

# Public attitude as a determinant of petty corruption in Egypt: a survey study

Public attitude as determinant of corruption

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481

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## Abstract

**Purpose** – The aim of the study is to examine the effect of public attitude on petty corruption.

**Design/methodology/approach** – This is a survey study on customers of a licenses providing authority ( $N = 390$ ) in Cairo, Egypt. The authors use Akers social learning theory of crime and deviance and take into consideration criticisms of it. The authors control for individual and organizational level determinants that are identified by scholars as influencing people's attitudes toward corruption and which could be known through the authority customers' experiences. Because the dependent variable is binary, whether a person paid a bribe during last transaction with this authority or not, the authors use binary logistic regression.

**Findings** – The findings indicate that people are more likely to engage in petty corruption when they see it as acceptable, have previous petty corruption experience and when they use a mediator. Also, of those who dealt with that civil service authority during and directly after the 25th of January Revolution ( $N = 161$ ) 31% reported that they did not engage in petty corruption in comparison to previous years. They referred this to a change in attitude at the time.

**Originality/value** – The policy implications of the research are important. Social science theories could generate cultural and policy relevant solutions for petty corruption; however, they have not been taken full advantage of. Also, experience-based country-specific corruption survey studies are important input for an effective anti-corruption policy.

**Keywords** Corruption, Public administration, Service delivery, Akers social learning theory

**Paper type** Research paper

## Introduction

Petty corruption is one of the types of bureaucratic corruption and a major problem in developing countries (Clarke, 2011). It is that kind of corruption which is committed at the bottom of the bureaucracy pyramid by grass root and medium level bureaucrats and involves small and medium sums of money (Riley, 1999). It affects the daily lives of poor and medium level citizens who represent most citizens in such countries aggravating their poverty or denying them vital services if they do not pay the bribe (World Bank, 1997, p. 59). At the same time, it has an indirect negative effect on a country's economy (Mauro, 1995), and stability (Reisinger *et al.*, 2016) as it leads to people's dissatisfaction with public services due to the extra burden of the illegal money they must pay, or due to the prolonged and unnecessary procedures if they do not pay. It can also lead to public catastrophes arising from illegitimate authorizations such as collapse of buildings (Escaleras *et al.*, 2007), car accidents (Wells and Beynon, 2011) and environment pollution (Biswas *et al.*, 2012).

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Definitions of petty corruption differ according to how academics approach it. Some approaches highlight the small amount of money involved, and the involvement of lower and medium level public officials. It is seen in this case as limited bribes to civil service officials who deal directly with civil service customers in the form of small amounts of money or tips (Abdel Latif *et al.*, 2009). Emphasis is put on that its pettiness refers to the size of each transaction and not to its overall impact on government income or policy (Lambert-Mogiliansky *et al.*, 2008).

Other academics identify the damage it causes to poor and middle-class citizens. Approaches based on the detection of damage to the “public interest” explain how it affects the people’s daily lives through the burden of bribes paid to civil service officials to get the service, or through non delivery of service in case of non-payment (Riley, 1999). Emphasis is put on its effect in the distortion of governmental redistribution policies, as the service goes to those who can pay the bribe and not to those who deserve the service or subsidy (Blair Commission for Africa, 2005).

Another group identifies a basic legal standard to relate to. Approaches based on a basic legal standard describe petty corruption as the kind of corruption that involves low level civil servants, including police and military personnel, performing narrowly defined roles within public organizations and which involves not observing or breaking the rules and procedures in return for rewards (Theobald, 2008, p. 160). However, in some countries public officials take the bribe to provide the deserved service in time and with no delays. Therefore, it does not always involve breaking of a rule. Nevertheless, it certainly involves violating the non-discrimination norm as it discriminates between those who pay the bribe and those who do not.

For this research petty corruption is the abuse of assigned power by lower and middle level civil service officials for private gain through extortion, soliciting or acceptance of bribes, unlawful gratuities or exchange of favors. It violates the nondiscrimination norm whether through delays and/or extra requirements from those who deserve the service but do not comply with the illegal transaction, or through giving the service to those who do not deserve it but concede to the corrupt dealings. Private gain includes not only gain for the civil servant himself/herself but also gain for a relative or an accomplice.

Petty corruption has been lingering in civil service authorities in Egypt for decades. According to *TI’s Bribe Payers Index* (2008, p. 20) the registry and licensing services are perceived to be the most corrupt institutions in Egypt, with a rank of 3.6 out of 5, where 1 not at all corrupt and 5 extremely corrupt.

