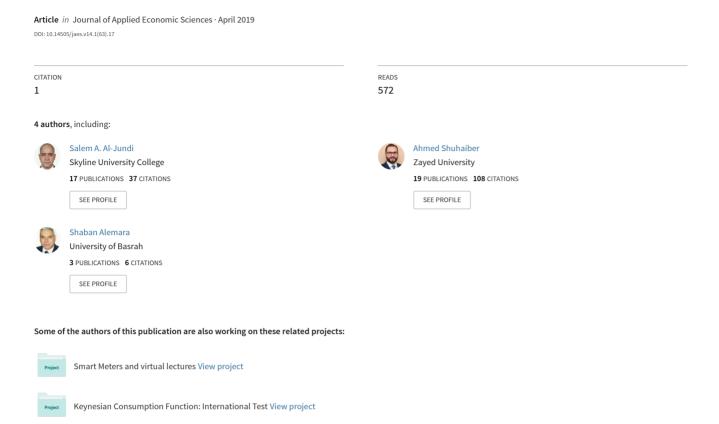
# Why is administrative corruption pervasive? A mediation approach



# Why is Administrative Corruption Pervasive? A Mediation Approach

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#### **Abstract:**

Despite the existence of valuable literature on political and corporate corruption, there have been only a limited number of papers examining the determinants of administrative corruption. A thorough search of the relevant literature shows there has been no examination of the multivariate impact of corrupt culture, the weakness of organizational culture, the political instability, and the institutional weakness on administrative corruption and the interplay among these constructs has yet to be studied. By testing a sample of 677 responses that reflect the perspective of the general public in Basra, Iraq, this current study attempts to fill these gaps by proposing and testing a model using the partial least squares structural equation modeling method. Overall, weak organizational culture mediates the effect of corrupt culture on corruption; institutional weakness mediates the effect of political instability on corruption; and institutional weakness mediates the effect of weak organizational culture on corruption. Finally, through theoretical contributions, managerial implications, limitations, and recommendations for further research, this study brings presents insights on how weak organizational culture and institutional weakness mediate the effect of corrupt culture on corruption.

**Keywords:** administrative corruption; culture; organizational culture; political instability; institutional weakness; mediation; PLS-SEM

JEL classification: C300; H110; O170

#### 1. Introduction

Corruption has become a global phenomenon. A report published by Transparency International (2018) indicated that more than two-thirds of all countries experience high corruption. Corruption Perceptions Index ranks public sector corruption, using a scale from 0 (highly corrupt) to 100 (very clean); according to their measure for 2017, New Zealand scored 89 and ranked first in the world, whereas Iraq scored only 18 and ranked 169th out of 180 countries. Iraq scored slightly better than North Korea and Libya, but worse than Angola and Chad. A notable

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finding is that many countries were rated as more corrupt in 2017 than previously (Transparency International, 2018). Therefore, the problem should be investigated using a new approach.

This paper will provide insights into administrative corruption, which has prominently taken the form of petty corruption. This corruption primarily stems from personal benefits becoming the main motivation of low- and midlevel public employees. They tend to misuse their power in public organizations through various interactions with people who attempt to access basic public goods or services (Darsareh and Bastanipour 2016, Hacek *et al.* 2013, Transparency International 2018, Treisman 2000). If business managers have social ties with public officials, their firms will mostly engage in corruption (Collins, Uhlenbruck, and Rodriguez 2009). Administrative corruption potentially undermines the effectiveness of any organization. This is evident through several corrupt activities, such as bribery, embezzlement, collusion with the private sector, and nepotism, whereby corrupt public employees breach governmental rules and laws (Arshad *et al.* 2015, Chan and Owusu 2017, Yahya and Gomaa 2016, Zhang 2015).

Administrative corruption has destructive effects in less developed and developing countries, particularly when it is accompanied by political instability. Corruption affects military expenditure and government financial investment. The interaction between corruption and both military and government investment expenditure has strong effects on economic growth (D'Agostino *et al.* 2016). It weakens economic development and increases inflation and public expenditure (Haider *et al.* 2011, Sironi and Tornari 2013). Deteriorating popular trust in public organizations encourages citizens to disobey the rules and laws (Villoria *et al.* 2013). Corruption is a by-product of war, terrorism and internal conflicts (Transparency International 2018). It is a major factor in increasing the cost of new projects in both public and private sectors. This leads to market inefficiencies, poor infrastructure, and increases in poverty and income disparity (Agbiboa 2012, Tebaldi and Mohan 2010). Corruption, together with bureaucracy, makes business endeavors more expensive and depresses the entrepreneurial enthusiasm (Nan 2009). Factors such as inflation and weak or deficient legal codes lead to inefficient businesses; however, corruption has been shown to play a separate and stronger role (Bo' and Rossi 2007). Corruption painfully reduces the truthfulness of financial institutions and markets (Venard and Hanafi 2008).

