Abstract: Standard anticorruption interventions consist of intensified monitoring and sanctioning. Rooted in principal-agent theory, these interventions are based on the assumption that corrupt acts follow a rational cost-benefit calculation by gain-seeking individuals. Given their mixed results, however, these interventions require closer scrutiny. Building on goal-framing theory, the authors argue that rule compliance requires a salient normative goal frame, since monitoring can never be perfect. Being inherently brittle, it needs constant reinforcement through external cues operating alongside formal monitoring and sanctioning. Leaders and peers setting a good example can provide such cues. In line with this hypothesis, analysis of multilevel repeated measures data from a vignette study of 580 Indonesian senior civil servants shows that the perceived likelihood of a hypothetical civil servant accepting a bribe is lowest when monitoring and sanctioning are strong and when leaders and peers are known to have refused bribes in the past.

Evidence for Practice

• Applying a goal-framing approach that acknowledges the importance of manifest norms provides a useful means for studying corruption and for understanding the role of leaders and peers.
• A large vignette study showed that a good example set by peers, and especially by leaders, is a powerful deterrent for civil servants to engage in corruption.
• The study confirmed the importance of strong monitoring and sanctioning as tools for corruption prevention.

As part of the Indonesian government’s reform efforts, since 1998, it has invested substantially in measures to reduce corruption. Many of these measures focus on intensifying formal institutions, such as adopting anticorruption laws or establishing and strengthening public organizations to implement monitoring and sanctioning. These attempts to control and detect corruption in the Indonesian public sector reflect an economic view of corruption, assuming that corrupt individuals are goal-directed actors who maximize their personal benefit through a rational choice calculation (De Graaf 2007; Palmer 2008). Accordingly, as in many other countries, anticorruption interventions consist of intensified monitoring (increasing the expected probability of detection) and increased severity of punishment (increasing the expected costs of corruption). For example, Presidential Regulation No. 87/2016 on the Eradication of Extortion or Illegal Levies was enacted to punish and eradicate extortion practices by public officials and to create a better and more transparent public service system. Each ministry, local government, and other government agency in Indonesia has its own inspectorate that acts as an internal control body that monitors whether organizational rules are obeyed by everyone in the bureaucracy. As part of external monitoring strategies, particular state agencies monitor and investigate alleged corruption and maladministration by public officials. Examples of such agencies are the Corruption Eradication Commission and the Indonesian Financial Transaction Reporting and Analysis Center.

Despite these government initiatives, corruption is still pervasive in Indonesia, not only among appointed political leaders but also among senior civil servants in both central and local government (Silitonga et al. 2016). For example, as a recent Indonesia Corruption Report (GAN Business Anti-Corruption Portal 2017) emphasizes, a corrupt judiciary, extensive bribery in the public service, and the extortion of informal payments to register businesses or obtain licenses are still rampant and perceived not only to severely harm the efficiency of business but also to undermine property rights protections and weaken dispute settlement processes. Martini (2012, 1) summarizes the causes of the persistence and pervasiveness of corrupt practices in Indonesia. They include “large amounts of public resources derived from natural resources, vested interests and politically connected networks, poorly paid civil servants, low regulatory...
quality, and weak judicial independence. In addition, local officials are given wide discretionary power and resources without proper accountability and enforcement mechanisms.”

The failure of enforcement mechanisms is the focus of this study. Given the limited effectiveness of monitoring and sanctioning systems to control corruption (Lambsdorff 2009; Mungiu-Pippidi 2011; Persson, Rothstein, and Toerell 2013), we propose, develop, and empirically test an alternative approach to corruption based on goal-framing theory (Lindenberg and Steg 2013). We argue that since monitoring can never be perfect, compliance with rules and norms requires a salient normative goal frame that stipulates the importance of refraining from corruption. However, since this goal frame is inherently brittle, it needs constant reinforcement through cues that operate alongside formal monitoring and sanctioning mechanisms. We expect that behavior of leaders and coworkers (peers) signaling the importance of refraining from corruption acts as a powerful cue to increase the salience of the normative goal frame of civil servants and reduces their likelihood of engaging in corruption.

This article focuses on corruption among a particular group of Indonesian civil servants: senior civil servants. Because of their “sandwich position” as linking pins between top-level leaders and lower-level officials, this group faces major challenges with regard to the detection and prevention of corruption practices. First, more than most members of the bureaucracy, these officials may be aware of opportunities for as well as the incidence and forms of corruption at all levels of the bureaucracy. Second, their position makes them interesting targets for corruption because of their authority to make decisions on important government matters. This study investigates how and under what conditions the compliance behavior of leaders and peers affects senior civil servants’ inclination to engage in corruption.

The study contributes to corruption research in at least two ways. First, since most research on corruption focuses on appointed political leaders (see e.g., Montinola and Jackman 2002; Persson, Rothstein, and Toerell 2013), relatively little is known about unelected career officials (bureaucrats) in the executive branch, especially at the level of senior civil servants. This group is relevant to study since they have leadership responsibilities and play an active role in managing subordinates, which requires professional competence and high morals.

Second, corruption studies looking at micro-level conditions of corrupt behavior and using primary data from public officials are still limited because collecting data on corruption is extremely challenging, for several reasons. First, actors involved in corruption tend not to view themselves as corrupt (Anand, Ashforth, and Joshi 2004). Second, when respondents are asked about sensitive issues such as corruption in a survey, they may provide socially desirable answers rather than genuine opinions (Collett and Childs 2011; Desautels and Jacob 2012). This study complements previous work on corruption by focusing on the microdynamics of corruption through a vignette study.

The remainder of this article first provides a short sketch of the Indonesian civil service, its structure, and incentives. This is followed by sections on theoretical background, data and methodology, results, discussion, and conclusion.

**Organization of the Indonesian Public Service**

Indonesia has about 4.5 million civil servants. Civil service positions come with high prestige in Indonesian society and are popular jobs, as application figures demonstrate (2.6 million applicants for 100,000 jobs in 2014 alone). Each civil servant is part of one of three branches of the Indonesian public service (Law No. 5/2014 on the State Civil Apparatus): the General Administrative Service, the Special Functional Service, or the Senior Leader Service. The last-named branch is made up of senior civil servants. These middle and top executive positions can be obtained through promotion or open recruitment. Appointments are based on outstanding leadership skills, competence, and knowledge. In fact, since the restructuring of the civil service in 1999, a postgraduate education doubled a civil servant’s likelihood of promotion compared with before 1999, leading a World Bank study (2018, 19) study to conclude that “Indonesia’s civil service recognizes merit in practice, elevating highly skilled civil servants to leadership positions.”

The majority of senior civil servants have professional and strategic managerial responsibilities that relate to public decision-making processes. Their level of responsibility can vary among ministries, agencies, and local governments, depending on their role and mandate.

The compulsory retirement age for staff members of the administrative service is 58 years, while the retirement age for senior civil servants is 60 years. Civil servants are paid according to rank, seniority, and position. Salaries are based on a combination of two systems. According to the single-scale system, civil servants at the same rank receive the same salary regardless of the type of job and level of responsibility, whereas the double-scale system is based on the type of job and level of responsibility. Therefore, all senior civil servants have similar employment conditions (e.g., in terms of basic salary, family allowance, children’s allowance, and retirement conditions), but those with higher managerial responsibilities might have significantly different structural allowances compared with their colleagues at the same rank.

**Theoretical Background**

Principal-agent theory (see, e.g., Eisenhardt 1989 for an overview) is one of the cornerstones of corruption research in economics (e.g., Groenendijk 1997), and it informs much of the policy making in the field. This perspective, with its emphasis on monitoring and sanctioning, has faced much criticism, however, leading some scholars to reject this explanatory framework outright as a tool for analyzing corruption (see, e.g., Persson, Rothstein, and Toerell 2013). Our study advocates a more nuanced theoretical strategy, goal-framing theory. Rather than discard the insights generated by corruption research informed by principal-agent theory, goal-framing theory proposes a behavioral micro-foundation that allows the incorporation of some of principal-agent theory’s key assumptions and findings. Leaders and peers who have accepted or rejected bribes in the past are crucial, because their bad or good example affects the salience of an agent’s normative and gain goal frames. This section outlines the rationale behind and testable hypotheses for both approaches, as well as for their interaction.