One of the problems that sustain petty corruption in Egypt is people’s attitude towards it. In a survey study by Al-Ahram Center for Political and Strategic Studies and CIPE 90% of those who paid bribes perceived it as something normal that everybody does (Sullivan *et al.*, 2009, p. 18). Therefore, the change in public attitude toward corruption during and after the 25th of January revolution, when in opposition to Egyptian’s usual acquiescing attitude toward corruption they showed intolerance and acted strongly to bring numerous ministers and high-level officials to prosecution could be important evidence that changing people’s attitude can lower levels of corruption.

The aim of this study is to identify the degree to which public attitude predicts petty corruption and to depict if a change in petty corruption level occurred due to the change in attitude during and directly after the 25th of January revolution in Egypt.

An attitude is “a psychological tendency to view a particular object or behavior with a degree of favour or disfavour” (Albarracin, 2005, p. 4). Public attitude toward corruption is the degree of people’s acceptability of acts of corruption and their involvement in it (Malec, 1993). It is one of the least studied, but important determinants of petty corruption. Its importance lies in the fact that if people define a certain conduct as corrupt, then they will support the government in enforcing the principles of ethical behavior by reporting corrupt officials and/or abstaining from paying the bribe. On the other hand, if the society defines a certain conduct as not corrupt or acceptable, it may take part in it and/or abstain from reporting corrupt

officials; thus, the government will find difficulty in enforcing the legal principles of ethical behavior (Malec, 1993, p. 15). Empirical evidence shows that public attitude did facilitate the growth of corruption in law enforcement agencies in Pennsylvania because the citizens did not define gambling as a corrupt action so, they bribed officials to “look the other way” (Gardiner, 1970).

Most empirical studies on determinants of corruption use perception-based indices. There are criticisms about their effectiveness. Among the criticism directed to them is that it is not clear what exactly they are measuring because they rely on different indicators that measure different types of corruption (Rohwer, 2009, p. 49). In addition, results differ when using a structured survey than when using perception indices (Olken, 2009). Furthermore, perceptions of corruption are highly affected by both people’s general attitude toward government (Dreher and Schneider, 2010) and media reports (Ristei and Senic, 2007). Additionally, some indices use general questions without specifying which type of corruption they mean or what they mean by it. For example, Transparency International’s widely used Corruption Perception Index uses general questions about corruption, such as assessment of “level of corruption” or whether “bribing and corruption prevail or do not prevail in the economy.” These surveys do not specify what they mean by corruption if it is political, judicial, private or bureaucratic; or if they mean grand or petty corruption. Therefore, they generate culture and attitude specific responses not related to actual experiences of corruption (Kurer, 2005, p. 236; Amin and Soh, 2020). They are accused of inconsistency, unreliable foundations and cultural prejudice (Ledeneva, 2009; Zaloznaya, 2013; Zaloznaya, 2014, p. 189). On the other hand, effective reform strategies require experience based and country specific data which allow longitudinal comparison (Recanatini, 2011, p. 34). Scholars have suggested that case studies and structured surveys measuring actual cases of bribery, and which rely on responses of those involved in corruption are more accurate and robust tools (Olken, 2009). They are important for identifying the nature and causes of corrupt acts to develop suitable anticorruption policies (Spector, 2012, p. 43). However, there is a shortage in and a need of such research (De Graaf, 2007, p. 39).

Also, although social psychology theories of deviance can help policymakers find the right structural reforms at the organization level, they have not been taken full advantage of to find corruption determinants, especially in non-western settings (Zaloznaya, 2014, p. 197). Social psychologists have given corruption little importance and when talking about it they concentrate on personal traits rather than social and contextual determinants that could be an important input for policy efforts (Zaloznaya, 2014, p. 188). This could be the reason why most reform efforts fail. This research fills in both above needs. It is a survey study that extends the new interest in applying the social psychology dimension to corruption studies. Recently, some corruption studies included the effect of social dimension on petty corruption such as previous experience (Li and Meng, 2020), social norms (Nicaise, 2021; Asiedu, 2020) and norms and social pressure (Baez Camargo *et al.*, 2020).

Tavits (2010) uses surveys conducted by Estonian Ministry of Justice to examine three aspects of the social learning theory of crime and deviance that shape people’s decision to get involved in bribing public officials. These are the level of acceptability of corruption; perceived pervasiveness of corruption; and perceived bribe effect. Her dependent variable is “corruptibility,” and it refers to citizen’s previous involvement in corrupt behavior. The results show that when people do not define corruption as wrong, and when they perceive that corruption is widespread among their peers, they are more likely to engage in it.