Previous research has made important contributions to reviewing the corruption index and its indicators, such as the extent of press freedom, access to information about public expenditure, autonomous judicial systems, and the effectiveness of the government (Mousakhani *et al.* 2013, Transparency International 2018, Treisman 2000, Wilhelm 2002, Yun 2004). Moreover, some research papers have evaluated efforts to combat corruption in the public sector (Cleveland, Favo, Frecka, and Owens 2009). Electronic government (e-government) has been considered one of the vital techniques for fighting corruption (Marquez 2015, Mohammed *et al.* 2015). Furthermore, as information technology progresses, so too does the accountability of government and the participation of citizens. Information and communication technology can enhance transparency and assist anti-corruption efforts (Koekpoe 2011, Sharifi-Renani *et al.* 2013). In addition, other research has addressed the factors affecting administrative corruption, which is the main concern of the current paper. Although covering various factors, their contributions have tended to be disconnected and incoherent; the deficiencies in existing research have prompted us to write this paper.

Administrative corruption is influenced by four main constructs: culture, organizational culture, political instability, and institutional weakness. Corrupt culture is the firmest and deepest determination of administrative corruption (Dincer and Johnstony 2017, Rajaei and Arghavani 2016). Public tolerance and a lack of concern about corruption boost administrative corruption (Ambali 2008). Organizational culture is the overall sum of the shared values, beliefs and norms of an organization's employees (Darsareh and Bastanipour 2016, Liu 2016). The absence of clarity, transparency and accountability contributes to weak organizational culture. In addition, the lack of a code of conduct in an organization leads to corruption (Ambali 2008, Voliotis 2017). Political instability erodes the ability of government and public organizations to combat corruption (Bohn 2006). Conflict between parties and sects weakens the policies designed to lessen administrative corruption (Yahya and Gomaa 2016). A deficiency of technological applications in administrative work can lead to a low satisfaction rate among public employees, and the bureaucratic systems may cause institutional weakness that can trigger corruption (Bin-Ismail and Abbas 2015, Darsareh and Bastanipour 2016, Yahya and Gomaa 2016).

There is extensive literature on corruption related to political and corporate aspects (Aguilera and Vadera 2008, Shakantu 2006, Sharifi-Renani *et al.* 2013), whereas only a few studies have examined factors influencing administrative corruption. However, after reviewing various scholarly studies on corruption studies, it is evident that the multivariate influences of culture, organizational culture, political instability, and institutional weakness on administrative corruption have not yet been tested using the partial least squares structural equation modeling (PLS-SEM) method. This method allows for testing the interplay between stated constructs. Previous research has

explored the perceptions of public employees (Darsareh and Bastanipour 2016, Rajaei and Arghavani 2016). However, an analysis of the general public's perspective is yet to be produced. Furthermore, some studies have used international data (Abu and Karim 2015, Koekpoe 2011, Treisman 2000), although we suggest there is a significant need to collect data directly from participants. Some research has examined corruption in a narrow context, such as in a taxation office or firm tax compliance (Ahmadi *et al.* 2010, Alon and Hageman 2013, Darvish and Pakdel 2016, Hindriks *et al.* 1999, Kumar and Bhasker 2015); however, there is a pressing need to understand corruption on a national scale.

The aim of this paper is to fill these gaps by building and testing a comprehensive model to explain administrative corruption (see Figure 1. The paper proposes a model that is intended to make a significant impact on research into administrative corruption due to its key focus on two key areas: first, the direct effects of culture, organizational culture, political instability, and institutional weakness on administrative corruption; and second, the mediating role of organizational culture and institutional weakness on the relationship between culture and corruption and on the relationship between political instability and corruption.

Corrupt Culture

Weak
Organizational
Culture

Political
Instability

Institutional
Weakness

Figure 1. Proposed model

The next section builds the conceptual framework and hypotheses based on previous literature. Section 3 demonstrates that measured items are derived from each construct. Then data is collected and presented to show public attitudes in Iraq, a country that experiences a high degree of corruption. Section 4 examines the measurement model, structural model and hypotheses testing using PLS-SEM. Section 5 discusses the theoretical contributions, managerial implications, limitations, and future research directions.

## 2. Conceptual framework and hypotheses development

#### 2.1. Administrative corruption, culture, and political instability

Culture is defined as the shared values, beliefs, attitudes, norms, and practices among the general public within a society (Hira 2016). Corruption may be, in part, a cultural phenomenon (Barr and Serra 2010, Lee and Guven 2013). For an experiment on corruption, Berninghaus *et al.* (2013) find that beliefs consider as a good predictor for corruption. Research has shown that when corruption is universal, people tend to learn negative values and accept corrupt practices, and that administrative corruption will have no strong religious or national restrictions among people (Darsareh and Bastanipour 2016). Studies have shown that people justify breaking some rules, such as pretending to be sick at work when they are healthy or using another sick person's prescriptions to get free medicine (Villoria *et al.* 2013). In addition, international aid programs may create corruption because the administrators focus more on formal issues rather than on the culture of the local society that the program intends to assist (Hira 2016). The cultural norm of particularism has a positive effect of demanding a bribe, even asking for a bribe violates the commonly social norm (Rotondi Stanca 2015). Therefore, the following hypothesis is proposed:

## • H1: Corrupt culture positively impacts administrative corruption

Over time, a positive unidirectional causality runs from political instability to corruption (Abu and Karim 2015). Political instability leads to governments becoming shortsighted, and hence foregoing a long-term view. This, in turn, leads to the undervaluing of infrastructure development and anti-corruption programs (Bohn 2006). Corruption adversely affects the foreign direct investment in countries with a high level of political uncertainty (Touny 2016). Political instability is associated with the inadequacy of legislative bodies in inspecting administrative corruption, as well as with the immobilization of political determination to fight corruption. Disputes between parties and groups

constantly weaken policies against corruption (Yahya and Gomaa 2016). Political instability has an association with corruption as a result of judicial inefficiency (Ismail and Rashid 2014). Hence, the following hypothesis is proposed:

H2: Political instability positively impacts administrative corruption

## 2.2. Administrative corruption, organizational culture, and institutional weakness

Organizational culture can be defined as the shared values and beliefs of an organization's employees. The leaders and key decision-makers are responsible for framing the culture, and they recruit or attract employees with similar values. Consequently, the key people are accountable for the bad conduct of lower-level management employees (Liu 2016, Pelletier and Bligh 2008). Corruption is the deficiency of shared standards among public employees, regarding to the anti-corruption practices (Darsareh and Bastanipour 2016, Voliotis 2017). If the leaders do not set recognized customs and norms against corruption, these misdemeanors could be prevalent among all departments. Research has shown that taxation departments experience comparatively higher corruption than do educational entities because of the differences in the moral costs of corruption (Ahmadi *et al.* 2010, Schneider and Bose 2017, Soehari and Budiningsih 2017). Firms with a significantly corrupt culture are more likely to engage in accounting fraud and option backdating (Liu 2016). The connection between government and business contributes to corruption, particularly when there is minimal e-government and citizen participation (Choi 2007). The weak business culture and collusion between politics and business lead to unethical decisions (Vaiman, Sigurjonsson, and Davídsson 2011). When an employee has the experience in corruption, he/she will justify bribery and ask for a bribe (Lee and Guven 2013). Hence, the following hypothesis is proposed:

H3. Weak organizational culture positively impacts administrative corruption

In developing countries, the weaknesses of bureaucratic administrative systems are an important cause of corruption (Darsareh and Bastanipour 2016). Lack of accountability is the main reason for misusing public funds for personal benefit (Kpundeh 1994). Poor salaries and lack of job satisfaction among public employees increase the chances of corruption (Bin-Ismail and Abbas 2015). High-ranking criminals react by bribing officials in public organizations, so as to avoid being sanctioned, especially when the cost of bribery is low (Gamba *et al.* 2018, Kugler *et al.* 2005). Public sector hiring depends mainly on relations, nepotism and bribery rather than on qualifications and fair process (Kpundeh 1994). Law enforcement agencies exhibit tenacious misbehavior because of lack of control mechanisms, including judicial oversight, codes of conduct, and the absence of proper strategies (Aguilera and Vadera 2008, Costa 2011, Lee *et al.* 2013). The willingness to engage in corrupt practices is affected by the perceived practices of peer in the same organization (Dong, Dulleck, and Torgler 2012). Therefore, we hypothesize:

• H4. Institutional weakness positively impacts administrative corruption

#### 2.3. Culture and organizational culture

Jamil *et al.* (2015) have shown that organizational culture echoes the broader societal culture. Zhang (2015) has argued that people become more honest and less corrupt when they trust that others, such as public employees, have similar values. Other research has explored how educational institutions, including both schools and universities, that do not include anti-corruption practices in their teaching leave students unprepared about suitable codes of conduct in their future workplaces (Dorozhkin *et al.* 2016). Society is the main source of greed among its population, and people probably become corrupt when they obtain power in public organizations (Ambali 2008). Clients and administrators share some common values when the client sometimes pays bribes and the administrator occasionally receives commissions on providing access to public services (Fazekas 2017). Thus, we hypothesize:

H5. Corrupt culture positively impacts weak organizational culture

## 2.4. Political instability and institutional weakness

Political uncertainty adversely affects the public sector because job appointments depend on nepotism and political and ethnic bonds (Bin-Ismail and Abbas 2015, Kpundeh 1994). Lack of political stability degrades economic development, depreciates currency value, and reduces opportunities for foreign investment and tourism inflows (Bouraoui and Hammami 2017, Okafor 2017, Touny 2016). Governments are unable to spend sufficient money to develop public organizations and services. At the same time, institutional leaders are more concerned with expanding their political power and capitalizing on their personal advantages than with building suitable organizational structures and enhancing satisfaction levels among their subordinates and clients (Ambali 2008).

The transition period from an autocratic regime to democratic government is related to feeble governance and an increase in profiteering from public funds (Haider *et al.* 2011). Hence, the following hypothesis is proposed:

• H6. Political instability positively impacts institutional weakness

## 2.5. Organizational culture and institutional weakness

Lack of satisfaction among public employees pushes them to become corrupt (Bin-Ismail and Abbas 2015). An increase in public dissatisfaction is an indicator of an increase in the degree of corruption (Villoria *et al.* 2013). Flatters and Macleod (1995) stated that acceptance of corruption to some extent could be part of an efficient tax collection system if wages are low and individual tax payers' liabilities cannot easily be established. Inspectors may be paid commission on high income reports (Hindriks *et al.* 1999). Corruption is caused by greediness of public employees and their hunger for wealth, in addition to societal tolerance and institutional weakness (Ambali 2008). Thus, we hypothesize:

H7. Weak organizational culture positively impacts institutional weakness

#### 2.6. The mediating role of organizational culture and institutional weakness

Darsareh and Bastanipour (2016) stated that the expansion of administrative corruption is caused by weak organizational culture and the undermining of national identity among public employees. The negative values are often brought by people when they join public organizations. This will intensify when a job appointment in the public sector is based on nepotism or the membership of a social group or association rather than on competence (Kpundeh 1994). Lack of concern and ignorance about corruption can encourage public employees to exploit public resources for their personal gain. The wider culture of society shapes the culture of administrators; subsequently, weak organizational culture impacts corruption (Ambali 2008). Hence, the following hypothesis is proposed:

• H8. Weak organizational culture mediates the effect of corrupt culture on administrative corruption

Researchers have noticed that administrative corruption in autocratic regimes is much lower because of stronger governance. The government becomes weaker during the transition period from an autocratic regime to democratic rule. Public organizations lose their control, which results in the profiteering of public funds (Haider *et al.* 2011). Moreover, key public officials enter into secret agreements with the private sector to exploit public funds (Chan and Owusu 2017). Corruption has had a severe impact on all public institutions due to the defects of local and federal governments; the absence of political stability and security experienced by countries with high level of corruption contributes to this corruption (Mohammed *et al.* 2015). Hence, the following hypothesis is proposed:

• H9. Institutional weakness mediates the effect of political instability on administrative corruption

Weak organizational culture helps public employees achieve economic power. The bureaucratic structure is transformed into a device for personal gain which gives unnecessary power to key public employees (Kpundeh 1994). When leaders disregard establishing an anti-corruption culture in their organizations, the ravenous low-level managers enjoy utilizing their positions and power for personal advantage. Institutional weakness can be considered as lack of transparency and accountability, in addition to the absence of civil service work ethics (Ambali 2008). In developing countries, policy-makers spend a significant amount of time on planning rather than implementation. Unsuccessful attempts to improve public management are caused by the ignorance of organizational culture (Rahman et al. 2013). Therefore, it can be hypothesized that:

- H10. Institutional weakness mediates the effect of weak organizational culture on administrative corruption
- H11. Weak organizational culture and institutional weakness mediate the effect of corrupt culture on administrative corruption.

## 3. Methodology

#### 3.1. Measurement variables

To test the proposed model (Figure 1) using the PLS-SEM approach, we established measurable indicator variables for all constructs that are based on previous research. All observed items were considered as reflective indicators. Each construct had four variables. All items were measured using a seven-point Likert scale and semantic differential scale types, as shown in Table 1.

Table 1. Measurement properties of constructs

Codes	Items	Scale					
Corrupt culture (Ambali 2008, Darsareh and Bastanipour 2016, Dincer and Johnstony 2017, Villoria et al. 2013)							
C1	People's reactions to corruption are weak.	from 1: strongly disagree to 7: strongly agree					
C2	Many people break laws; for instance, traffic and municipal laws.	from 1: strongly disagree to 7: strongly agree					
C3	Religious deterrence is no longer an effective factor in preventing state officials from practicing administrative corruption.	from 1: strongly disagree to 7: strongly agree					
C4	Corrupt people are characterized by greed.	from 1: strongly disagree to 7: strongly agree					
	anizational culture (Ahmadi et al. 2010, Darsareh and Bastanipond Budiningsih 2017)	our 2016, Liu 2016, Schneider and Bose 2017,					
A1	The culture of public organizations has become corrupt.	from 1: very clean to 7: very corrupt					
A2	The failure of public employees to comply with a code of conduct is a cause of administrative corruption.	from 1: strongly disagree to 7: strongly agree					
А3	The feeling of dissatisfaction among public employees makes them accept administrative corruption.	from 1: strongly disagree to 7: strongly agree					
A4	How satisfied are you with the services of public organizations?	from 1: very satisfied to 7: not at all satisfied					
Political in 2016)	stability (Bin-Ismail and Abbas 2015, Bohn 2006, Haider et al. 201	11, Tebaldi and Mohan 2010, Yahya and Gomaa					
P1	Parliament is weak at investigating the problems of administrative corruption.	from 1: very strong to 7: very weak					
P2	There is no real political will to fight administrative corruption.	from 1: strongly disagree to 7: strongly agree					
P3	Conflict between parties and sectarian groups has weakened the campaign against administrative corruption.	from 1: strongly disagree to 7: strongly agree					
P4	The performance of the local and federal governments is acceptable.	from 1: very acceptable to 7: not at all acceptable					
Institutiona al. 2013)	al weakness (Bin-Ismail and Abbas 2015, Costa 2011, Darsareh	and Bastanipour 2016, Kpundeh 1994, Lee et					
W1	The administrative work of public organizations is characterized by bureaucracy and complexity of procedures.	from 1: very flexible to 7: very bureaucratic					
W2	Appointments in public organizations depend more on nepotism than on qualifications.	from 1: strongly disagree to 7: strongly agree					
W3	There is no accountability of employees for misuse of state funds.	from 1: strongly disagree to 7: strongly agree					
W4	The use of computers and the Internet in the administrative work of state departments reduces administrative corruption.	from 1: strongly disagree to 7: strongly agree					
Administrative corruption (Chan and Owusu 2017, Choi 2007, Hindriks et al. 1999, Tebaldi and Mohan 2010, Vaiman et al. 2011, Yahya and Gomaa 2016, Zhang 2015)							
CO1	Bribery has become one of the manifestations of everyday work in public organizations.	from 1: strongly disagree to 7: strongly agree					
CO2	Embezzlement is a widespread phenomenon among public employees.	from 1: strongly disagree to 7: strongly agree					
CO3	There is collusion between the government departments and the construction companies executing government projects.	from 1: strongly disagree to 7: strongly agree					
CO4	There is a widespread phenomenon of nepotism in the administrative work of public organizations.	from 1: strongly disagree to 7: strongly agree					

