Private Benefits, Public Harms, and Citizen Participation in Corruption: a Field Experiment in Nairobi, Kenya

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Abstract

In a two-stage field experiment (N = 1,403) in Nairobi, Kenya, we demonstrate that citizens’ own self-interest legitimizes common instances of corruption but concerns for harming others subsequently attenuates real willingness to participate in it. An in-person vignette experiment that manipulates the reason bribes are commonly paid demonstrates that public support for bribery is highest when bribes function as a cooperative arrangement with officials that helps citizens avoid consequences of their own mistakes and misdeeds, even though participants also recognize that these self-interested bribes cause significant harm to other citizens and institutions. In a follow-up behavioral experiment, the same respondents were offered an opportunity to cooperate with a corrupt official to receive a disproportionate cash payment following their participation in the study. Willingness to engage in the corrupt transaction was significantly reduced by a subtle reminder that accepting the additional funds could result in monetary loss to other citizens. We compare our results to earlier work using laboratory-based bribery games and discuss the potential for anti-corruption strategies based on the same types of social group preferences normally regarded as detrimental to macro-level collective action.

Introduction

A bribe is a payment made to an officeholder with the intent to influence action. Regardless of whether the payment is triggered by the officeholder's solicitation or a client's offer, bribes entail an abuse of power by corrupt officials, a key focus of principal-agent (1) approaches to corruption. Principal-agent frameworks that focus on the role of abusive officials constitute a large portion of early and contemporary corruption research (1–6), and they continue to inform the methodology of major international surveys on bribery (7–10) as well as many anti-corruption efforts (11, 12). Another key approach to explaining bribery focuses instead on descriptive norms, the extent to which citizens or officials will engage in bribery because they believe it is normal in their context (13–15). Strong descriptive norms reinforce cultures of corruption and create collective action problems that hinder anti-bribery efforts (16, 17). Research on the normative basis of corruption has sought to manipulate local norms and beliefs as part of anti-corruption efforts (18, 19). Despite a clear understanding of the impact of both corrupt agents and cultural norms on the prevalence of corruption, anti-corruption efforts rooted in changing incentives for principal-agent relations or in changing perceived local norms have not been particularly successful at reducing corruption (20).

In this paper, we empirically demonstrate the value of a third, and to date less prominent, approach. The “functional” approach (20–22) focuses on the fact that “corruption provides immediate, specific, and concrete benefits” to many actors, not just officials, that participate in it (23). A key implication of the functional approach is that bribery can be useful to citizens as well as officials, an attribute of bribes rarely documented in popular corruption surveys, but a key focus of the current study.

To underscore the value of this perspective, we first measured the extent to which citizens are perceived to be responsible for causing common bribe payments as a way to pursue their own self-interests, as
opposed to bribes caused by officials who abuse their power. We fielded a survey to a representative sample of citizens in Nairobi County, Kenya (N=711, July 2022). This survey was taken in the same empirical context as our primary study reported below but employed a different sample. In this exploratory survey, respondents were asked: “Thinking across the different reasons why citizens pay bribes, what percentage of bribes do you think are paid as a result of A) an official abusing their power, B) a citizen making a mistake and wanting to avoid the consequences, or C) a citizen wanting some kind of special treatment?” Respondents attributed 44% of all bribes to the latter two categories of citizens’ agentic preferences, with 27% of bribes believed to result from citizens avoiding the consequences of their own mistakes and 17% from citizens wanting special treatment. This suggests that a sizable portion of the frequent violations of the principal-agent relationship in the high corruption context of Nairobi result from a more cooperative relationship (24) between citizens seeking functional benefits and officials who provide them, rather than exclusively from endemic abuses of officeholders.

But focusing only on benefits leaves out a critical dimension of corruption: private benefits come at the cost of public goods. Roads are more dangerous when drivers expect to be able to bribe their way out of speeding tickets. Government services suffer when unqualified job applicants bribe their way into jobs. Therefore, a more complete understanding of how functional benefits influence willingness to engage in bribery requires careful attention to how citizens make decisions based on their understanding of the tradeoffs between their own self-interest and damage to public goods that are fundamental to corrupt transactions (3, 4, 11). An interdisciplinary body of research shows that concerns for others’ welfare is an important factor in decision making, even in situations where there are tradeoffs between private benefits and others’ welfare (15, 25–29), a pattern no less true in weak institutional contexts that foster both high rates of corruption and strong social group preferences (30, 31).