**Principal-Agent Theory: Monitoring and Sanctioning**

According to principal-agent theory, principals face two major problems: agents’ interests may not fully overlap with their own interests, and agents usually have an information advantage when it comes
corrupt leaders from prosecution and punishment by granting their own benefit. In such settings, the legal system tends to protect government leaders who have the power to bend the laws to their suppression of systemic corruption, which usually involves high-level servants will engage in corruption:

This reasoning informs the traditional approach to fighting corruption. It suggests that corruption is hard to eradicate without an appropriate monitoring system to detect it, alongside an effective system to sanction corrupt behavior (Huisman and Walle 2010; Jain 2001; Van Rijckeghem and Weder 2001). By establishing strict and effective monitoring and sanctioning policies, the traditional approach aims to increase the risk (cost) of corruption so that its costs outweigh its benefits (Garoupa and Klerman 2004; Matsueda 2013). Financial audits are one way to monitor public officials’ behavior, to assess, for example, whether project funds in business operations are handled transparently in an accountable way. Such monitoring can detect corrupt acts and help deter public officials from engaging in corruption (Olken 2007). Legal sanctions, including financial penalties, imprisonment, and confiscation of bribes, are corrective measures that aim to punish corrupt actors when caught, but they can also deter officials from future attempts at corruption. Legal sanctions are more likely to be effective in situations in which detection is highly probable (Cole 2015).

The intensity of combining monitoring and sanctioning against corruption depends on a strong governance system, which includes compliance with a country’s legal framework and the appointment of independent government officials to implement anticorruption policies. For the operational side to be effective, government institutions need to develop anticorruption measures as well as practices and procedures that increase the likelihood of detecting and sanctioning corruption (Alt and Lassen 2014; Søreide, Gröning, and Wandall 2016). Hence, if intensive monitoring and severe sanctions are present and effective, and the risk of detection and sanctioning is thus high(er) and the consequences harsh(er), it is less likely that senior civil servants will engage in corruption:

**Hypothesis 1:** The greater the intensity of monitoring and sanctioning, the less likely it is that senior civil servants will accept bribes.

However, monitoring and sanctioning may not be effective, for several reasons. First, monitoring and sanctioning may fail to suppress systemic corruption, which usually involves high-level government leaders who have the power to bend the laws to their own benefit. In such settings, the legal system tends to protect corrupt leaders from prosecution and punishment by granting them political immunity (Persson, Rothstein, and Toerell 2013). Second, the implementation of monitoring systems and legal sanctions requires substantial financial, human, and logistic resources (Lambsdorff 2009; Mungiu-Pippidi 2006). Third, there is evidence that an individual’s willingness to comply with rules and norms tends to decay, because not all compliant acts are or can be observed by an authority and thus cannot be rewarded (Kugler, Verdier, and Zenou 2005; Schweitzer 2005; Shleifer and Vishny 1993). Hence, at some point, the perceived costs of norm compliance may outweigh the potential gains resulting from informal rewards for norm compliance.

Because of these limitations, the literature on anticorruption reform proposals that alternative or complementary anticorruption strategies are needed. We suggest that goal-framing theory provides a fruitful lead for developing such an alternative.

**Goal-Framing Theory: Leader and Peer Behavior**

According to goal-framing theory, people strive for three types of overarching goals: the hedonic goal, the gain goal, and the normative goal (Lindenberg 2008, 2011; Wittek 2003). The hedonic goal is related to achieving individuals’ immediate satisfaction, such as seeking instant gratification, excitement, or enjoyment (Lindenberg 2008). For example, public officials with a hedonic goal will be inclined to accept entertainment or a present from members of the public without considering the negative consequences of their indulgent behavior, given that this behavior results in immediate gratification.

The long-term gain goal is related to achieving individual resources (e.g., money, status). According to Lindenberg (2008, 506), “a gain goal frame makes individuals highly sensitive to opportunities for improvement of their resources and incentive instruments.” For example, if extorting money from clients in exchange for public services could bring a public official financial gain, even if he or she is aware of the rules against this behavior, then the official is likely to ignore the rules because of the opportunity to gain profit.

The normative goal corresponds to doing what is expected in a given situation and acting appropriately according to the norms. Hence, the motivation is directly tied to social norms (Lindenberg 2008). For example, public officials with a salient normative goal frame would reject “extra” payments or gifts from their clients merely because it is a good thing to behave according to the rules.

One of the three goals is dominant (in the foreground), while the other goals can become background goals. Among the three goal frames, the normative one has the lowest a priori salience (Fishbach and Dhar 2005; Lindenberg and Foss 2011). This means that it is inherently brittle and can be easily weakened, for example, by situational cues. A cue is any element in the environment or action that is permanently or occasionally present and can shape and reshape an individual’s feelings, thoughts, and behavior (Lindenberg 2011). Cues can signal that specific behavior or goals are accepted and promoted by others, which makes similar behavior more likely. For example, a series of field experiments found that observing others who litter in a public area weakens one’s normative goal frame and strengthens one’s hedonic or gain goal frame (Keizer, Lindenberg, and Steg 2008). This triggers a decay of norm compliance (the “spreading of disorder”), resulting, for example, in more littering or trespassing in the neighborhood. Conversely, a...
clean environment is a cue that littering is not common or accepted, and thus it can strengthen the normative goal frame, so that individuals use bins and do not litter. Therefore, external cues help activate and sustain the normative goal frame.

Applying these arguments to situations of corruption, we predict that the behavior of role models in organizations shapes senior civil servants’ inclination to engage in corrupt behavior. If many public officials are known to accept illicit gifts, senior civil servants are more likely to rationalize the act of accepting illicit gifts or hospitality from clients as common practice (Anand, Ashforth, and Joshi 2004). This will strengthen the gain goal frame and push the normative goal frame into the background, so that the senior civil servant is more likely to accept bribes from clients, thus causing corruption to spread.

The behavior of significant others can be an important external cue sustaining the normative goal frame. In a public bureaucracy, leaders, peers, and subordinates are significant others. Their compliance with or violation of anticorruption regulations will be perceived as a cue about which behaviors are acceptable or not (e.g., “do not engage in corruption”). This perception, in turn, can strengthen or undermine a public official’s normative goal frame (Lindenberg 2013; Lindenberg and Foss 2011) and therefore affect the incidence of corrupt behaviors. Following the lead of previous goal-framing research, this study focuses on the role of leaders and peers as role models; it does not address the potentially important role of subordinates.

Both leaders and peers are influential in the workplace (Kuipers 2009). Public officials spend much of their time at work interacting with colleagues at the same level. As a result, peers are relevant points of reference for social comparison and provide cues about appropriate behavior (Chiaburu and Harrison 2008). Leaders, being formal authority figures, play an important role in defining expectations, because it is their task to facilitate the collective effort to accomplishing shared objectives, serve as role models, and guide the behavior and decision making of other organizational members (Brown, Treviño, and Harrison 2005; Jurkiewicz and Giacalone 2016; Yukl 2010). Unethical behavior by leaders who seek personal gain rather than comply with rules may encourage subordinates to do the same (Palmer 2008; Pelletier and Bligh 2008).

Goal-framing theory suggests that the behavior of leaders and peers may strengthen or weaken the normative goal of subordinates (Lindenberg and Foss 2011). If their behavior signals that they are committed to refraining from corruption, this can strengthen the normative goals of others in the organization and encourage others to do the same (Ashforth and Anand 2003). Conversely, leaders and peers who tolerate or encourage corrupt practices—for example, by accepting gifts or money from clients—weaken the normative goal frame of those who know about it (Jávor and Jansics 2013). Hence, knowledge about norm-abiding or norm-violating leaders and peers is likely to have an effect on the ethical behavior of senior civil servants (Duggar and Duggar 2004).