We use Akers’ social learning theory of crime and deviance as explained in Akers and Jennings (2009) and take into consideration criticisms of it. According to this theory, people decide to involve in illegal acts due to their definition of the action as good “positive definition,” or acceptable “neutralizing definition,” perception of its widespread among peers or the society, previous rewarding experiences, perception of promised benefit, and

calculation of risks. We also take into consideration criticism of this theory that it does not consider free will in deciding to get involved in deviate actions (Bandura, 2008), and that public attitude is the tendency to react in a certain way to influences or situations (Rotter, 1972). Thus, the sub variables the researchers use for public attitude are “definition of corruption,” “acceptance of petty corruption,” “perceived pervasiveness of corruption,” “previous petty corruption experience,” “perceived bribe effect,” “perception of probability and severity of punishment,” “intent of involvement in petty corruption” (free will) and “circumstantial influences” which reflect circumstances present at the time of dealing with the civil service. We include also several individual and organizational level control variables that could be known through Authority A customers’ experiences. There is no previous research that studied the effect of all these variables together on involvement in petty corruption.

### Design and empirical analysis

This is a survey study of public service customers of one of the licenses providing/renewing authorities in Cairo  $N = 390$ . For the sake of anonymity, we call the authority “Authority A.” The size of the sample follows Krejcie and Morgan’s sample size table (1970) as they state that “there is little to be gained to warrant the expense and energy to sample beyond about 380 cases” (p. 608). The sample is chosen randomly from various districts of Cairo to be as representative as possible. It covers the age range 18–75. The respondents are asked about their experiences during last transaction with Authority A. They are asked to identify the office they dealt with; 75.1% of the sample identified 25 offices in the different districts of Cairo while 24.9% refused to identify the office they dealt with. As males are mostly the ones who interact with government offices in Egypt, 74.1% of the sample are males while 25.9% are females.

Direct self-report questions measuring corruption victimization has proved to be an efficient method of measuring corruption (Seligson, 2006, p. 387). Bias is unlikely because petty corruption can always be blamed on the official making people more willing to report their involvement (Tavits, 2010, pp. 1262–1263). Self-report measure has considerable face validity because the questions ask directly about people’s previous experiences and intentions. The questionnaire is administered and explained personally by the researchers. The respondents are asked whether they prefer to fill in the questionnaire by themselves or to be interviewed (for those who have difficulty reading). To reduce possible self-reporting bias, respondents are informed that they have the right to refuse to participate and are guaranteed anonymity and confidentiality. Also, they are informed about affiliation of the researchers. People in general are more willing to talk to academics than media reporters.

A series of questions are asked and for the sake of reliability where suitable Cronbach’s alpha test is performed, the questions are standardized, and an average of the responses is taken.

The dependent variable for this research is “paid a bribe during last transaction with Authority A.”

### *Public attitude subvariables*

The main independent variable the study is concerned with is “public attitude” as a determinant of petty corruption.

When people define a certain conduct as right (positive definitions) or acceptable (neutralizing definitions) they are more likely to involve in it (Akers and Jennings, 2009, p. 107). Tavits (2010) considers definition and acceptance as one variable (1260). For more accuracy, we use two sub variables one called “definition” and the other “acceptance.”

Defining something as wrong does not necessarily mean that one sees it unacceptable. People might define petty corruption as wrong, but they accept it because it is essential to get the service or because they see it fair as officials' salaries are inadequate. The question used for "definition" is borrowed from the EMJ Survey (2005) as quoted in Tavits (2010) with some modification. It is measured by an average of the degree of respondents' agreement to three statements on a five-point Likert scale that range from strongly disagree to strongly agree. The statements are as follows: (1) If a public official accepts a sum of money or a gift to remove a fine or to accelerate the procedures, this is corruption. (2) If a person is hired in a governmental position because of his relationship to a high-level public official, this is corruption. (3) If a public official sells classified information related to his job, this is corruption. The mean is calculated for this variable and an index called "Index define as corruption" is created.

Acceptance or refusal of a deviant conduct is based upon people's belief of the fairness of the laws regulating it and their classification of it as justified (Edwards, 2010, p. 457). For example, Chinese migrants did not see bribing Romanian police officers as morally wrong because their salaries were low and the services which they provided were essential (Hiah, 2019). A study of 6,000 interviews with the public and over 1300 interviews with street level officials also finds that although both citizens and the officials explicitly condemn bribes, they confess to giving and taking them, and would do it again if they must. Thus, pressure or temptation have more influence than internal values (Miller, 2006). So, people may pay the bribe if there is a need to pay it to get the service, or to get it with no delays, and/or if they see that officials' salaries are inadequate. To get the sub variable "acceptance of petty corruption" respondents are asked a five-point semantic differential question about if they see paying a bribe or giving a gift to get a public service acceptable or not by choosing one of the following: (a) acceptable; (b) acceptable because public officials' salaries are insufficient; (c) acceptable only if there is a real need; (d) unacceptable but I have to do it; and (e) unacceptable and should not be done in any case. For the analyses the question is transformed into a single indicator. We considered the choices from "a" to "d" as accepting petty corruption because they showed willingness to pay, and choice "e" as unaccepting petty corruption.