In this paper, we report a study that measures public support for, and willingness to engage in, the corrupt practice of bribery across common scenarios where the root cause of the bribe varies by the source of the problem that caused it. Specially, we compare across commonly occurring situations where bribes are used to solve problems caused either by a citizen's counter-normative behavior (e.g., the citizen makes a mistake or engages in an illegal behavior), an official's abuse of their power (e.g., the official lies or fabricates a problem), or a systemic weaknesses that leads to a resource scarcity (e.g., the official controls access to a limited good or service). In addition to measuring benefits associated to the bribe payer, we also measure perceived harm done to public goods.

Using a two-part experimental design (N=1,403) administered in the high corruption context of Kenya’s capital city, we first report results from a vignette experiment that demonstrate that bribes paid to solve citizen-caused problems are paradoxically perceived to be both more socially acceptable while also being perceived as harmful to other citizens and more harmful to public institutions than bribes that solve problems caused by abusive officials or systemic weaknesses. Our results suggest that self-interest wins in this tradeoff: in addition to being judged more socially responsible, participants also self-report greater willingness to pay bribes if they were in the same citizen-led bribery situation, despite the recognition of harming the greater good. Mediation models demonstrate that functional benefits to the citizen explain
the greater acceptability and reported willingness to pay bribes in citizen-led bribery situations, compared to bribes that arise from officials abusing their power or system-shortages.

Subsequently, we test an intervention that makes salient the potential harm to others at the time the decision is made to engage in self-interested corruption. Based on results from a behavioral experiment with the same respondents several days after the vignette study, we find that making salient the public harm that can result from corrupt behaviors at the time of decision making results in a significant reduction in the acceptance of a corrupt opportunity. In a concluding discussion we position the efficacy of our field experiment intervention against previous laboratory experiments using bribery games and discuss the potential for anti-corruption strategies based on the same types of social group preferences normally regarded as detrimental to macro-level collective action.

Vignette Experiment

We conducted our study in Kenya's capital city of Nairobi, a setting where petty bribes are a ubiquitous feature of daily life and corruption undermines the quality of public institutions (32, 33). Before any manipulations, participants answered a series of pre-test questions to measure their general attitudes about bribery and corruption (see Supplemental Note 2), to be analyzed for a separate project. The vignette experiment presents common situations in which bribes are paid, manipulating whether paying the bribe solves a problem created by the “fault” of the citizen, an official’s abuse of power, or a systemic or institutional shortcoming. We refer to these as “citizen fault,” “official fault” and “system fault,” respectively. We also manipulated whether the official requested the bribe or if the citizen offered it.

Via the use of focus groups and extensive pilot testing, we arrived at six situations in which bribery is pervasive in Nairobi. Because previous research shows the police are the government agents most frequently involved in bribery in Kenya (32), three of our situations involved an interaction with police (34): driving above the speed limit, driving through a road closure, and violating the recent Covid-19 curfew. The other three situations featured an unemployed teacher applying for a job, a mother getting her child’s birth certificate, and a sick man needing health care at a public hospital. Pilot testing confirmed that each situation had face validity for two of the three fault conditions. Table 1 summarizes the 12 specific vignette scenarios created by the combination of the six common situations and the two fault conditions in which they had face validity. With the additional manipulation of whether the citizen offered the bribe or the official solicited it, we had 24 vignettes in total. Each respondent answered a randomly determined “block” of three vignettes, one involving the police, and two from the remaining three scenarios. The assignment of vignettes to “blocks” is described in Supplemental Note 1. The complete vignette experiment instrument is provided in Supplemental Note 2. After each vignette, we measured respondents’ beliefs of the functional benefits of the bribe provided to the citizen relative to the official and the extent to which the bribe harmed other citizens or institutions (35, 36).