Furthermore, because of the hierarchical relationship between superior and subordinates, the behavior of the leader is likely to have a stronger impact on ethical behavior than the behavior of peers (Ashforth and Anand 2003; Schminke et al. 2002). Subordinates are therefore more likely to conform to the behavior of the leader, because, compared with colleagues, leaders have more power to allocate or withhold positive and negative sanctions for their subordinates (e.g., by blocking promotion). Hence, the effect of a leader’s behavior on the decision to engage in corruption should be larger than that of peers:

**Hypothesis 2:** If (a) peers or (b) leaders refuse bribes, it is less likely that senior civil servants will accept bribes. (c) Compared with the behavior of peers, a leader’s compliant (noncompliant) behavior has a stronger effect on senior civil servants’ decision to accept a bribe.

**An Integrated Approach: The Combined Effect of Monitoring and Sanctioning and Leader and Peer Behavior**

Goal-framing theory suggests mutual reinforcement between the system of monitoring and sanctioning, on the one hand, and the behavior of role models, on the other. First, leaders’ and peers’ norm compliance not only strengthens the normative goal frame, it also reinforces the perceived legitimacy and effectiveness of monitoring and sanctioning as formal instruments to uphold organizational rules and ethical principles. Conversely, perceiving leaders and peers as violating the rules is likely to have a negative effect on perceptions of the formal punishment system.

Second, the functioning of the formal punishment system is likely to influence the normative goal frame of actors. For example, if the system is perceived as ineffective, this will result in perceptions of lower probabilities of being caught and sanctioned—corrupt actors are more likely to engage in corrupt transactions when they observe that the punishment system is not working (Goel and Nelson 2007). The awareness that the punishment is ineffective in itself constitutes a strong cue about norm violations and therefore will weaken the salience of the normative goal frame. Hence, role models’ norm compliance (i.e., not accepting gifts) strengthens the impact of monitoring and sanctioning strategies against corruption.

**Hypothesis 3:** The effect of monitoring and sanctioning on senior civil servants accepting a bribe will be stronger and positive in departments in which both the leader and peers have refused bribes compared with departments in which both the leader and peers have accepted bribes.

**Other Factors Influencing Senior Civil Servants’ Willingness to Accept Bribes**

Several other factors can affect corrupt behavior of senior civil servants. The first is the nature of relations with leaders and peers. The quality of relationships within an organization relates to employees’ willingness to follow or imitate the behavior of leaders and peers (Duggar and Duggar 2004; Jurkiewicz and Giacalone 2016; Schminke et al. 2002).

The second factor is job satisfaction. Previous studies have concluded that there is a positive relation between low job satisfaction and counterproductive behavior, such as corruption in organizations (e.g., Tang et al. 2011). Conversely, high job satisfaction is positively related to officials’ ethical behavior (Brown, Treviño, and Harrison 2005; Kim and Brymer 2011).
The third factor is trust in management and peers. Both have a positive effect on work performance and job satisfaction of employees (Chiaburu and Harrison 2008; Dirks and Ferrin 2001). Furthermore, the way in which employees interpret cues from leaders and peers depends on the degree of trust they have in those leaders and peers. If employees trust their leaders and peers, they will take their behavior more seriously than if this trust is absent. We expect that employees are more inclined to follow the behavior of trusted leaders and peers.

Fourth, we control for reward satisfaction. Some studies suggest that higher wages and benefits received by public officials reduce corruption in the public sector (Van Rijckeghem and Weder 2001). However, other studies argue that low wages do not systematically affect corruption (Barr, Lindelow, and Serneels 2009). Given these contradictory views, we include this factor in our analysis.

Finally, we control for the demographic attributes of senior civil servants, such as age, gender, level of education, level of government, work experience, number of staff supervised, knowledge of unethical behavior cases in the organization, and current position in government office. Previous studies have shown that women are more concerned with ethical issues and exhibit higher levels of ethical behavior. In addition, gender differences influence the degree of involvement in corruption practices in government (Dollar, Fisman, and Gatti 2001; Swamy et al. 2001). Previous studies have also suggested that older people are more likely to comply with the rules and perceive corruption as an unjustifiable act (Torgrler and Valev 2004). In this study, we propose that younger officials will be more tempted to break the law and engage in corruption.

Educational level may matter because undergraduates have been found to hold less ethical perceptions and to be more prone to behave unethically (Lane 1995). Years of service as senior civil servants and the number of staff supervised might also influence ethical behavior. Lastly, we expect senior civil servants in local government or those who give direct services to inhabitants to be more prone to corruption than those who work in central government or do not provide direct services to the public.

Data, Operationalization, and Methodology

Data: Target Group and Selection of Respondents

Target group. The target group of this study consists of senior civil servants from central and local government in Indonesia. Based on Indonesian Law No. 5/2014 concerning the civilian state apparatus, Indonesian senior civil servants hold high-level managerial positions in central and local government. According to data from the Indonesia State Personnel Agency, in December 2014, there were 4,406,715 civil servants in Indonesia, of which 14,612 (0.30 percent) were in senior positions. Among all senior civil servants, 12,191 (83 percent) were men and 2,421 (17 percent) were women.

Selection of respondents. We collected data from 580 senior civil servants attending a leadership training program organized by the National Institute of Public Administration (NIPA). The program is an obligatory training course for senior civil servants in central and local government in Indonesia. Government regulations prescribe that those promoted to managerial positions must enroll in this program within one year of their promotion. The course is also open to civil servants who are not yet in a managerial position but are eligible, have passed the selection tests, and are expected to be promoted to a senior civil servant position soon.

Because of the chosen data collection strategy, we might have sampled a relatively “junior” senior civil servant group. However, since the program recruits participants from all central and local governments according to a quota system arranged by NIPA, and with limited training budgets available, not all promoted senior civil servants enroll in the leadership training program during their first year of tenure. Most government agencies select and send civil servants based on seniority. Thus, among the recruits, we expect a mix of junior and senior civil servants who have held their position for longer.

Instead of sending the vignette survey by (e)mail to a particular sample of respondents, we decided to survey this group of senior civil servants in person, because we expected this method to increase the response rate, since respondents needed instruction and help with filling in the survey, given that it was an unusual format for them. The leadership training program allowed us to be present for support and to motivate the civil servants to fill in the survey. In addition, the training location was a more neutral environment for respondents, and they had more time to fill in the survey than during their normal working hours. In addition, internet connection is not optimal in all parts of Indonesia, making an online survey not always possible, and sending the survey by mail was expected to lead to a very low response rate. Conducting the survey during the leadership training program allowed us to collect information from respondents from different regions of Indonesia. This is important because Indonesia has a decentralized system, and the nature of senior civil servant work may differ by region, alongside organizational norms and practices.

The data collection process adhered to the principles of voluntary participation, anonymity, and confidentiality. The questionnaire was assessed and approved by the Ethical Committee. The questionnaire’s cover letter contained a short explanation of the study and the ethical considerations of data collection. Respondents were asked to sign the consent form to indicate their willingness to participate in the survey.

We collected data from eight training centers across provinces in Indonesia between April and June 2015, covering 10 classes in total; each class consisted of 60 participants. However, 20 participants were absent during the data collection for reasons not related to the survey. Thus, in total, we collected data from 580 training program participants.

Of the total number of respondents, 87 percent were men. Their ages ranged from 35 to 58 years (M = 50.52 years, SD = 4.33). The information on educational level indicates that a majority of respondents held master’s degrees (69 percent), some had bachelor’s degrees (26 percent), and only a few held doctoral degrees (5 percent). Most respondents worked in local government (71 percent at the district level and 9 percent at the province level), and the rest worked in central government agencies (20 percent).