## 3.2. Sampling and data collection

The sampling frame used for data collection comprised students and employees from the University of Basra, Iraq, and Basra citizens who were digitally savvy. The sampling technique and procedure used to select the participants for the study was purposive sampling, which is also known as judgmental sampling (Saunders *et al.* 2016). The rationale for using purposive sampling stemmed from the characteristics of the population and the objective of the study (Saunders *et al.* 2016). We decided that, based on the objectives of the research, a sampling frame comprising the students and employees of University of Basra, Iraq, as well as interested digitally savvy citizens in Basra was the most suitable and appropriate.

The measured items under consideration were translated into Arabic and inserted into Google Forms as an electronic survey. We invited 20 friends and relatives, using the purposive sampling procedure to fill in the form. The items themselves and the results were discussed with five academics from the College of Administration and Economics, University of Basra, for pre-testing purposes (Saunders *et al.* 2016). Accordingly, we made slight changes to the first version to ensure reliability and validity (Sekaran and Bougie 2013). The questionnaire (see Table 2) thus became much more understandable for all educational levels.

We communicated first with students, employees and academics from the University of Basra. We then used social media to reach digitally friendly and savvy members of the general public in Basra, Iraq. The main goal is to analyze administrative corruption and its causes from the perspective of the general public. We aimed to reach 1,000 people from different social classes; however, we collected responses from only 715 participants. Of these, 38 were deleted because the respondents had not taken the survey seriously (*e.g.*, they selected 1 in the seven-point scale for all questions). The final sample thus comprised 677 responses. The process of collecting the data took three months, from the beginning of August to the end of October 2017. Appendix A contains the data set of 677 responses. The supplementary data to this article can be found online at Al-Jundi (2018).

The sampling frame was quite diverse. Participants who held secondary school certificates represented 27% of the total sample size, 14% had a diploma, 33% had achieved a bachelor's degree, 9% a master's and 13% a PhD. Only 3% had elementary school certificates or less. As for monthly household income, 16% earned less than \$400, 16% \$400–600, 17% \$601–800, 16% \$801–1000, 10% \$1001–1200, 8% \$1201–1400 and 17% earned more than \$1400.

### 3.3. Partial least squares - structural equation modeling (PLS-SEM)

Structural equation modeling (SEM) has been applied in this research. SEM is a second-generation comprehensive multivariate data analysis approach. It consists of a set of statistical models that explain the relationships among multiple variables (Hair *et al.* 2016). SEM has several advantages over first-generation approaches that cannot measure multiple relationships simultaneously (Hair *et al.* 2016). Among these advantages are:

- SEM can integrate unobservable constructs measured indirectly by indicator problem (Hair et al. 2016);
- SEM enables complex construct relationships to be graphically modeled and statistically examined, and it provides a holistic view of the entire model (Gefen and Straub 2005);
- SEM is popular in behavioral science research (Hair *et al.* 2016) and in technology and systems research (Gefen and Straub 2005).

SEM is most commonly identified with partial least squares (PLS) (Fornell and Bookstein 1982, Gefen and Straub 2005, Hair *et al.* 2016), which is preferable for the following reasons:

- Causality investigation when no theory-based evidence is necessary;
- Appropriateness for exploratory theory rather than for confirmatory theory testing (Urbach and Ahlemann 2010);
- Suitability for estimating and testing small samples (Chin 1998);
- Applicability to complex models with a large number of variables (Urbach and Ahlemann 2010).

PLS is a set of processes that "provides successive approximations for the estimates, subset by subset, of loadings and structural parameters" (Fornell and Bookstein 1982, 441). PLS analysis is usually conducted in two stages: the measurement (outer) model testing; the structural (inner) model testing (Hair *et al.* 2016). The next sections discuss the two phases in detail.

#### 4. Data analysis and results

### 4.1. Partial least squares (PLS) measurement (outer) model results

First, the item loadings were assessed in order to view the correlations between the variable and its measuring items. Following Hair *et al.* (2016), items loading above 0.6 were retained, whereas item loadings between 0.4 and 0.6 were directly examined against construct validity and reliability. Low items loadings (below 0.4) were eliminated from the analysis. As a result, nearly all items were found above the acceptable level of 0.6, thus demonstrating reliable items (as shown in Table 2).