Social conduct is developed and continued through imitating others' behavior (Akers *et al.*, 1979). Perception that petty corruption is prevalent, essential, and acceptable by most community members presents social pressures that are hard to resist even when the person defines this practice as corrupt (Baez-Camargo *et al.*, 2020). Similarly, the higher the perceived corruption in an organization, the more probable that a person dealing with it is going to offer a bribe (Čábelková and Hanousek, 2004, p. 396). Respondents are asked three questions to depict their perceived pervasiveness of corruption. The first question is borrowed from the EMJ Survey (2005) as quoted in Tavits (2010) with some modifications. Respondents are presented with twelve corrupt behaviors and asked, "to what extent do you think this is a common behavior in the civil service in Egypt?" They answer on a five-point Likert scale where (a) "very uncommon" and (e) "quite common." The corrupt behaviors included are as follows: (1) a driver offers a traffic officer a bribe in order to avoid a speeding ticket or parking in no parking area ticket; (2) a person offers the headmaster of an elite public school a gift to admit his/her son to the school; (3) a public official uses a government provided car for private purposes; (4) a civil servant offers, for a fee, consultation in the area of his/her work related expertise; (5) an entrepreneur calls up a public official whom he/she knows from previous personal contacts, and asks to fast track the processing of his/her file; (6) an entrepreneur offers a public official personal favors in return for a public contract; (7) a public official buys goods on behalf of his/her organization from a company owned by his/her relative; (8) A patient is moved up on a waiting list for surgery because he/she knows an official or professional in the hospital; (9) an entrepreneur gifts a public official with a good or a service by his/her firm; (10) a person who wishes to renew a car license offers the inspector a bribe;

(11) a contractor offers the inspecting architect a bribe to avoid fines on construction infringements; and (12) a professional offers the tax official a bribe to avoid high taxes. Second, respondents are asked to choose the statement which they believe to be nearest to the truth from among five Likert scale choices. In the civil service authorities in Egypt: (1) no one pays a bribe to get things done, (2) a few pay bribes to get things done, (3) fifty percent of the civil service customers pay bribes to get things done, (4) the majority pay bribes to get things done, or (5) everybody pays bribes to get things done. Third, they are asked the same previous question with the same choices but instead of “in Egypt” “in Authority A”. The mean of all responses is calculated and “Index perceived prevalence” is created.

Previous experience refers to a respondent’s previous involvement in petty corruption. This variable shows the actual percentage of respondents who have previous experience of petty corruption not only in Authority A but also in other public organizations. The respondents are asked if they have ever paid a bribe or offered a gift to a public official to influence the provision of a public service. Positive responses are coded “1”, and negative responses “0” to get the variable “previous petty corruption experience.”

Tavits (2010) includes one general question if people believe that bribery influences the quality of service or not to get their perceived bribe effect. She clarifies that it was not possible to include other factors derived from the incentive theory due to lack of data (p. 1264). We include six factors that might induce a civil service customer to pay a bribe. The respondents answer “right” or “wrong” to six statements that show if they experienced previous rewards for paying a bribe to depict their “perceived bribe effect.” Those statements are: (a) paying a bribe saves time; (b) paying a bribe saves me standing in a long line; (c) paying a bribe eases procedures and decreases requirements; (d) I can avoid inspection and/or other important procedures through paying a bribe; (e) if I do not pay a bribe the public official can put hindrances so that I do not get the service; and (f) paying a bribe improves the quality of the service I get, for example the official treats me better. The answers are coded “0” for “wrong” and “1” for “right”. The mean is calculated and “index perceived bribe effect” is created.

A main determinant of whether people will commit illegal actions or not is their perception of the risk coupled with these actions, that is the probability of being detected as well as the severity of the punishment (Goel and Rich, 1989). The cost-benefit rationalization and weak or non-existent supervision are found to be the main influential factors that undermine the “zero tolerance for corruption” strategy in Rwanda (Nicaise, 2021). Tavits (2010) controls for extortion as a cost-benefit analysis. However, extortion does not guarantee that the risk of being caught is low as still there might be a snitch among the official’s colleagues or among other civil service customers. We ask two direct questions to depict the respondents’ “perception of the risk of being charged” and their “perception of severity of punishment.” First, we ask: from your previous experience what is the probability of charging a person who gives a bribe in Egypt? They answer on a five-point Likert scale ranging from 1 – never charged to 5 – certainly charged. Second, we ask a five-point semantic differential question to depict their perception of severity of punishment of briber: from your previous experience, what is the punishment given to those who bribe public officials? The answers range from 1 – no punishment to 5 – long-time jail. The mean is calculated and the index “perception of probability and severity of punishment” is created.