In terms of current position, 65 percent were in charge in local government as regional secretary, head of department, regional
assistant, local parliament secretary, or head of municipal police, while 21 percent were managers in central government with such positions as head of bureau, director, deputy assistant, secretary of directorate general, secretary of the Indonesian Civil Service Corps, and agency expert. The remaining were head of regional office, head of university, general attorney official, diplomat, or other positions. In terms of work experience in current position, the range was 1–96 months of experience, which was dichotomized to 0 = 0–12 months experience (66 percent) and 1 = more than one year experience. As for the number of employees supervised, 46 percent of the respondents supervised 1–50 staff, 26 percent supervised 51–100 staff, and 27 percent supervised more than 100 staff.

The Vignette Study
To elicit individuals’ perceptions of corruption, we collected primary data using the vignette scenario method. The vignettes used third-person scenarios to limit socially desirable answers, meaning that respondents were asked what they thought the person in the scenario would do (not what they would do themselves). Presenting respondents with a hypothetical scenario about corruption was expected to reduce social desirability bias in comparison with responses to direct questions about their personal involvement in corruption (León, Arana, and de Leon 2013).

We constructed the vignette scenarios by selecting characteristics from the independent variables elaborated earlier. The vignette describes a fictional senior civil servant (without mentioning name, gender, etc.) who is in the strategic position to decide which company to select for a certain government project. In this situation, the senior civil servant has been offered a gift (bribe) by a company in exchange for the contract. Note that this represents a relatively simple hypothetical scenario, since it does not address the possibility that bribery offers may reach the civil servant indirectly, for instance, from his or her superiors or subordinates.

We selected a case of bribery for the scenario because under the Eradication of the Criminal Act of Corruption (Law No. 31/1999 and 20/2001), bribery is one of the criminal activities classified as corruption. Furthermore, previous work has indicated that bribery is one of the most common types of corruption in the public sector in Indonesia (Silitonga et al. 2016). Following Transparency International’s widely used definition, we conceptualize bribery as “the offering, promising, giving, accepting or soliciting of an advantage as an inducement for an action which is illegal, unethical or a breach of trust.”

To ascertain that the scenario was plausible to respondents, we adopted the plots of real corruption cases published in Indonesian newspapers and government court reports. The vignette questionnaire was translated into Indonesian and piloted with 10 civil servants who did not participate in the study. The aims of the pre-test were to assess readability, remove inconsistencies, and confirm the content of the scenario. The background of the scenarios is as follows:

X is a senior civil servant responsible for evaluating tenders by private companies for implementing a big government project. X has the authority to select which company will get the job, following a list of financial and technical qualifications. X is approached by a company that does not meet the necessary qualifications. This company offers X, as well as X’s leader and colleagues, a trip abroad if X grants the project to them anyway.

Respondents were asked what they thought this person (a senior civil servant) would do. The vignette’s variables included the nature of the monitoring and sanctioning system and who accepted or refused the bribe (the leader, colleagues, or both). We viewed monitoring and sanctioning as one policy package with two dimensions: monitoring (effectiveness of the monitoring system) and sanctioning (is the law followed in terms of severity of sanctions?). We distinguished four conditions: (1) the monitoring process is ineffective and sentencing is more lenient than the law prescribes (monitoring and sanctioning weak); (2) monitoring is effective but sentencing is more lenient than the law prescribes (monitoring strong, sanctioning weak); (3) monitoring is effective and sentencing is according to law (monitoring and sanctioning strong); and (4) no monitoring and sanctioning system is present/mentioned. The final condition was included because we considered that even though some form of monitoring and sanctioning is always present (whether it is effective or not), the respondents might not always be aware of this system. Therefore, we also examined the respondents’ perceptions when the condition was not primed by explicit information on monitoring and sanctioning.

We further included conditions relating to the presence or absence of anticorruption cues from the leader and peers that reflect whether they nurture or condone corrupt practices. These cues were operationalized as whether or not the leader and/or peers had accepted any type of gifts from external stakeholders in the past. We deliberately chose to present the same external cues for the leader and the peers, so as to ensure that the difference in the type of actor influenced the decision of the senior civil servant and not the type of signal itself. The variables in this condition were that only the leader had refused or accepted gifts, only the peers had accepted or refused these gifts, or both the leader and peers had accepted or refused these gifts.

At the end of the survey, we asked respondents about their perceptions of the scenarios. They were asked “How realistic did you find the scenarios in general?” and instructed to rate their impression on a five-point scale from 1 = very unrealistic to 5 = very realistic (M = 3.78, SD = 0.64). Of the total respondents, 74 percent agreed that the scenarios were realistic or very realistic; 20 percent, neither realistic nor unrealistic; 4 percent, unrealistic; and 2 percent did not respond to the question.

The distribution of vignettes. The population of all possible vignettes with four and two factor levels results in a vignette population of $4 \times 2 \times 2 = 16$ different vignettes. The vignette characteristics and variables are presented in table 1.

Ideally, to elicit an individual’s beliefs, perceptions, or intended behavior, one would want each respondent to receive and respond to the full set of vignettes or full factorial combinations (Atzmuller and Steiner 2010). This makes it possible to investigate the interaction effects and increases the precision of the obtained estimates (Jasso and Opp 1997). On the other hand, if the number of vignettes to
be rated is too large, respondents might feel overloaded and refuse to carry out the rating task, or stop midway. Too many vignettes might tire respondents, and the fatigue condition will influence the quality and validity of their ratings.

In this study, the total vignette population was divided into two sets with a confounded factorial design (see table 1). In this setting, the interaction effect of all characteristics is confounded equally between set one and set two. The interaction effects in the partitioned sets are identical to the interaction effect of a full factorial design (Atzmuller and Steiner 2010). By the end, each respondent had answered eight scenarios. Designs with fewer than 10 vignettes to be rated are deemed acceptable (Jasso and Opp 1997). The rating tasks are presented at the end of each vignette scenario.

We divided the 16 scenario into two sets, group A and group B (see table 1), which were randomly distributed to the 580 respondents. Of the respondents who participated, 49 percent received questionnaire group A (vignettes A1–A8), and 51 percent received questionnaire group B (vignettes B1–B8).

**Conditions and operationalization.** The dependent variable in the vignette is the inclination of the senior civil servant toward corruption. It was measured by the respondents’ perceptions of the likelihood that the senior civil servant would accept the gift (offered bribe). We asked respondents, “In your opinion, how likely is it that the senior civil servant will accept the gift?” Answers were rated on a five-point scale (1 = extremely likely, 2 = likely, 3 = don’t know, 4 = unlikely, and 5 = extremely unlikely).

The independent variables are the intensity of the monitoring and sanctioning system and the presence or absence of leader and peer normative behavior. The 16 vignettes included all combinations of these independent variables. The monitoring and sanctioning strategy was measured as follows: (1) monitoring and sanctioning weak, (2) monitoring strong, sanctioning weak, (3) monitoring and sanctioning strong, and (4) monitoring and sanctioning not mentioned. The cue in the scenarios was whether coworkers and/or the leader had received gifts in any form from external stakeholders in the past (gifts accepted coded as 0, gifts refused coded as 1). The behavior of peers was measured by the cues from coworkers.

### Control variables.
Job satisfaction was measured with five items rated on a seven-point scale using a pre-tested instrument of job satisfaction from Andrews and Withey (1976) (1 = terrible to 7 = delighted). The scale has a high reliability in the current sample ($\alpha = 0.86$). Examples of items include “How do you feel about your job?” and “How do you feel about the work you do in your job?” (M = 5.33, SD = 1.05).

Trust in management was measured with six items rated on a five-point scale (1 = strongly disagree to 5 = strongly agree) using a pre-tested standard measure (Cook and Wall 1980). The scale with moderate reliability in the current study ($\alpha = 0.62$) included the following items: “Management at my organization is sincere in its attempts to meet the employees’ point of view” and “Management can be trusted to make sensible decisions for the organization’s future” (M = 3.60, SD = 0.45). Items 2 and 12 (marked by R) were coded in the reverse direction, where high values reflect greater trust in management.