Table 2. Items' loadings and cross-loadings

Codes	Weak Organizational Culture	Corrupt Culture	Administrative Corruption	Political Instability	Institutional Weakness
A1	0.658	0.29	0.359	0.404	0.321
A2	0.792	0.52	0.458	0.551	0.462
A3	0.623	0.242	0.296	0.294	0.304
A4	0.564	0.176	0.255	0.359	0.308
C1	0.272	0.706	0.27	0.358	0.317
C2	0.403	0.811	0.344	0.421	0.358
C3	0.388	0.819	0.423	0.49	0.432
C4	0.475	0.807	0.45	0.595	0.5
CO1	0.474	0.395	0.829	0.417	0.533
CO2	0.494	0.327	0.827	0.409	0.513
CO3	0.418	0.444	0.84	0.486	0.609
CO4	0.348	0.417	0.773	0.43	0.492
P1	0.425	0.365	0.278	0.627	0.312
P2	0.481	0.522	0.433	0.795	0.569
P3	0.433	0.541	0.476	0.812	0.536
P4	0.466	0.238	0.283	0.582	0.39
W1	0.425	0.303	0.348	0.512	0.654
W2	0.425	0.496	0.586	0.559	0.831
W3	0.414	0.408	0.573	0.489	0.808
W4	0.259	0.248	0.334	0.282	0.543

To examine the discriminant validity across the items, the items' cross-loadings among constructs were examined. Specifically, the cross-loading should be less than the item loading on its associated construct (Hair *et al.* 2016). In this research, the discriminant validity of nearly all items was demonstrated, since cross-loadings among all constructs were greater than the determined cut-off point (as shown in Table 3).

Another measurement involved in the measurement model testing is construct validity. Construct validity assesses whether the chosen measures actually measure what they are supposed to measure (Gefen and Straub 2005). Convergent validity, one type of validity, refers to the extent to which a measure correlates, or converges, with other measures of the same construct (Hair *et al.* 2016). Convergent validity is achieved when the average variance extracted (AVE) value between the constructs is equal to, or exceeds, 0.5 (Hair *et al.* 2016). As presented in Table 3 the AVE scores for all constructs in the model were higher than 0.5, thus demonstrating convergent validity. An alternative approach to evaluate convergent validity is to inspect the constructs' composite reliability (Fornell and Larcker 1981). Table 3 shows that all constructs demonstrated acceptable composite reliability scores by exceeding the 0.7 cut-off point (Hair *et al.* 2016).

Table 3. Validity and reliability estimates of the constructs

	Cronbach's alpha	rho_A	Composite reliability	Average variance extracted (AVE)
Administrative Corruption	0.835	0.839	0.89	0.669
Corrupt Culture	0.798	0.817	0.866	0.619
Institutional Weakness	0.781	0.723	0.806	0.516
Weak Organizational				
Culture	0.788	0.717	0.859	0.669
Political Instability	0.774	0.787	0.803	0.508

To examine constructs' reliability, Cronbach's alpha measures were assessed. Constructs' reliability is achieved when alpha scores are greater than 0.7 (Hair *et al.* 2016). Those with scores of lower value should not be further assessed. As presented in Table 4, all scores exhibited acceptably high reliability (after conducting the second-round testing), with alpha scores exceeding the 0.7 threshold. Thus, all constructs demonstrated reliability.

Discriminant validity examines the extent to which a variable is truly different from other variables in predicting the dependent variable (Hair *et al.* 2016). One popular approach is to examine the correlation matrix among constructs. Specifically, the square root of the AVE score of each construct should be higher than the correlations with this construct (Hair *et al.* 2016). The results in Table 4 indicate that all constructs in the research

model achieved discriminant validity, as none of the off-diagonal elements exceeded the correlation coefficients underneath that were calculated through the square root of the AVE scores.

Table 4. Discriminant validity	(correlation	matrix among	construct scores)	ĺ
Table 4. Discriminant validity	(COLLCIATION)	matrix arriorig		1

	Administrative	Corrupt	Institutional	Weak Organizational	Political
	Corruption	Culture	Weakness	Culture	Instability
Administrative Corruption	0.818				
Corrupt Culture	0.485	0.787			
Institutional Weakness	0.659	0.522	0.719		
Weak Organizational Culture	0.531	0.501	0.537	0.665	
Political Instability	0.534	0.507	0.555	0.524	0.711

#### 4.2. Partial least squares (PLS) structural (inner) model results

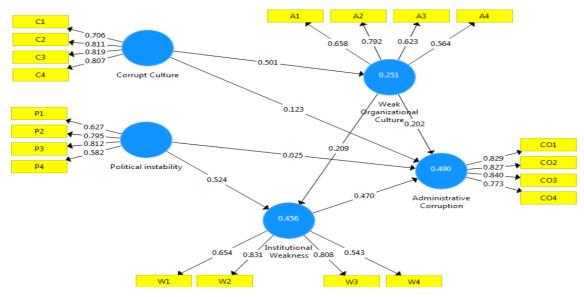
An assessment of the structural model included determining the significance of the paths, the predictive power of the model, and bootstrapping random samples from the original data set (Hair *et al.* 2016). This is achieved by examining the standard error, T-statistics, and significant level (Chin 1998). Table 5 highlights the hypotheses of the study, and shows the path coefficients, T-statistic values, and the results of the hypotheses (*i.e.* either supported or not). The bootstrap T-statistics determine the stability of the estimates; they are considered acceptable with a value above 1.96 at 95% confidence interval (Chin 1998). As a result, ten hypotheses were supported, whereas only one hypothesis was not supported (H2). The results of each path are interpreted in the next section.