**Table 1 (vignette scenarios) about here**
Figure 1 graphically presents results on the private versus public goods tradeoffs across our fault manipulations using model results from Table S1. Panel A shows the predicted functional benefits for the citizen relative to the official across our fault conditions using Model 1 from Table S1. Citizen-fault bribes, the reference category in Model 1, predict a mean rating of the citizen’s benefit relative to the official that represents an almost mutually beneficial outcome for the citizen who avoids the consequences of their poor behavior and the official who makes that possible (mean = 3.2). Functional benefits for the citizen relative to the official are significantly higher for citizen-fault bribes than official-fault (Mean = 4.1, \( t = -12.45, p = 0.00 \)) or system-fault bribes (Mean = 3.7, \( t = -6.25, p = 0.00 \)). System-fault bribes predict significantly higher benefits for the official relative to the citizen. Unsurprisingly, official-fault bribes are seen as most beneficial to the official relative to the citizen.

Panel B allows a direct comparison between these assessed benefits and the predicted harms using Models 2-4 in Table S1. These models predict respondents’ assessments of harm done to the citizen in the vignette, other citizens who will be in the same situation in the future, and the public institution featured in the vignette (e.g. road safety, public education, health care, etc.). Predicted harm to the citizen in the vignette serves as a benchmark for comparing harm done to other citizens and public institutions. Consistent with results in Panel A, predicted harm done to the citizen in the scenario (left) is lowest in the citizen-fault condition, significantly lower than the official-fault (\( t = -15.72, p = 0.00 \)) or system-fault (\( t = -9.78, p = 0.00 \)) conditions. Consistent with popular opposition to corrupt officials, harm to the focal citizen was rated highest when bribes are paid to solve problems in the official-fault condition (\( t = -6.38, p = 0.00 \)).

Comparing the perceived harm to the focal citizen (left) against perceived harms done to other citizens in similar positions in the future (center) and harm done to relevant public institutions (right) reveals important patterns in how citizen-fault bribes are judged to cause public harms. First, although predicted harm to future citizens (center) remains lower when the citizen is at fault compared to the official-fault (\( t = -8.61, p = 0.00 \)) and system-fault (\( t = -5.80, p = 0.00 \)) conditions, respondents assess that paying bribes to solve citizen-fault problems hurts citizens who will be in the same situation in the future more than the focal citizen in scenario. Further, respondents expect citizen-fault bribes to cause more harm to future citizens (Mean = 3.8) than the focal citizen (Mean = 2.9). Assessed harm to public institutions of these different types of bribes (right) shows another important pattern. Citizen-fault bribes are judged to be the most harmful to the relevant public institution, more than official-fault (\( t = 3.61, p = 0.00 \)) and system-fault bribes (\( t = 6.50, p = 0.00 \)).

Together, results in Figure 1 demonstrate that Nairobi residents judge bribery as most beneficial (and least harmful) to the focal citizen who pays a bribe to avoid the consequences of a problem they caused, but these citizen-fault bribes are also judged to be more harmful to future citizens who will be in similar situations than the focal citizen and are judged to be most harmful to public institutions, i.e., more so than bribes paid as a result of abusive public officials or systemic shortcomings. This suggests that Nairobi residents recognize that the tradeoffs between individual benefits from paying bribes and the collective costs of doing so is particularly strong for bribes that solve citizen-caused problems (which, as
shown in the exploratory survey reported above, are perceived to constitute more than 40% of all bribe payments in Nairobi). These results are robust to respondents’ assessment of the price of the bribe and whether the bribe is first offered by the citizen or demanded by the official, which further shows that respondents’ assessments are not driven by abusive officials.