Trust in peers was measured using a pre-tested standard measure by Cook and Wall (1980). An example of the six items is “If I got into difficulties at work I know my workmates would try to help me out.” All items were rated on a five-point scale (1 = strongly disagree to 5 = strongly agree). The reliability of trust in peer scale was satisfactory with $\alpha = 0.77$ (M = 3.95, SD = 0.53).

Relationships with the leader and with peers were measured on a five-point scale (1 = very bad to 5 = very good). The questions...
included “How would you describe the work relationship with your
leader?” (M = 4.67, SD = 0.76), and “How would you describe the
work relationship with your colleagues?” (M = 4.67, SD = 0.67).

Reward satisfaction was measured on a five-point scale (1 = very
dissatisfied to 5 = very satisfied). The question was “How would
you rate your satisfaction with the salary and benefits senior civil
servants receive?” (M = 2.88, SD = 1.12).

Knowledge of unethical behavior cases in the organization was
measured on a five-point scale that was recoded into a three-point
scale (1 = yes [yes, more than 3 times, yes 2–3 times, yes, once], 2
= don’t know, and 3 = no, never). The question was “Do you know
of any real incident in your agency where the leader or senior civil
servant formal or informally pressed charges because of an unethical
behavior in the agency?” (M = 1.95, SD = 0.66).

Level of education was defined as a dichotomous variable, assigning
0 to undergraduate and 1 to graduate (master’s and doctoral) degree
holders.

Respondent’s government level (M = 0.79, SD = 0.40) was
measured as 0 = central government and 1 = local government
(province and district).

Gender (M = 0.74, SD = 0.44) was coded 0 = male and 1 = female.
Control variables were centered at their grand means, except for
gender, education, level of government.

**Method of Analysis**
Multilevel analysis was employed to investigate the factorial design
of the vignettes. The observed responses of the respondents can be
considered repeated measures. Multilevel analysis is appropriate
to analyze repeated measures by considering the vignettes as the
first level, which are nested in the respondents, the second level.
Multilevel analysis provides a flexible alternative to repeated
measures (M)ANOVA (see Snijders and Bosker 2012, chap. 15).
Although each respondent was presented with eight (out of 16)
vignettes, it is possible to estimate the full factorial design because
of the confounded factorial design (Atzmuller and Stein 2010).
To adjust for differences in respondent characteristics in groups A
and B, we included these characteristics in the analysis as control
variables.

To test the hypotheses, we estimated four models. The first
contained only main effects of the monitoring and sanctioning
system in controlling corruption. As a baseline analysis, we use
model 1 to test hypothesis 1. In the second model, we added and
estimated the effects of peers and leader behavior in strengthening
the normative goal against corruption. We refer to model 2 to test
hypothoses 2a, 2b, and 2c. The third model contained main effects,
two-way interactions, and three-way interactions of the main effects.
To measure the interaction effects, we computed the estimate means
of model 3 by summing up the means of the main effects, two-way
and three-way interactions. To test hypothesis 3, we examined the
interaction effect of formal monitoring and sanctioning with the
compliant (noncompliant) behavior of peers and the leader. We
compared the coefficients of peers and the leader refusing bribes
with those of peers and the leader accepting bribes within the
four conditions of monitoring and sanctioning. Lastly, in model
4, we added control variables to examine the effect of individual
characteristics on the likelihood of senior civil servants accepting
bribes and to study possible changes in the parameter estimates
of model 3, adjusting for possible bias due to differences between
respondent groups A and B.

**Results**
**Descriptive Statistics**
Descriptive statistics and correlations between variables can be
found in table 2. From the 580 respondents (282 in group A and
298 in group B), three (one from group A and two from group B)
are not included in the analysis because they did not respond to all
eight vignettes. In both groups, a small number of respondents did
not fill in the questionnaire completely. Five respondents (two in
group A and three in group B) had missing observations for some
of the vignette questions, and 20 (8 in group A, 12 in group B) had
one or more missing for the control variables. Table 2 reports the
number of complete observations for all control variables. Hence,
the number of participants with complete responses was 273 in
group A and 284 in group B.

Since respondents were randomly assigned to different sets of
questionnaires, table 2 describes the correlations between factors
of group A and group B separately. Overall, the correlations between
control variables were similar in size in both groups. The mean
percentage of female respondents in group A is lower than group B
(10 percent and 16 percent, respectively).

**Multilevel Analysis**
Table 3 presents the results of multilevel analysis models used to
test the hypotheses. The estimate mean of the null model with the
intercept variances is 3.43. The intraclass correlation coefficient
equals 0.36, showing that of the total variance (i.e., the sum of the
level 1 and level 2 variances reported in model 0 in table 3, 0.64 +
1.15 = 1.79), 36 percent (0.64/1.79) is between respondents (level
2) and 64 percent (1.15/1.79) between vignettes within respondents
(level 1).

In model 1, estimating the effects of monitoring and sanctioning,
the constant (β = 3.47, SE = 0.05) pertains to the reference category
formed by vignettes with scenarios that do not mention monitoring
and sanctioning (A3, A7, B2, and B5 in table 1). On average,
respondents tend to indicate that it is unlikely that the senior civil
servant will accept the gift in these scenarios. The first model shows
that willingness to engage in corruption (accepting the bribe)
is weaker when both monitoring and sanctioning mechanisms
are present and more intensive (β = 0.25, SE = 0.04) compared
with the reference category. In contrast, in scenarios in which
sanctioning is weak and monitoring is either weak (β = −0.26, SE
= 0.04) or strong (β = −0.13, SE = 0.04), the willingness to engage
in corruption is stronger (compared with the reference category),
indicating the importance of strong sanctions. These results support
the first hypothesis, which stated that the greater the intensity of
monitoring and sanctioning, the lower the inclination of senior civil
servants to accept bribes.

We tested hypotheses 2a and 2b, which predicted that cues from
peers and the leader would have a positive effect on senior civil
### Table 2: Means and Standard Deviations and Correlations per Group of Questionnaires

<table>
<thead>
<tr>
<th>Variables</th>
<th>Questionnaire A (N = 282)</th>
<th>Questionnaire B (N = 298)</th>
<th>Correlations*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>1 Trust in management</td>
<td>3.65</td>
<td>.40</td>
<td>281</td>
</tr>
<tr>
<td>2 Trust in peer</td>
<td>4.00</td>
<td>.52</td>
<td>281</td>
</tr>
<tr>
<td>3 Work relation with leader</td>
<td>4.75</td>
<td>.59</td>
<td>280</td>
</tr>
<tr>
<td>4 Work relation with peer</td>
<td>4.68</td>
<td>.66</td>
<td>279</td>
</tr>
<tr>
<td>5 Reward satisfaction</td>
<td>2.97</td>
<td>1.09</td>
<td>277</td>
</tr>
<tr>
<td>6 Job satisfaction</td>
<td>5.41</td>
<td>1.00</td>
<td>281</td>
</tr>
<tr>
<td>7 Knowledge of corruption incident</td>
<td>2.00</td>
<td>.65</td>
<td>277</td>
</tr>
<tr>
<td>8 Perception on presented scenarios</td>
<td>3.79</td>
<td>.62</td>
<td>277</td>
</tr>
<tr>
<td>9 Age (in years)</td>
<td>50.57</td>
<td>4.56</td>
<td>279</td>
</tr>
<tr>
<td>10 Gender</td>
<td>.10</td>
<td>.10</td>
<td>279</td>
</tr>
<tr>
<td>11 Educational background</td>
<td>.75</td>
<td>.75</td>
<td>279</td>
</tr>
<tr>
<td>12 Government levels</td>
<td>.77</td>
<td>.77</td>
<td>279</td>
</tr>
<tr>
<td>13 Work experience</td>
<td>.67</td>
<td>.67</td>
<td>282</td>
</tr>
<tr>
<td>14 Number of subordinates</td>
<td>.72</td>
<td>.82</td>
<td>282</td>
</tr>
<tr>
<td>15 Current position</td>
<td>1.72</td>
<td>1.20</td>
<td>281</td>
</tr>
<tr>
<td>16 Vignette responses</td>
<td>3.42</td>
<td>.89</td>
<td>281</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.01 level (two-tailed).
*Correlation is significant at the 0.05 level (two-tailed).
Below diagonal Questionnaire A, above diagonal Questionnaire B.
Table 3 Results of Multilevel Analysis of the Effect of Monitoring and Sanctioning and Compliant (Noncompliant) Behavior of Leaders and Peers on Respondents’ Willingness to Refuse Bribes