Table 5. Influence paths and hypotheses results

Hypotheses	Original sample (O)	T-statistics ( O/STDEV )	P values	Hypothesis result
H1	0.123	2.624	0.009	Supported
H2	0.025	0.46	0.646	Not supported
H3	0.300	6.076	0	Supported
H4	0.470	7.502	0	Supported
H5	0.501	14.515	0	Supported
H6	0.524	11.376	0	Supported
H7	0.209	4.683	0	Supported
H8	0.101	3.871	0	Supported
H9	0.105	4.255	0	Supported
H10	0.210	6.856	0	Supported
H11	0.049	3.448	0.001	Supported

The model fit is assessed by examining the amount of variance explained by R squared (Hair *et al.* 2016) as well as the predictive ability of the dependent variables (Chin 1998). Hair *et al.* (2016) indicate that the minimum level for a construct's R squared should be greater than 0.10. For instance, the R squared value of Administrative Corruption was found moderate and equal to 49%. In addition, the R squared value of Institutional Weakness and Weak Organizational Culture were also found moderate and equal, at 45.6% and 25.1% respectively (as shown in Figure 2).

Figure 2. Research model (tested and validated)



Therefore, it was appropriate to examine the significance of the paths associated with these variables. Figure 2 shows the tested and validated conceptual model. All path coefficients, item loadings and R squared are also presented on the model, as calculated by SmartPLS3.2.7 software.

#### 5. Discussion

#### 5.1. Theoretical contributions

In discussing and analyzing the current paper, it must be emphasized that it primarily contributes to the existing literature by simultaneously testing the effects of corrupt culture, weak organizational culture, political instability, and institutional weakness on administrative corruption in governmental establishments. Additionally, it provides empirical evidence to support the multivariate influences of these four constructs on corruption, and the interplay between them. We tested a sample of 677 responses that reflects the perspective of the public in Basra. PLS-SEM was employed to examine the overall structure of the research model. Iraq has an extremely high rate of corruption (Transparency International 2018), and the researchers, who live in Iraq, benefit from the respondents' experience and observations.

Arguably, as depicted in Figure 2, corrupt culture in the whole society positively impacts administrative corruption (H1). The finding here is consistently found and established by Barr and Serra (2010), Darsareh and Bastanipour (2016), and Dincer and Johnstony (2017). Weak organizational culture in the public sector leads to the pervasiveness of administrative corruption, (H3) as explained by Liu (2016) and Ahmadi *et al.* (2010). In addition, it is established that institutional weakness also influences corruption (H4), as supported by Kpundeh (1994) and Darsareh and Bastanipour (2016). In this study, the direct relationship between political instability and corruption is not supported (H2); nevertheless, Abu and Karim (2015) maintained that there is a positive unidirectional causality that is embedded and runs from political instability to corruption. Ismail and Rashid (2014) found that political instability is associated with corruption. A high rate of corruption has been established and found in more than two-thirds of all countries (Transparency International 2018), in some of which it is well entrenched and has the backing of the governance structure and system, thereby giving it some credence of political stability. We still have a doubt about the result due to the inherent issues exposed. People who are partisan or affiliated to a specific political view tend to display more biased responses on factual questions than do those who must answer as sharp individuals (Robbett and Matthews 2018). Political instability is still an important factor since it affects corruption via institutional weakness (H9) and it weakens governmental organizations and structures (H6).

In addition, the findings show that corrupt culture positively impacts weak organizational culture (H5) (Jamil et al. 2015, Zhang 2015). People learn negative values from their society and become corrupt when they acquire power in public organizations (Ambali 2008). Political instability influences institutional weakness (H6). Political uncertainty and instability adversely affect the public sector because job appointments depend on nepotism, and on political and ethnic bonds (Bin-Ismail and Abbas 2015, Kpundeh 1994). Weak organizational culture boosts institutional weakness (H7). The result here is quite consistent and echoes the findings of Ambali (2008) and Bin-Ismail and Abbas (2015).

To the best of our knowledge, we have established that previous research has not examined the mediating role of weak organizational culture and institutional weakness on the relationship between other constructs and corruption. The results of the current study demonstrate that weak organizational culture mediates and facilitates the effect of corrupt culture on administrative corruption (H8). This result is to some extent consistent with the study by Ambali (2008). Institutional weakness mediates the effect of political instability on corruption (H9). The government becomes weaker during the transition period from an autocratic regime to democratic one rule. Public organizations lose their control, resulting in profiteering from public funds (Haider *et al.* 2011). Institutional weakness mediates the effect of weak organizational culture on corruption (H10). Institutional weakness can be considered as lack of transparency and accountability, as well as the absence of civil service work ethics (Ambali 2008).

The most important finding in the current paper is that weak organizational culture and institutional weakness facilitate and mediate the effect of corrupt culture on administrative corruption (H11). Thus, we can conclude that societal corrupt culture is the crucial and key reason for administrative corruption, since corrupt culture has direct and indirect effects (via weak organizational culture and institutional weakness) on administrative corruption. Corrupt culture, simply and clearly, destroys the culture of governmental organizations, and the latter participate to weaken the structure and policies of the public entities. Institutional weakness allows pervasiveness of administrative corruption in the public sector. While Barr and Serra (2010) argued that corruption may partially be a cultural phenomenon, the current paper proves that corrupt culture is the focal reason for the pervasiveness and prevalence of administrative corruption worldwide. We have to pay a close attention to culture, political environment, and the interaction between politics and business, prior to making any effort to combat corruption (Vaiman et al. 2011).