Criticisms to some social learning theories include that they put exclusive importance on acquisition of behavior and neglect personality or free will (Bandura, 2008). We include a question about “intent.” Intent reflects people’s free will in deciding to involve or not in corrupt dealings. Respondents are asked how they will act in the same twelve situations stated in variable three. They choose among three choices: (a) I will do the same, (b) I am not sure, (c) I will not do the same. The mean is calculated, and “index intent of corruption” is created.

Rotter (1972) highlights the importance of situational influences. Rabl (2011) studies the impact of three situational influences: the size of bribe, time pressure, and the degree of

unclearness of the procedures. His results show that the amount of the bribe acts as an incentive to commit a corrupt act, under time pressure a person is more likely to follow others' values and practices, and that clear and effective guidelines are important to lower corruption (p. 97). To depict circumstantial influences' effect on petty corruption in Authority A, the respondents are asked to answer "right," "not sure," or "wrong" to three statements: (a) the more the amount of the bribe the faster the procedures are, (b) I pay a bribe only if I am in a hurry, and (c) I pay a bribe only if the required procedures are not complete. The mean is calculated and "index circumstantial influences" is created.

#### *Other individual level determinants*

Corruption is the result of several entwined determinants that affect each other (Caiden, 2001). The researchers include other individual level determinants that are identified by scholars as influencing people's attitudes towards corruption, and which could be known through Authority A customers' experiences. For example, age, gender, education and being well informed about politics were all identified as factors that affect people's attitudes towards corruption (Smigel and Ross, 1970, p. 7; Gardiner, 1970).

Previous studies find some evidence for inverted U-shape relationship between age and participation in corrupt dealings (Hunady, 2017). The questionnaire includes a question about "Age."

There is a discrepancy in scholars' arguments and findings concerning the effect of gender on corruption levels. Some scholars find women less corrupt while others argue that there is no difference. When examining data on attitudes towards corruption, Swamy *et al.* (2001) find significant evidence that women are less tolerant to corruption than men. Conversely, an experimental study conducted in Australia, India, Indonesia and Singapore shows that women are less tolerant of corruption only in Australia but there are no significant differences in attitudes towards corruption in other countries. It is suggested that gender differences may be culture specific (Alatas *et al.*, 2009). Goetz (2007) suggests that the difference between men's and women's propensity to take bribes might be the result of a lack of opportunity for women rather than higher integrity. Respondents are asked to identify their "Gender" through choosing one of two choices: male (coded 0), and female (coded 1).

Education has been generally linked to social empowerment. The combination of a literate government and an illiterate society leads to a sense of vulnerability by illiterate individuals when dealing with public officials. So, the more illiterate they are, the more liable they will be to pay bribes whether voluntary or obligatory (McMullan, 1961, p. 188). Similarly, Apergis *et al.* (2010) find that education has significant negative impact on corruption. We ask respondents about their "education" levels from among a semantic differential four-point scale ranging from 1 – preparatory certificate or below to 4 – Master or PhD degree.

Also, those who are better informed about politics and corruption are found to be less tolerant of bureaucratic corruption (Gardiner, 1970; Arnold, 2012). To depict respondents' political and corruption awareness, we ask about reading newspapers, frequency of reading newspapers, reading politics and public opinion part of the newspaper, number of newspapers and magazines read per week, watching or hearing news, frequency of watching or hearing news per day and keenness on voting. The sub variables are standardized, and the mean is calculated to create "index political awareness."

Treisman (2000) highlights the importance of the protection the law offers to those harmed by corruption. Unenforceable laws are found to be the main cause of police corruption (Clark, 1970 cited in Carvajal, 1999, p. 341). To depict respondents' "perception of rule of law and law enforcement" we ask: if you reported a corrupt public official what do you think will happen? The respondents choose among four-point semantic differential scale ranging from 1 – I will be harmed to 4 – Official will be punished directly.

Presence of an intermediary between the public official and the client is claimed to increase the incidence of corruption because it gives the client another alternative than going through red tape. It also facilitates for those who doubt if the official will accept a bribe or not (Bayar, 2005). This is not validated empirically yet this research attempts to validate this variable. To depict “presence of intermediaries” the respondents are asked if they used an intermediary during their last transaction with Authority A and the answers are coded “0” for “no” and “1” for “yes.”

Internet awareness is found to have a negative effect on prevalence and perception of corruption (Goel *et al.*, 2012, p. 72). To get the variable “Internet illiteracy” we ask the respondents directly if they know how to use the Internet. The answers are coded “0” for “no” and “1” for “yes.”

Social empowerment of the excluded people and regions within a country provides the necessary support to institutional reform (Johnston, 1998). Strategies for engaging the poor to fight petty corruption is an effective way to curb it (Lough, 2008). Therefore, the knowledge of how and where to report a corrupt public official empowers them and helps to deter corruption (Graycar, 2014, p. 281). Respondents are asked if they are aware of the procedures to report a corrupt official. They choose between “no” and “yes.”