**Figure 1 (private benefits vs public harms) about here**

Figure 1 provided separate assessments of the benefits and costs associated with citizen, official, and system-fault bribes. The more respondents resemble game theoretic “economic agents guided by self-interest,” (37), the more we would expect them to find bribes more acceptable and be more willing to pay them. We explicitly asked respondents to assess the acceptability of each type of bribe and their own willingness to pay it. Figure 2 shows participants’ predicted assessment of the increased acceptability of the bribe in a given vignette and their self-reported willingness to pay it across fault conditions based on Models 5 and 6 in Table S2. Respondents found bribes significantly more acceptable in the citizen-fault condition (model 5: \( t = 5.80 \) relative to official’s fault, \( t = 4.67 \) relative to system’s fault) and expressed a greater willingness to pay bribes in that condition (model 6: \( t = -2.37 \) relative to official’s fault, \( t = -2.33 \) relative to system’s fault). The magnitudes of these within-respondent shifts are significant. On a 1-5 scale, bribes paid in the citizen-fault condition are judged about 20% more acceptable than the official or system-fault conditions (Mean citizen fault = 2.6; mean official fault = 2.1; mean system fault = 2.2). Respondents report a 7% greater willingness to pay in the citizen-fault condition compared to the other two (Mean citizen fault = 2.9; mean official fault = 2.79; mean system fault = 2.7). Additional tests showed that ratings of acceptability did not differ between the official fault and the system fault (\( t = 0.85, p = 0.398 \)) nor did ratings of willingness to pay differ between those two conditions (\( t = -0.09, p = 0.932 \)). The only condition that differed from the others was citizen-fault.

**Figure 2 (acceptability and willingness to pay) about here**

Given these results, we tested three potential mechanisms suggested by prior work against the effect of functional benefits provided to citizens in citizen-fault bribes. Specifically, we compared the effects of the power of an official over a citizen (38, 39) as well as descriptive and injunctive norms regarding the prevalence and ethicality of bribery (40, 41) to the effects of the functional benefits to the citizen (20) on acceptability and stated willingness to pay bribes in citizen-led bribes. We use the same two specifications of functional benefits to the citizen presented above in Figure 1: the bribe’s benefits to the citizen relative to the official and the lack of harm done to the focal citizen in the scenario.

Table 2 shows results of our formal tests of significance of the indirect effect of each mechanism on our two key outcomes, greater acceptability of the bribe and self-reported willingness to pay it, based on the Monte Carlo approach (42) and 20,000 simulation runs. In the mediation tests, the citizen-fault condition was compared to a combined official/system fault condition for two reasons. First, our theoretical focus is on understanding conditions where citizens are at fault. Second, the citizen fault conditioned significantly differed from the other two conditions and the other two did not differ from each other. Results given in Table 2 show that neither injunctive norms about the ethicality of the bribe nor the
relative power of an official over a citizen significantly mediates the effects of our manipulation on either the acceptability of the bribe (Table 2, Panel A1) or respondents’ self-reported willingness to pay it (Table 2, Panel A2). However, functional benefits to the citizen and descriptive norms that others would pay are significant mediators for both outcomes.

Table 2 Panel A1 shows the mediating effects of each mechanism separately on the acceptability of the bribe. Greater benefits to the citizen relative to the official accounts for almost 44% of the increase in acceptability of citizen-fault bribes, and this mediating mechanism is significant at the 99% level. Notice that 15% of the effect of citizen-fault on increased acceptability of the bribe is attributable to the second measure of functional benefits to the citizen, the lack of harm done to the focal citizen. Finally with respect to significant effects in Panel A1, 3% of the increased acceptability of the bribe is attributable to descriptive norms that “the bribe is so common most Kenyans would pay it and move along.” These latter two mechanisms are each significant at the 95% level. The effects of these three significant mediators on acceptability of the bribe were further tested in a set of simultaneous mediation models; results are shown in Table 2 Panel B1. In the simultaneous mediation model, only the functional benefit to the citizen significantly predicts higher acceptability of the bribe payment.

Table 2 Panel A2 shows the mediating effects of each mechanism separately on the respondent’s self-reported willingness to pay the bribe. Results are consistent with those reported above. Greater benefits to the citizen relative to the official accounts for almost 34% of the increase in self-reported willingness to pay citizen-fault bribes. Just over 61% of the effect of citizen-fault on increased self-reported willingness to pay the bribe is attributable to the second measure of functional benefits to the citizen, the lack of harm done to that citizen. Just over 50% of the rise in self-reported willingness to pay citizen-fault bribes is attributable to greater descriptive norms. The effects of these three significant mediators on self-reported willingness to pay the bribe was further tested in a set of simultaneous mediation models; results are shown in Table 2 Panel B2. In the simultaneous mediation model, the functional benefit of the citizen's benefit relative to the official as well as the descriptive norm of the commonality of paying such a bribe are both significant at the 99% level.