<table>
<thead>
<tr>
<th>Fixed Part</th>
<th>Null Model</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.43*** .04</td>
<td>3.47*** .05</td>
<td>3.00*** .05</td>
<td>2.99*** .07</td>
<td>2.96*** .47</td>
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</table>

**Level 1 Main design parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and sanctioning weak</td>
<td>–.26*** .04</td>
<td>–.25*** .04</td>
<td>–.31** .11</td>
<td>–.43*** .11</td>
</tr>
<tr>
<td>Monitoring strong and sanctioning weak</td>
<td>–.13** .04</td>
<td>–.13** .04</td>
<td>–.10 .08</td>
<td>–.10 .08</td>
</tr>
<tr>
<td>Monitoring and sanctioning strong</td>
<td>.25*** .04</td>
<td>.25*** .04</td>
<td>.34** .11</td>
<td>.23* .11</td>
</tr>
<tr>
<td>Peer refused gift</td>
<td>.28*** .04</td>
<td>.27* .11</td>
<td>.15 .11</td>
<td></td>
</tr>
<tr>
<td>Leader refused gift</td>
<td>.61*** .04</td>
<td>.53*** .11</td>
<td>.43** .11</td>
<td></td>
</tr>
<tr>
<td>Peer refused gift * Leader refused gift</td>
<td>.08 .06</td>
<td>.33* .18</td>
<td>.55*** .18</td>
<td></td>
</tr>
</tbody>
</table>

**Level 1 Interaction parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and sanctioning weak* Peer refused gift</td>
<td>.18 .18</td>
<td>.40* .18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring strong and sanctioning weak* Peer refused gift</td>
<td>–.12 .12</td>
<td>–.11 .12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring and sanctioning strong* Peer refused gift</td>
<td>–.03 .18</td>
<td>.17 .18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring and sanctioning weak* Leader refused gift</td>
<td>.15 .18</td>
<td>.36* .18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring strong and sanctioning weak* Leader refused gift</td>
<td>.24* .12</td>
<td>.23* .12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring and sanctioning strong* Leader refused gift</td>
<td>–.04 .18</td>
<td>.15 .18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring and sanctioning weak* Peer and leader refused gift</td>
<td>–.44 .32</td>
<td>–.85** .31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring strong and sanctioning weak* Peer and leader refused gift</td>
<td>–.37* .16</td>
<td>–.37* .17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring and sanctioning strong* Peer and leader refused gift</td>
<td>–.19 .32</td>
<td>–.58* .31</td>
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</tr>
</tbody>
</table>

**Level 2 Respondent characteristics**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in management</td>
<td>.18** .10</td>
<td>.21* .09</td>
<td>.25*** .06</td>
<td></td>
</tr>
<tr>
<td>Trust in peer</td>
<td>–.03 .07</td>
<td>.03 .03</td>
<td>.02 .04</td>
<td></td>
</tr>
<tr>
<td>Work relation with leader</td>
<td>.04 .05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work relation with peer</td>
<td>–.03 .07</td>
<td>.03 .03</td>
<td>.02 .04</td>
<td></td>
</tr>
<tr>
<td>Reward satisfaction</td>
<td>.04 .05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>.04 .05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of unethical cases in organization</td>
<td>.04 .05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception on scenarios presented</td>
<td>–.06 .06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (ref: male)</td>
<td>.23* .11</td>
<td></td>
<td></td>
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<tr>
<td>Female</td>
<td>.23* .11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (ref: undergraduate)</td>
<td>.07 .09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate degree</td>
<td>.07 .09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government level (ref: central government)</td>
<td>.03 .12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local government (province and district)</td>
<td>.03 .12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in present position (ref: 0–12 months)</td>
<td>–.14* .08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 12 months</td>
<td>–.14* .08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of staff (ref: 0–50)</td>
<td>–.03 .09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51–100</td>
<td>.16* .09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;100</td>
<td>.16* .09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position (ref: diplomat and other position)</td>
<td>–.05 .15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position at local government</td>
<td>.00 .15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position at central government</td>
<td>.00 .15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central at local government</td>
<td>–.00 .23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control function</td>
<td>–.44 .34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Random Part**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Null Model</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2: Respondent</td>
<td>1.15 .03</td>
<td>1.11 .03</td>
<td>1.03 .03</td>
<td>1.03 .03</td>
<td>1.03 .03</td>
</tr>
<tr>
<td>Level 1: Vignette</td>
<td>14,684.2</td>
<td>14,542.0</td>
<td>13,953.4</td>
<td>13,923.2</td>
<td>13,442.0</td>
</tr>
<tr>
<td>N Respondent</td>
<td>577</td>
<td>577</td>
<td>577</td>
<td>577</td>
<td>557</td>
</tr>
<tr>
<td>N Vignette</td>
<td>4,602</td>
<td>4,602</td>
<td>4,602</td>
<td>4,602</td>
<td>4,452</td>
</tr>
</tbody>
</table>

Note: * p < .10; ** p < .05; *** p < .01; **** p < .001 (two tailed).
SCS: Senior civil servant.