Thus, individual level determinants included are: “age,” “gender,” “education,” “political awareness,” “perception of rule of law and law enforcement,” “using a mediator,” “Internet illiteracy” and “social empowerment” (awareness of reporting procedures).

#### *Organizational level determinants*

Two organizational level determinants are included as they can be known through the experiences of Authority A customers and these are “Complex Rules and Red Tape” (sub variables: “number of requirements”, and “number of public officials involved”), and “competition” that is choosing among officials providing same service.

Numerous rules and regulations encourage corruption because people try to evade them through illegal transactions (Bardhan, 1997). More regulatory bottlenecks including number of procedures and the time involved are found to lead to higher corruption levels, especially in business start-up, licensing, property registration and taxation (Goel, 2012, p. 238; Amin and Soh, 2020). Also, fragmenting the procedures among multiple bureaucrats increases petty corruption incidence (Hong and Yin, 2020). To get the variable “complex business rules and red tape” the respondents are asked two questions. The first is about the number of required documents and requirements and the second is about the number of involved officials.

Presence of alternative public officials or offices to provide the same service is claimed to lower levels of corruption as it gives the civil service customer the opportunity to choose a clean official over a corrupt one (Shleifer and Vishny, 1993). Respondents are asked if there is more than one official providing the same service among which they can choose to depict “competition in public administration” in Authority A. Answers are coded “0” for “no” and “1” for “yes.”

#### *Public attitude after the 25th of January Revolution*

We also investigate if there was a change in attitudes and levels of petty corruption during and directly after the 25th of January Revolution. Mungiu-Pippidi (2006) argues that public attitudes and expectations change greatly when a traditional regime is gone, and social acceptance of corruption is no more the norm. Therefore, if the changes do not produce better governance, the society starts pushing for mechanisms to hold rulers accountable (p. 90). This variable is studied through retrospect questions to depict if respondents experienced a difference in the level of paying bribes directly after the 2011 revolution, as well as their opinion of the reason for this change to find out if this was due to a change in the attitude of



Egyptians. First, they are asked to choose between “yes” or “no” if they dealt with Authority A in the year 2011, and if they experienced a difference than before concerning public officials’ asking for bribes or customers’ offering bribes. Those who stated that they experienced a difference are then asked about the nature of the difference and their opinion on why there was a difference.

### The findings

The results show that 76.9% of the sample paid a bribe during last transaction with Authority A. Several respondents especially those with low level of education commented: “I pay a bribe because I have no connections.” In addition, 22.6% believed that if they report a corrupt official they will be harmed, and 53.8% believed that nothing will happen. Furthermore, 84.1% had no knowledge of how to report a corrupt official and 90.2% did not know where to report him. Those results go with collectivist and low-indulgence cultural values that prevail in countries like Egypt where nepotism and favoritism are common. People tend to accept corruption as an alternative to having connections, and fear questioning unethical behavior of public officials.

### Simple correlations

Some public attitude sub variables are statistically significant independently, but not significant once other covariates are added (Table 1). There is a statistically significant, positive correlation between perceived prevalence of bureaucratic corruption and paying a bribe,  $r_s(388) = 0.191, p < 0.001$ . Similarly, the higher the perceived bribe effect, the higher the probability of paying a bribe,  $r_s(388) = 0.163, p = 0.001$ . Likewise, there is a statistically significant, positive correlation between intent and involvement in petty corruption,  $r_s(388) = 0.246, p < 0.001$ . Conversely, perception of probability of punishing briber and of

	Sig. (2-tailed)	$r_s$	$\Phi$
Age	0.190	-0.066	
Education	0.037	-0.106*	
Gender	0.003	-0.149**	-0.149
Internet illiteracy	0.777	0.014	0.014
Using a mediator	0.000	0.249**	0.249
Perception of rule of law and law enforcement	0.001	-0.165	
Social empowerment	0.277	0.055	0.055
Index political awareness	0.215	0.063	
Number of official documents and requirements	0.409	0.042	
Number of officials	0.124	0.078	
Competition in public service	0.387	-0.044	-0.044
Index define as corruption	0.487	-0.035	
Acceptance of petty corruption	0.000	-0.255**	-0.255
Index perceived prevalence	0.000	0.191**	
Previous petty corruption experience	0.000	0.472**	0.472
Index perceived bribe effect	0.001	0.163**	
Index probability and severity of punishment	0.031	-0.109*	
Index intent of corruption	0.000	0.246**	
Index circumstantial influences	0.943	-0.004	

**Note(s):** Dependent Variable “Paid a bribe during last transaction with Authority A”

\*\*Correlation is significant at the 0.01 level (2-tailed)

\*Correlation is significant at the 0.05 level (2-tailed)

**Table 1.**  
Simple correlations

severity of punishment is negatively associated with involvement in petty corruption,  $r_s(388) = -0.109, p < 0.05$ .