Considering findings from Panels B1 and B2 together, the relationship between the citizen being at fault (vs. official or system fault) and the acceptability of the bribe is mediated by participants’ beliefs that the bribe offers functional benefits to the citizen. The relationship between the citizen being at fault and willingness to pay the bribe is mediated by participants' beliefs that the bribe offers functional benefits as well as their belief that most other citizens would also pay that type of bribe.

**Table 2 (mediation results) about here**

These results demonstrate how accounting for the functional benefits available to citizens through bribes that solve problems they cause helps explain why corruption remains prevalent despite being so reviled. Citizens are more accepting and willing to pay bribes that promote their self-interests in situations where they do not want to suffer the consequences of their own mistakes or otherwise secure a benefit they are not entitled to, even though they recognize that doing so is more harmful to future citizens than to the
focal citizen and most harmful to public institutions. As we showed in an ancillary study reported earlier, such situations are more common than existing research and corruption reduction efforts might suggest.

**Behavioral Experiment**

Our results suggest that functional benefits to citizens who use bribes to solve problems they created play a particularly powerful role in driving the acceptability and self-reported willingness to pay bribes, effectively creating a more cooperative arrangement (24) between the citizen paying the bribe and the official who accepts it. Nonetheless, our results also show that citizens recognize the public harm that results from their participation in self-interested corruption (see Figure 1). Given this, we wanted to know whether making salient harm to others’ welfare might reduce respondents’ willingness to engage in corruption.

We answered this question using a behavioral experiment that gave respondents the opportunity to collude with a member of the research team to secure a higher-than-expected payment for their participation in the study, but at the possible cost of financial harm to other respondents. Specifically, at the end of the in-person interview where the vignette responses reported in the previous section were collected, respondents were offered a small cash payment in appreciation of their time. 94% of respondents agreed to the payment and shared their mobile phone number in order to receive the payment via mobile banking app “in the coming days.” Rather than sending the payment, participants received a phone call from an employee of the survey company who, following the script shown in Supplemental Note 3, offered the participant a corrupt opportunity to collude with the employee to receive more than the promised payment amount. If the respondent chose the additional, corrupt payment, the survey firm employee requested that the participant cooperate and send a portion of the excess payment back to the survey firm employee’s private number.

To explain where these excess funds would come from, the control group was told that “the company that runs this study is big and won’t run out of funds,” while the treatment group was told “if the study runs out of funds, respondents in the future just won’t get paid.” The design provided a behavioral test of the hypothesis that citizens will be less willing to engage in corruption in the treatment group, since that condition makes salient harm to fellow citizens. The study budget was set such that if 100% of all respondents agreed to the illicit payment then the last few respondents would not have been offered the thank you payment; they would not have been aware of this harm in advance since the payment for participation was only mentioned at the end of the vignette interview.

Given that our participants had already discussed bribery and corruption with a member of the research team 3-4 days earlier, we wanted to ensure that any effects of our public harm manipulation were not a result of having participated in the vignette experiment. Thus, we also enrolled a separate random sample from Nairobi County (N = 295) in an ancillary study where, instead of the bribery vignette experiment, they completed an alternative survey that did not mention bribery, corruption, or any related concepts. This instrument borrowed questions from the most recent wave of the Afrobarometer survey (the full
instrument for the ancillary study is posted in the Supplemental Note 4). Like the participants in the vignette study, participants in this ancillary sample were contacted with the corrupt opportunity 3-4 days after the initial survey.

Model 7 in Table S3 shows that ancillary participants were modestly more likely to accept the bribe opportunity \((t = 1.67)\). Most importantly, Model 8 in Table S3 shows that being a participant in the vignette versus ancillary group does not interact with our manipulation (interaction effect \(t = 0.33\)). This suggests that the effect of our manipulation does not depend on having previously discussed bribery.

