(0.015)	(0.015)	(0.014)
perceptions	0.01***	0.01**	0.01***	0.01**	0.00	0.01**	0.01***	0.00	0.01***
	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
female			-0.01			-0.02***			-0.06***
			(0.009)			(0.007)			(0.011)
*bribe*female*			0.00			0.01			-0.01
			(0.013)			(0.01)			(0.019)
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Profession Dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country Dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	7,607	6,891	14498	7,704	6,995	14699	7,770	7,101	14871

Notes: Probit marginal effects reported. The corresponding standard errors are clustered by region and reported in parentheses., **, and *** indicates significance at the 10%, 5% and 1% levels respectively. All models include controls for age, education, poverty, and urban status.*

Table 5: Robustness - Local Conditions and Norms

	(1) political	revenge	domestic	(4) political	(5) revenge	(6) domestic	(7) political	(8) revenge	(9) domestic
bribe	0.06***	0.03***	0.03***	0.06***	0.02***	0.03***	0.07***	0.03***	0.04***

	(0.011)	(0.009)	(0.011)	(0.011)	(0.008)	(0.011)	(0.011)	(0.009)	(0.012)
perceptions	0.01***	0.01**	0.01***	0.01***	0.00*	0.01***	0.01***	0.01**	0.01***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
meanbribe	0.17*	0.01	0.24**						
	(0.097)	(0.063)	(0.117)						
politicalnorm				0.97***					
				(0.035)					
revengenorm					0.70***				
					(0.032)				
domesticnorm						0.87***			
						(0.027)			
violentcommunity							0.13**	0.02	0.10
							(0.066)	(0.039)	(0.063)
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Profession Dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country Dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	14,498	14,699	14,871	14,498	14,699	14,871	14,498	14,699	14,871

Notes: Probit marginal effects reported. The corresponding standard errors are clustered by region and reported in parentheses.*, **, and *** indicates significance at the 10%, 5% and 1% levels respectively. All models include controls for age, education, poverty, and urban status.

Table 6: Robustness - Legitimacy and Crime

	(1) policelegit	(2) courtslegit	(3) political	(4) revenge	(5) domestic	(6) political	(7) revenge	(8) domestic
bribe	-0.05***	-0.03***	0.07***	0.02**	0.04***	0.07***	0.02**	0.04***
	(0.010)	(0.010)	(0.012)	(0.009)	(0.012)	(0.012)	(0.009)	(0.012)
perceptions	-0.02***	-0.01***	0.01***	0.00*	0.01***	0.01***	0.00*	0.01***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
crime	-0.02**	-0.03***	0.02*	0.01	0.01	0.02*	0.01	0.01
	(0.010)	(0.010)	(0.009)	(0.007)	(0.009)	(0.009)	(0.007)	(0.009)
meanbribe	-0.02	-0.03						
	(0.093)	(0.091)						
policelegit			-0.03**	-0.06***	0.01			
			(0.011)	(0.008)	(0.011)			
courtslegit						-0.02*	-0.04***	0.00
						(0.011)	(0.008)	(0.011)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Profession Dummies	YES	YES	YES	YES	YES	YES	YES	YES
Country Dummies	YES	YES	YES	YES	YES	YES	YES	YES
Observations	15,033	14,870	14,354	14,548	14,715	14,213	14,396	14,555

Notes: Probit marginal effects reported. The corresponding standard errors are clustered by region and reported in parentheses.*, **, and *** indicates significance at the 10%, 5% and 1% levels respectively. All models include controls for age, gender, education, poverty, and urban status.

Appendix

Table A1: Round 2 Data Variable Definitions

Label	Definition

political	Takes a value of 1 if the respondent agrees (or very strongly agrees) with the statement that "In this country, it is sometimes necessary to use violence in support of a just cause" and zero if the respondent agrees (or very strongly agrees) with the statement that "The use of violence is never justified in [their country's] politics"
revenge	Takes a value of 1 if the respondent agrees (or very strongly agrees) with the statement that "If you were the victim of a violent crime, you would find a way to take revenge yourself" and zero if the respondent agrees (or very strongly agrees) with the statement that "If you were a victim of a violent crime, you would to the police for help."
domestic	Takes a value of 1 if the respondent agrees (or very strongly agrees) with the statement that "A married man has a right to beat his wife and children if they misbehave." and zero if the respondent agrees (or very strongly agrees) with the statement that "No-one has the right to use physical violence against anyone else."
usedviol	Takes a value of one if the respondent says that he or she has "Used force or violence for a political cause" or would do so if he or she had the chance and zero the response is "No, would never do this"
bribe	Takes a value of 1 if the respondent reports having had to, in the past year, "pay a bribe, give a gift, or do a favour to government officials" in the context of avoiding problems with the police, getting a child into school, getting a document or permit, getting a household service or for "anything else"
meanbribe	The average of *bribe* in the respondent's region
perceptions	Created from questions which ask "How many of the following people do you think are involved in corruption, or haven't you heard enough about them to say?" in relation to "The President and Officials in his Office", "Elected leaders, such as parliamentarians or local councillors", and "Government officials." Each of the questions can be answered "none", "some of them", "most of them" and "all" to which we assign the values from 0 to 3 respectively leading to an index that takes values from 0-9.
history	Takes a value of one if the respondent answers "sometimes" "often" or "always" to the question "In your experience, how often do violent conflicts arise between people … [w]ithin your own family?" and zero if they answer "never" or "rarely."
misogyny	Takes a value of one if the respondent agrees (or very strongly agrees) with the statement that "Women have always been subject to traditional laws and customs, and should remain so." and zero if the respondent agrees (or very strongly agrees) with the statement that "In our country,