Servants’ decisions to refuse bribes, by adding parameters for leader and peer behavior conditions in the scenarios. The vignette with scenarios that do not mention monitoring and sanctioning, in which the leader and peers accept the gift (B2), now forms the reference category. In line with hypothesis 2a, the result for the peer effect indicates that peers’ normative behavior (not accepting the bribe) has a significant positive effect on senior civil servants’ inclination to not accept bribes ($\beta = 0.28, SE. 0.04$). The result also indicates a significant main effect for the presence of the leader’s normative behavior ($\beta = 0.61, SE. 0.04$). If the leader rejects the gift offered, respondents indicate that the senior civil servant is significantly less likely to accept the bribe, thus supporting hypothesis 2b. Comparing these two parameter estimates shows that the leader’s cue has a significantly larger effect ($p < .001$) than that of peers on the likelihood of senior civil servants accepting bribes. Thus, the results support hypothesis 2c. The small, nonsignificant interaction effect indicating scenarios in which both peers and leader accept the gift implies that leader and peer effects are summed, with an even lower likelihood of senior civil servants accepting bribes in these vignettes.
Table 4: Likelihood of Respondents Accepting Bribes (Based on Model 3 in Table 3)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Cell</th>
<th>Ref Cat-eory</th>
<th>MS</th>
<th>PR</th>
<th>LR</th>
<th>PRLR</th>
<th>MS PR</th>
<th>MS LR</th>
<th>PRLR</th>
<th>Total Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2 Monitoring and sanctioning not mentioned (No MS)</td>
<td>No MS</td>
<td>2.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.99</td>
</tr>
<tr>
<td>A6 Monitoring and sanctioning weak</td>
<td>WW</td>
<td>2.99</td>
<td>–.31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.68</td>
</tr>
<tr>
<td>B8 Monitoring strong and sanctioning weak</td>
<td>SW</td>
<td>2.99</td>
<td>–.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.89</td>
</tr>
<tr>
<td>A2 Monitoring and sanctioning strong</td>
<td>SS</td>
<td>2.99</td>
<td>.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.33</td>
</tr>
<tr>
<td>A3 Peer refused gift</td>
<td>No MS PR</td>
<td>2.99</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.26</td>
</tr>
<tr>
<td>B3 Monitoring and sanctioning weak* Peer refused gift</td>
<td>WWPR</td>
<td>2.99</td>
<td>–.31</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
<td>.18</td>
<td></td>
<td>3.13</td>
</tr>
<tr>
<td>A8 Monitoring strong and sanctioning weak* Peer refused gift</td>
<td>SWPR</td>
<td>2.99</td>
<td>–.10</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
<td>–.12</td>
<td></td>
<td>3.04</td>
</tr>
<tr>
<td>B1 Monitoring and sanctioning strong* peer refused gift</td>
<td>SSPR</td>
<td>2.99</td>
<td>.34</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
<td>–.03</td>
<td></td>
<td>3.57</td>
</tr>
<tr>
<td>A7 Leader refused gift</td>
<td>No MS LR</td>
<td>2.99</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.52</td>
</tr>
<tr>
<td>B6 Monitoring and sanctioning weak* Leader refused gift</td>
<td>WWLR</td>
<td>2.99</td>
<td>–.31</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
<td>.15</td>
<td></td>
<td>3.36</td>
</tr>
<tr>
<td>A1 Monitoring strong and sanctioning weak* Leader refused gift</td>
<td>SWLR</td>
<td>2.99</td>
<td>–.10</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
<td>.24</td>
<td></td>
<td>3.66</td>
</tr>
<tr>
<td>B7 Monitoring and sanctioning strong* Leader refused gift</td>
<td>SSLR</td>
<td>2.99</td>
<td>.34</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
<td>–.04</td>
<td></td>
<td>3.82</td>
</tr>
<tr>
<td>B5 Peer refused gift * Leader refused gift</td>
<td>No MS PRLR</td>
<td>2.99</td>
<td>.27</td>
<td>.53</td>
<td>.33</td>
<td></td>
<td></td>
<td>.18</td>
<td>.15</td>
<td>4.12</td>
</tr>
<tr>
<td>A5 Monitoring and sanctioning weak* Peer and leader refused gift</td>
<td>WW PRLR</td>
<td>2.99</td>
<td>–.31</td>
<td>.27</td>
<td>.53</td>
<td></td>
<td></td>
<td>.18</td>
<td>.15</td>
<td>3.70</td>
</tr>
<tr>
<td>A4 Monitoring and strong and sanctioning weak* Peer and leader refused gift</td>
<td>SSP PRLR</td>
<td>2.99</td>
<td>–.10</td>
<td>.27</td>
<td>.53</td>
<td>.33</td>
<td></td>
<td>–.12</td>
<td>.24</td>
<td>3.77</td>
</tr>
</tbody>
</table>

Notes: MS = monitoring and sanctioning; SW = monitoring strong, sanctioning weak; SS = monitoring and sanctioning strong; No MS = monitoring and sanctioning not mentioned; LR = leader refused gift; PR = peer refused gift. The range for the likelihood of senior civil servants accepting the bribes is as follows: 1 = extremely likely to accept bribes; 2 = likely; 3 = don’t know; 4 = unlikely; 5 = extremely unlikely to accept bribes.

In table 4, we computed the estimated responses using the full factorial design of model 3, by summing the relevant main and interaction effects (see table 3). For example, for line B1 of table 4, we computed the overall interaction effect of strong monitoring and sanctioning and peers refusing bribes (SSPR). We sum the coefficients of the constant (2.99), the main design effects of strong monitoring and sanctioning (MS = 0.34), and peer refuses bribe (PR = 0.27), and of their interaction (MSPR = –0.03). Thus, the likelihood of senior civil servants refusing bribes in the condition when monitoring and sanctioning is strong and peers refuse bribes is 3.57 on the five-point scale measuring respondents’ willingness not to accept bribes.

Table 5 presents the 16 scores based on the computation of estimated responses in column Total Mean of in table 4, representing the factorial design. This makes it easier to interpret the significant interaction effects found in model 3 that pertain to scenarios A1 and B4. The estimated likelihood indicated by respondents that the civil servant will refuse the bribe in these scenarios is rather high. But it does not increase significantly when both leader and peers refuse the bribe (3.66 and 3.77, respectively), whereas this is the case for all other monitoring and sanctioning conditions (cf. B6 and A5; A7 and B5; B7 and A4). Thus, the negative estimate of the main design effect for strong monitoring and weak sanctioning can be understood as being due to a response to the scenario in which both leader and peers refuse the bribe that is not higher than the response to the scenario if only the leader refuses the bribe.

For hypothesis 3, we compared the coefficients of vignettes in which leader and peers accept bribes (00) with those in which leader and peers refuse bribes (PRLR) within the four conditions of monitoring and sanctioning (see table 5). The results show that respondents indicate that senior civil servants are less likely to accept bribes when the leader’s and peers’ normative cues are added to the model. Overall, the perceived willingness for senior civil servants to refuse bribes is highest (4.20) in the condition where monitoring and sanctioning is strong and both leaders and peers are known to refuse (SSPRLR). The findings in this model are in line with hypothesis 3.

Hypothesis 3 predicts that the intensity of monitoring and sanctioning, together with the presence of leader and peer compliance behavior, will increase the likelihood of senior civil servants refusing bribes. Therefore, in model 3, interaction parameters are estimated between the two sets of design effects, defining the full factorial model for the 16 vignettes, where vignette B2 is again the reference scenario. In comparison with model 2, some of the main design parameters change considerably, most notably, the one for the vignette in which peers and leader refuse the gift. The estimates now refer to the vignettes in which peers and leader both accept the gift for the comparisons with monitoring and sanctioning conditions (cf. first column [A2, A6, B2, and B8] in table 5) and the vignettes that do not mention monitoring and sanctioning (cf. third row [A3, A7, B2, B5] in table 5). The significant interaction parameters pertain to the two vignettes in which monitoring is strong and sanctioning is weak, and in which the leader refused the gift (A1) and both the leader and peers refused the gift (B4).

Table 5: Likelihood of Respondents Accepting Bribes (Based on Table 4)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Peer and Leader Accepted Bribes (00)</th>
<th>Peer and Leader Refused Bribes (PR)</th>
<th>Peer and Leader Refused Bribes (LR)</th>
<th>Peer and Leader Refused Bribes (PRLR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and sanctioning weak (WW)</td>
<td>2.68</td>
<td>3.13</td>
<td>3.36</td>
<td>3.70</td>
</tr>
<tr>
<td>Monitoring and sanctioning weak (SW)</td>
<td>2.89</td>
<td>3.04</td>
<td>3.66</td>
<td>3.77</td>
</tr>
<tr>
<td>Monitoring and sanctioning not mentioned (No MS)*</td>
<td>2.99</td>
<td>3.26</td>
<td>3.52</td>
<td>4.12</td>
</tr>
<tr>
<td>Monitoring and sanctioning strong (SS)</td>
<td>3.33</td>
<td>3.57</td>
<td>3.82</td>
<td>4.20</td>
</tr>
</tbody>
</table>

Notes: The range for the likelihood of senior civil servants accepting the bribes is as follows: 1 = extremely likely to accept bribes; 2 = likely; 3 = don’t know; 4 = unlikely; 5 = extremely unlikely to accept bribes. * = reference category. A1–A8 and B1–B8 are the sequence of the scenarios in the questionnaire.
In the final model in table 3 (model 4), respondent characteristics were added as control variables. As some respondent information is missing (see table 3), the sample analyzed is slightly smaller. Although no specific hypotheses were formulated for the impact of respondent characteristics on the vignette responses, we briefly discuss the parameter estimates of the control variables. We investigated their impact on the factorial design parameter estimates to check for differences between the responses to the two sets of vignettes (A and B). Four parameter estimates of the control variables are significant and similar in size to the vignette design effect. They indicate that female respondents give higher responses to the scenarios, implying that they deem it less likely that senior civil servants engage in corruption by accepting a gift. Similarly, positive parameter estimates were obtained for respondents who have a higher level of trust in management, trust in their peers, or a good working relationship with their leader.