The left side of Figure 3 shows the effect of our manipulation that accepting the corrupt additional payment may result in financial harm to others, based on results from Model 8 in Table S3. Making salient the potential harm to others significantly lowered the probability that respondents accepted the corrupt opportunity by 8.1 percentage points (Model 8: \(t = -2.88\)). Overall, this is an approximately 12% reduction in the acceptance of the corrupt opportunity (Mean acceptance = 69% in the control condition vs 61% in the experimental condition of other respondents at risk of not being paid).

**Figure 3 (behavioral experiment results) about here**

We wanted to rule out a potential alternative explanation for why participants might have been less apt to accept the corrupt opportunity in the treatment condition. Specifically, participants may have perceived a greater risk of being caught in this condition, since they were told that there was a slight risk of the study running out of funds. Enumerators were trained to record several possible concerns that a respondent might express during the call: the risk of detection and punishment, concern that the offer was a scam, concerns about what would happen if they accepted the illicit payment but did not or could not return the 50 Ksh to the enumerator’s private number, and confusion about what opportunity was being offered. Our enumerators responded using the scripted answer to each concern provided in Supplemental Note 3. Results in Table S3 Model 9 show that including dummy variables for these concerns makes no material difference in the effect of our manipulation. Model 10 adds an additional concern that respondents could mention: that the corrupt opportunity was unethical. Including this dummy variable does lower the effect size of our manipulation, suggesting that our manipulation has the intended effect of priming respondents to think about harm done to others.

We also tested whether respondents’ general attitudes about bribery and corruption, as measured in the pre-test questions asked prior to the manipulations in the vignette survey, predicted their willingness to accept the corrupt opportunity in the behavioral experiment. These results are based on our “main” sample of respondents who completed the vignette study about bribery. We find no evidence that they do. Model 11 in Table S3 shows that neither respondents’ general attitudes about the private versus public goods tradeoffs inherent in bribes \((t = -1.12)\) nor their descriptive norms perceptions of the prevalence of bribery in Kenya \((t = -1.66)\) impact acceptance of the corrupt opportunity. The right side of Figure 3 provides a visual comparison of effect sizes from Model 11 against the effect size in Model 8, which did not include alternative reasons for declining the corrupt opportunity or the general attitudes measures.
Lastly, we report the degree to which respondents cooperated with the enumerator in the corrupt opportunity. Specifically, once a participant accepted the corrupt opportunity and received the excess payment, they had a choice to either fulfill the informal terms of the corrupt opportunity (by depositing part of the excess in the survey firm employee’s account) or simply keeping all the excess. Of the 67.2% of all respondents who accepted the corrupt opportunity, 70.2% of them cooperated and sent the 50 Ksh back to the employee’s private number.

Discussion

Our study yields three primary insights derived from more precisely identifying the functional benefits of corruption for citizens. First, bribes that solve citizen-caused problems, a more cooperative arrangement between citizens and corrupt or corruptible officials, are a substantial portion of bribes paid in the high corruption context of Nairobi, Kenya. Second, the public recognizes the tradeoff between private benefits and public harms in these types of bribes, as these bribes that solve citizen-caused problems are judged most beneficial to the citizen paying them but also harmful to other citizens and especially harmful to public institutions. Formal mediation tests demonstrate that the functional benefits available to the citizen, not the power of the corrupt official or beliefs about the ethicality of such bribes, explains public support for these bribes. Third, and more optimistically, the public is less likely to accept a real, self-benefitting corrupt opportunity when the potential for harming others is salient at the time of decision making.

It is helpful to compare the efficacy of our intervention in cutting corrupt behavior to the interventions suggested in previous work. A foundational study using a bribery game found no reduction in bribery after introducing a negative financial externality of bribes on other players in the game (43) and thus “accepted the null hypothesis that individuals take no account of the harm that corrupt exchanges cause to others” (44). A follow-up study similarly found no effect of financial harm to others on rates of bribery in the bribery game played in three developing countries (45). Another study showed a reduction in bribes only when harm to others was paired with a manipulation that strongly framed the illicit payment as corruption (44).