Some individual level determinants are also statistically significant independently, but not significant when other covariates are added. A Spearman's rank-order correlation shows a statistically significant negative correlation between education and involvement in petty corruption,  $r_s(388) = -0.106, p < 0.05$ . Similarly, the higher the perception of rule of Law and Law enforcement the lower the probability of paying a bribe,  $r_s(388) = -0.165, p = 0.001$ . Both Phi and Cramer's V coefficient, and Spearman show that males are more likely to pay bribes than females,  $\Phi$  and  $r_s = -0.149, p < 0.01$ .

#### *Inside the model*

A binary logistic regression is performed to ascertain the effects of public attitude (sub variables: define as corruption, acceptance of petty corruption, perception of prevalence of bureaucratic corruption, previous petty corruption experience, perceived bribe effect, probability and severity of punishment, intent of corruption, and circumstantial influences) on the likelihood that participants involve in petty corruption. We control for age, gender, education, political awareness, perception of rule of law, social empowerment, competition in public administration, and complex business rules and red tape (number of requirements and number of officials involved).

To test for multicollinearity a Variance of Inflation Factor (VIF) is calculated for all the independent variables. The VIF values are all less than 2. The logistic regression model is statistically significant,  $p < 0.001$ , which means a 99.9% confidence. Hosmer and Lemeshow goodness of fit test shows  $p = 0.826$  and the test's contingency table shows expected cases equal to the observed ones. The classification table demonstrates that the model's prediction accuracy of those who paid a bribe during their last transaction with Authority A is 96.6% and it correctly classifies 87.3% of cases.

Acceptance of petty corruption, previous petty corruption experience, and using a mediator are found to be significant predictors (Table 2). Those who accept petty corruption has 2.8 times higher odds to involve in petty corruption than those who see it unacceptable,  $p < 0.01$ . Similarly, those who have previous petty corruption experience have 9.2 times higher odds to pay a bribe than those who do not have previous experience,  $p < 0.001$ . Those who use a mediator have 4.6 times higher odds to pay a bribe,  $p < 0.001$ .

Public attitude sub variables that proved to be significantly associated inside as well as outside the equation are "acceptance of petty corruption"  $p < 0.001$  outside the equation and  $p < 0.01$  inside the equation, and "previous petty corruption experience,"  $p < 0.001$  in both cases. On the other hand, "definition of corruption" and "circumstantial influences" proved to be insignificant inside as well as outside the model.

The individual level determinant that has significant positive association both independently and inside the model is presence of intermediaries,  $p < 0.001$  in both cases. Intermediaries according to the respondents are usually well known to the officials. They take a sum of money that includes a fee in addition to the bribe amount and carry out all corrupt dealings on behalf of Authority A customers.

Individual level determinants which proved to be insignificant whether independently or inside the model are: "age," "index political awareness," "Internet illiteracy" and "social empowerment" ("knowledge of procedure to report a corrupt official").

The organizational level determinants "competition in public administration," "number of officials" and "number of documents and requirements" are found to be insignificant predictors of paying a bribe whether inside or outside the model. Also, a Spearman's rank-order correlation test shows no association between having the opportunity to choose from among officials providing same service and number of bribed officials.

	<i>B</i>	Wald	df	Sig	Exp( <i>B</i> )	Public attitude as determinant of corruption
Age*		6.621	4	0.157		
26–35	0.840	0.871	1	0.351	2.316	
36–45	–0.195	0.048	1	0.827	0.822	
46–55	0.199	0.047	1	0.829	1.220	
56 or above	–0.448	0.214	1	0.644	0.639	
Gender (0 = males, 1 = females)	–0.748	3.654	1	0.056	0.473	
Education**		4.765	3	0.190		
Secondary or 2 years above secondary	–0.994	0.976	1	0.323	0.370	
Bachelor’s degree	–1.254	1.611	1	0.204	0.285	
Master’s or PhD	–1.936	3.410	1	0.065	0.144	
Internet illiteracy	–0.555	1.214	1	0.271	0.574	
Index political awareness	0.349	1.657	1	0.198	1.418	
Social empowerment	0.532	0.958	1	0.328	1.703	
Perception of rule of law and law enforcement*** (what happens in case of reporting a corrupt official)		1.634	3	0.652		
Nothing	–0.231	0.265	1	0.606	0.794	
Official will be punished after long time litigation	–0.474	0.793	1	0.373	0.622	
Official will be punished directly	–0.859	1.293	1	0.255	0.424	
Using a mediator	1.523	13.208	1	0.000	4.584	
Number of officials	0.015	0.021	1	0.884	1.015	
Competition in public service	–0.217	0.420	1	0.517	0.805	
Number of official documents and requirements	0.061	0.554	1	0.457	1.063	
Index define as corruption	–0.167	1.021	1	0.312	0.846	
Acceptance of petty corruption	1.036	9.302	1	0.002	2.819	
Index perceived prevalence	0.466	3.024	1	0.082	1.594	
Index perceived bribe effect	0.275	0.590	1	0.442	1.316	
Previous petty corruption experience	2.210	25.716	1	0.000	9.119	
Index probability and severity of punishment	–0.197	1.090	1	0.296	0.821	
Index intent of corruption	0.610	2.713	1	0.100	1.840	
Index circumstantial influences	–0.325	0.908	1	0.341	0.722	