Some changes in the interaction parameters are observed in model 4, which pertain mostly to vignettes in which monitoring and sanctioning are weak, leading to a higher response when the leader refuses the gift, and even more so if peers also refuse the gift, which was not found in model 3. Note that because the continuous variables were centered around their means, these parameter estimates pertain to respondents belonging to the reference categories of the categorical variables and with average scores on the continuous individual characteristics. Although the parameter estimates are somewhat changed, they do not alter the results with respect to the hypotheses. Moreover, they cannot be attributed to a gender effect, which is the most remarkable difference between the two groups A and B.

**Discussion**

Focusing on Indonesian senior civil servants, this study complements traditional principal-agent theory—emphasizing the intensification of auditing, investigation, and prosecution for curbing corruption—with a goal-framing approach, stressing the importance of leaders and peers setting a good example. Hypotheses are tested with factorial survey data from 580 senior civil servants, each rating eight hypothetical corruption scenarios. Both treatment conditions (strong monitoring and sanctioning; peers and leaders rejecting gifts) and their interaction were found to significantly affect the likelihood that the hypothetical civil servant will reject or accept the gift. More specifically, this likelihood is lowest when monitoring and sanctioning are strong and when leaders and peers have rejected gifts. We also found that compared with peers, the effect of a leader’s compliant behavior was stronger when respondents considered the senior civil servant’s inclination in the vignette to refrain from corruption. This is not surprising because corrupt leadership figures contribute to the rationalization of corruption within organizations (Anand, Ashforth, and Joshi 2004), and consistent with the literature on the role of framing, according to which cues of powerful agents strengthen the normative goal frame of organization members (Lindenberg and Steg 2013).

Overall, the findings are in line with previous research on the importance of a functioning system of punishment (Becker and Stigler 1974; Tenbrunsel, Smith-Crowe, and Umphress 2003), as well as the strong influence of individuals who are seen as powerful or closely related and to whom one has a relationship (Cialdini 2007; Goel and Nelson 2007).

Two unexpected findings deserve closer scrutiny. First, we found that the effect of weak monitoring and sanctioning, or strong monitoring and weak sanctioning conditions, is lower than when monitoring and sanctioning are not added to the vignette. There are several possible explanations for this. First, these findings are in line with a study by Tenbrunsel and Messick (1999), according to which individuals may be primed by explicit signs of weak or absent punishment such that there is a low risk of sanction, which may encourage them to engage in corruption. If the nature of the monitoring and sanctioning system is not mentioned, this might not be dominant in the respondents’ considerations and other aspects might guide their thought process, such as their own perceptions about what is appropriate behavior. Alternatively, they might consider their knowledge of the current monitoring and sanctioning system in Indonesia. Second, the results might be associated with the design of the study, which may have caused an order effect. In the confounded factorial design, the order of the various combinations was random. Thus, respondents in both groups A and B were presented with scenarios, which explicitly mention monitoring and sanctioning, which might have led to priming their ideas for subsequent scenarios that did not mention monitoring and sanctioning.

Second, we found that female respondents are significantly less likely than their male counterparts to expect corrupt behavior in the vignettes. Whereas previous research showed that female officials are more hesitant to get involved in corrupt practices, that they are more likely to take stronger stances on ethical behavior, and that they are less likely to sacrifice the common good for personal benefit (Dollar, Fisman, and Gatti 2001; Swamy et al. 2001), it should be noted that our findings do not allow us to make statements about gender differences in accepting of bribes. Our findings complement this literature, showing that there seem to be also gender differences in estimating the likelihood that a gift will be accepted. Assessing the implications of this pattern might be a fruitful avenue for future research.

All in all, the applied vignette study design proved valuable in generating relevant and interesting insights into the microdynamics of corruption in Indonesia. Our effort to produce and pre-test vignettes that resemble real corruption cases by using Indonesian newspapers as information sources seems to have been successful, given the high percentage of respondents who judged the scenarios to be realistic. Compared with methods that directly inquire into people’s personal corrupt behaviors, we chose a vignette design in which respondents were asked to report on the behavior of others, to reduce social desirability in the responses to a sensitive topic. It would have added value to collect primary data from observations and interviews, but given the sensitive topic, this remains a challenge (Schwickerath, Varraich, and Smith 2017).

We acknowledge that because of its design restrictions, the vignette consisted of one type of corruption (bribery), two types formal institutions (monitoring and sanctioning), and one type of cue (accepting gifts). Hence, the study’s results cannot be directly transferred to other types of corruption, formal institutions and
Another fruitful avenue for future research consists in disentangling to what degree responses may differ across respondents coming from different sectors, and eventually cross-validate these findings with data from the Corruption Eradication Commission or Transparency International.

Conclusion
According to the estimates provided by Indonesian civil servants participating in our vignette experiment, strong monitoring and sanctioning are powerful deterrents for civil servants to engage in corruption—but the real difference is made by leaders and peers who set a good example by refusing to accept a bribe. Our results show that the estimated likelihood for a civil servant to reject a bribe is highest in those departments in which monitoring and sanctioning are strong and members are aware that their leaders and peers have previously rejected a bribe. More generally, our data show the effect of peers and leaders rejecting bribes being so powerful that it may compensate for weak monitoring and sanctioning. Overall, these findings lend support to our proposition that a goal-framing approach fruitfully complements current corruption research informed by principal-agent reasoning. It mirrors earlier conclusions stressing that effectively implementing and sustaining monitoring and sanctioning mechanisms will be difficult if corruption practices are routine and already embedded widely in organizations (Anand, Ashforth, and Joshi 2004). Our study shows that these mechanisms might be much more effective if civil servants see that corruption is condoned in their direct environment.

Given the strength of the effects we found, it is tempting to jump to potential implications for anticorruption policies and interventions—for example, for awareness campaigns. However, the effectiveness of such campaigns—which rely on anticorruption messages on posters, banners, signs, billboards, or other media—was found to be mixed at best. A recent study involving a sample of 1,000 Jakarta households even showed that they can be counterproductive, finding that exposure to anticorruption messages correlated with a decreasing willingness to report officials asking for bribes (Pfeifer 2017). We consider it a fruitful avenue for future research to assess whether anticorruption awareness campaigns relying on “good example” messages about one’s peers and leaders are more effective than traditional awareness campaigns pointing to the negative consequences of corruption for society (Pfeifer 2017).

Notes
1. Among the many terms used to describe high-level civil servants in Indonesia’s bureaucracy, such as senior executive service, high-ranked officials, senior civil service, or administrative service, this article denotes the group of high-level civil servants who are authorized to perform public functions with broad management expertise and responsibilities at ministries, state agencies, and regional government as “senior civil servants.” Based on the 2014 Law No. 5 concerning the civilian state apparatus, Indonesian senior executives (senior civil servants) are those who hold top-level positions in government organizations. Thus, the definition includes the first rank of senior executives (secretary general, deputy for national level institution, regional secretary for province) and the second rank of senior executives (director, head of bureau, head of department, and regional secretary for district). This study focuses on the second rank of senior executives.
2. It is possible and likely that several normative goals compete. For example, in the context of corruption, complying with family demands may conflict with demands for integrity and impartiality at work. We thank an anonymous reviewer for this important observation.
3. In the Indonesian language, there is only one gender-neutral pronoun, and there are no personal pronouns that refer to men or women. For instance, the same word is used for he/him and she/her (dia or di). Therefore, in the Indonesian-language version of the questionnaire, we presented senior civil servants as “X” and no specific gender was mentioned.

References


by Ronald L. Holzhacker, Rafael Wittek, and Johan Wolijer, 233–58. New York: Springer.