	women should have equal rights and receive the same treatment as men do."
politicalnorm	The average of *political* in the respondent's region
revengenorm	The average of *revenge* in the respondent's region
domesticnorm	The average of *domestic* in the respondent's region
violentcommunity	Captures the share of people in the individual's region who answer that violent conflicts arise between people within the community where they live "sometimes", "often", or "always."
crime	Takes a value of one if the respondent or anyone in their family has in the past year had something stolen from their home or been physically attacked and zero otherwise.
policelegit	Takes a value of one if the respondent agrees or strongly agrees with the statement that "The police always have the right to make people obey the law" and zero otherwise.
courtslegit	Takes a value of one if the respondent agrees or strongly agrees with the statement that "The courts have the right to make decisions that people always have to abide by" and zero otherwise.
Poverty Index (0-24 Scale)	Sum of 0-4 scale questions which ask how often the respondent has had to go without food, water, medical care, electricity, fuel for cooking, and cash income. Larger numbers indicate more severe lived poverty.
urban	Takes a value of 1 if the primary sampling unit was urban

Table A2: Robustness – Later Rounds of Data

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Round:	Three	Three	Three	Five	Five	Five	Five	Five	Five
Sample:	Full	Males	Females	Full	Males	Females	Full	Males	Females
	political	*political*	*political*	*political*	*political*	*political*	*revenge*	*revenge*	*revenge*
bribe	0.081***	0.072***	0.090***	0.046***	0.043***	0.051***	0.003**	0.003**	0.003*
	(0.011)	(0.012)	(0.013)	(0.007)	(0.008)	(0.009)	(0.001)	(0.002)	(0.002)
perceptions	0.005***	0.005***	0.006***	0.007***	0.005***	0.008***	0.001***	0.002***	0.001***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.000)	(0.000)	(0.000)
age	-0.001***	-0.001***	-0.001**	-0.001***	-0.001***	-0.001***	-0.000***	-0.000***	-0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
female	-0.013**			-0.011**			-0.006***		
	(0.006)			(0.005)			(0.001)		
Did Not Complete Primary School	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Primary or Some Secondary	-0.010	-0.025**	0.003	0.013**	0.021**	0.006	-0.001	-0.001	-0.000
	(0.008)	(0.012)	(0.012)	(0.006)	(0.008)	(0.008)	(0.001)	(0.002)	(0.002)
Secondary	-0.013	-0.027	0.002	0.003	-0.002	0.011	0.002	0.001	0.003
	(0.012)	(0.017)	(0.015)	(0.009)	(0.010)	(0.011)	(0.002)	(0.003)	(0.002)
Post-Secondary Qualification	-0.027**	-0.035**	-0.019	0.013	0.015	0.011	-0.000	-0.000	-0.000
	(0.012)	(0.016)	(0.016)	(0.011)	(0.013)	(0.015)	(0.002)	(0.003)	(0.002)
University and Postgraduate	-0.041**	-0.064***	-0.006	-0.001	-0.009	0.014	0.000	-0.000	0.002
	(0.020)	(0.023)	(0.031)	(0.013)	(0.015)	(0.020)	(0.002)	(0.004)	(0.004)
Poverty Index	0.002	0.001	0.002*	0.002**	0.003***	0.001	0.000***	0.001***	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
urban	0.006	0.010	0.002	-0.000	0.007	-0.008	0.000	0.002	-0.001
	(0.009)	(0.012)	(0.012)	(0.007)	(0.008)	(0.008)	(0.001)	(0.002)	(0.001)
Profession Dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country Dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	17,657	9,226	8,431	37,003	19,150	17,853	38,252	18,580	18,042