**Note(s):** Dependent variable “paid a bribe during last transaction with Authority A”  
\*Reference category first “18–25”  
\*\*Reference category first “preparatory education or below”  
\*\*\*Reference category first “reporter will be harmed”

**Table 2.**  
Inside the model

However, there is a statistically significant, positive correlation between number of officials the respondent had to deal with and number of bribed officials,  $r_s(388) = 0.246, p < 0.001$ . Thus, the one stop outlet can help decrease petty corruption.

*Public attitude change in 2011*

Of those who dealt with Authority A during and directly after the 25th of January Revolution ( $N = 161$ ), 31% reported that they experienced a positive change i.e., no petty corruption and better treatment by public officials. They attributed this to a change in public attitude.

**Conclusion and policy implications**

The results have important policy implications. They give us an insight into what perpetuates petty corruption in Egypt. The one size fits all previous policies to eradicate petty corruption had modest or no success because they are not based on country-specific and evidence-based results. Furthermore, they disregard the human dimension. An effective public policy to eradicate petty corruption should be tailored to the circumstances of each

country and based upon a study of the determinants that perpetuate petty corruption in this country. A social psychology dimension is indispensable in such study.

The results indicate that people are more likely to engage in petty corruption when they see it as acceptable, they have previous petty corruption experience, and when they use a mediator. These variables have significant effect whether independently or with other covariates.

The social learning theory of crime and deviance variables that proved to be significant predictors of petty corruption are acceptance and previous rewarding experience. This supports Malec's (1993) argument that public attitude towards corruption is the degree of people's acceptability of acts of corruption and their degree of involvement in it. It also supports her argument and Miller's (2006) findings that citizens get involved in corruption because it is crucial for fulfilling their needs despite their definition of it.

Likewise, the study supports Bayar (2005) concerning the presence of intermediaries as a determinant of petty corruption. Since the most reported reason for using a mediator is to save time therefore offering officials a performance-based bonus related to the number of issued licenses per day can increase their salaries and discourage delaying customers. The new incentive system and officials' salaries should be announced publicly so that people stop finding excuses to give officials a bribe. We also suggest that the reform should include one stop outlet for clients, and clearer officially known user charge.

There is evidence that public attitude did change levels of petty corruption in 2011. Thus, a national campaign that promotes people's morals and mobilizes them for a nationwide fight against petty corruption can help fight petty corruption. However, this cannot be successful without addressing some organizational determinants like better monitoring of public officials through engaging the citizens as well as other outside authority/authorities in monitoring them.

Furthermore, 44.4% of the respondents stated that they have previous experience in decreasing procedures and requirements through a bribe. This means that officials have the discretion to increase or decrease procedures and requirements. Therefore, there is a need for written well defined procedures, rules, and a code of ethics for officials. This can limit their discretion, increase their accountability, and guarantee non-discrimination in procedures and requirements.

As respondents showed ignorance of where and to whom they should report a corrupt official, the civil service customer should first be met with an official who explains the procedures and requirements in addition to what to do if an official try to extort him/her in any way. This is going to help in eliminating the use of intermediaries as some respondents reported using them because they know the procedures better.

Since 76.4% believed that in case of reporting a corrupt official either the reporter will be harmed or nothing will happen therefore appointing an Ombudsman who has deputies in each outlet of the Authority, and who is given the authority to punish the corrupt official on the spot is essential for fighting petty corruption. Worldwide there are several successful stories where using an Ombudsman helped in fighting corruption and promoting effective service delivery such as in Philippines, India, Indonesia and South Korea. In addition, suggestion/complaint boxes should be hanged in all outlets to give people a voice and to provide the needed communication between the Ombudsman and the civil service customers. This can help to improve the service and decrease petty corruption. The Ombudsman's assistants should prevent presence of intermediaries.

As 48.2% of the sample believed that a briber is never charged and 80.7% believed there is no punishment, increasing the risk of detection through enforcing rules that hold officials as well as customers liable and if needed issuing new rules is a must.

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