Like the authors in the latter study (44), we suspect that research design and context has much to do with the variation in results. These previous studies utilized laboratory experiments that are intentionally context free, while our respondents are randomly sampled citizens in Kenya’s capital city of Nairobi, a setting characterized not only by high levels of corruption but also proximity to others’ financially precarious positions. Similarly, in laboratory experiments participants generally know that they are, in a sense, playing a “game.” Thus, it may be easier to ignore the financial implications of one’s behavior on other “players.” This may be more difficult in decisions situated in the real-world, as happened in our experiment. It is understandable that citizens are more open to cooperation with corrupt officials when doing so provides them with specific functional benefits, but researchers and policy makers should not overlook the other-regarding preferences that characterize the social groups that organize political, social, and economic relationships across Africa (30) and especially in Kenya (46–48). These group-centric
preferences are often cited as detrimental to collective action and development (49–51). But we suggest they might instead contribute positively to grass roots collective action aimed at breaking the cycle of corruption, given the tendency to take fellow group members’ welfare into account when social identities are salient (52, 53)

Lastly, we note that the study presented here adds to a growing body of research using field experiments to better understand the causes of corruption (54) and test “nudge” interventions that might attenuate it. For example, a field experiment using public messages displayed on posters in a small South African town stating that bribery was on the decline lowered local perceptions of the frequency of bribery and decreased bribery in a corruption game (19). Similarly, a recent study in Nigeria produced multiple “Nollywood” feature films, with the treatment group receiving a film that primed viewers to see lower logistical barriers to reporting corruption (18). We consider the wide range of anti-corruption interventions to be complimentary, reflecting the range of possible anti-corruption strategies that may be warranted, given the diverse causes of corrupt behavior.

References


**Tables**

Table 1 and 2 are available in the Supplementary Files section.

**Figures**
Panel A: Private benefits of the bribe for the citizen relative to the official

![Graph showing the comparison of private benefits to public harms based on fault condition.]

**Note:** Benefit to citizen relative to official estimated holding all other variables to their mean values using model 1 in Table A2.

Benefit to the citizen relative to the official is measured using question Post-5 (Supplemental Note 2), “Under the circumstances in the scenario, would you say that the citizen who paid the bribe benefits more, or the official who received the bribe benefits more?”

Panel B: Harm done by the bribe

![Graph showing the harm done by the bribe under different fault conditions.]

**Note:** Predicted harms holding all other variables to their mean values using Models 2-4, Table A2.

Harm is measured using question Post-15 (Supplemental Note 2), “We want to know if you think anyone was harmed by the bribe in this scenario. On a scale of 1-5, where 1 is no harm and 5 is a lot of harm, how much harm do you think is done to each of the following?”

Figure 1

Predicted Private Benefits Versus Public Harms of Bribes, by fault condition
Figure 2

Predicted Acceptability and Self-reported Willingness to Pay Bribes, by fault condition

Note: Predicted outcomes estimated holding all other variables to their mean values using Models 5 and 6, Table A3.

Acceptability of the bribe is measured using question Post-4 (Supplemental Note 2), "Do the circumstances in the scenario A) Make it more acceptable to pay the bribe, or B) not make it more acceptable to pay the bribe?"

Willingness to pay the bribe is measured using question Post-12 (Supplemental Note 2), "If you were in the exact situation as this scenario do you think A) Bribes are so common, you would just pay it and move along?, or B) You would try hard to not pay the bribe?"

For both questions: 5 = strongly agree with A, 4 = agree with A, 3 = equal between A and B, 2 = agree with B, 1 = strongly agree with B.
Figure 3

Behavioral Experiment Results

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- Tables.docx
- BriberyFieldExperimentSUPPLEMENTALINFORMATIONAnonymousforNHBsubmission.docx

Note: Predicted outcomes estimated holding all other variables to their mean values. Estimates without controls use Model 8 in Table S3. Estimates with controls use Model 10 in Table S3. 95% confidence intervals displayed.

Control: "The company that runs this survey is big and it won't run out of funds."

Experiment: "If the study runs out of funds, we just won't pay some respondents in the future."