## 5.2. Managerial implications

The current paper will serve as a useful guide for stakeholders in public governance. Politicians, key decision-makers in the public sector, mass media, and educational institutions will find it informative, and hence beneficial. Since the paper proves that administrative corruption is caused by corrupt culture via weak organizational culture and institutional weakness, and political instability affects corruption via institutional weakness, we can check the measured items of these constructs in order to establish practical implications.

First, anti-corruption endeavors must focus on societal culture. Educational institutes should enrich their programs with anti-corruption values and practices, business ethics and social responsibility. Second, key managers in public organizations should be leaders and share anti-corruption practices with their subordinates. Third, mass media should participate in anti-corruption endeavors and encourage people not to pay bribes to public employees. Fourth, public organizations should set strategic plans and establish visions, missions and values for improving public services and increasing the level of satisfaction among their clients and employees. We can avoid the negative effect of corruption on the whole economy by increasing public officials' wages, thereby reducing their corruptibility (An and Kweon 2017, Van Veldhuizen 2013). Fifth, if politicians respect the constitution and solve their conflicts according to the law, the government will be strengthened to fight corruption, accelerate economic development, and attract FDI inflows. The government and parliament should establish standards and codes of conduct for public employees and independent judicial systems. Authorities should encourage self-reporting, which raises distrust between parties attempting to exchange bribes, and this may reduce bribery even where the governmental organizations are ineffective in combating corruption (Abbink and Wu 2017, Ryvkin et al. 2017). Sixth, the government should allocate resources for the transition from excessive bureaucracy to e-government, and it should widen the use of information technology to improve transparency and citizens' participation (Koekpoe 2011, Marguez 2015, Mohammed et al. 2015, Sharifi-Renani et al. 2013).

#### 5.3. Limitations and recommendations for further research

The main limitation of this study is related to the small sample size. We collected only 677 responses reflecting the perspective of university students, employees, and the wider public, all of whom were from Basra, Iraq. It is recommended, therefore, that the sample size be increased and that the sampling technique and procedure be reviewed so that the dynamics of the population in general are fully represented. In addition, we reached participants mainly through social media, so we did not get the opportunity to explain the questionnaire; we cannot be sure, therefore, that participants filled in the form with an acceptable level of understanding and seriousness, and without any form of bias (Saunders *et al.* 2016). Olken (2009) found that the public report real information about corruption, while public officials hide corruption so that it is difficult for people to detect. However, political partisans tend to be biased when answering political questions (Robbett and Matthews 2018). The study is also limited in scope because the findings are related to only one country's experiences in a period when there is a high level of

administrative corruption and political instability globally. Perhaps the proposed model could be tested in a developed country with a low level of corruption or even in another country with a similar corruption ranking to that of Iraq, such as Angola or Chad (Transparency International 2018).

Future research should focus on expanding the model by adding constructs such as judicial systems and information technology. The current model should be applied in other cities in Iraq and other countries with different levels of corruption. Because corruption is a complicated phenomenon, a comprehensive model can allow a multivariate analysis that will enable a thorough understanding of the interplay among different constructs. Corruption is pervasive in major sectors of the economy. Thus, it can be analyzed in sectors such as taxation, policing, education, and banking. We strongly recommend that researchers examine the perspective of public employees and compare the results with the perspective of the general public. The study introduced and tested the mediating role of weak organizational culture and institutional weakness. We suggest examining the moderating roles of gender, wealth, and educational level. Finally, the paper used cross-sectional data; however, time series data should be adopted and implemented to build a new corruption model in future research.

#### **Conclusions and recommendations**

The PLS-SEM technique was employed to examine the overall structure of a proposed model of administrative corruption in the public sector. A sample of 677 responses, which reflect the perspective of the public in Basra, Iraq, was collected to test the model. We found that:

- corrupt culture positively impacts administrative corruption;
- political instability has no direct effect on corruption;
- weak organizational culture positively influences corruption;
- institutional weakness positively affects corruption;
- corrupt culture impacts weak organizational culture;
- political instability has a direct effect on institutional weakness;
- weak organizational culture has a direct effect on institutional weakness;
- weak organizational culture mediates the effect of corrupt culture on corruption;
- institutional weakness mediates the effect of political instability on corruption;
- institutional weakness mediates the effect of weak organizational culture on corruption;
- weak organizational culture and institutional weakness mediate the effect of corrupt culture on administrative corruption.

Thus, we can conclude that societal corrupt culture is the crucial reason for administrative corruption, since corrupt culture has direct and indirect effects (via weak organizational culture and institutional weakness) on administrative corruption.

In view of the research findings, we strongly recommend the following:

- corporate and governmental organizations must implement structures and cultures that enhance effective institutional practices and procedures to eliminate corrupt practices:
- ethical values and practices must be promoted in all corporate and governmental organizations to instill discipline and self-restraint in employees who may be tempted to involve themselves in corruptible activities;
- anti-corruption policies and charters must be developed, adopted and signed by all employees in corporate and governmental organizations to portray their willingness to be incorruptible in all their activities;
- lawmakers must endeavor to promulgate legislative instruments that will promote acceptable ethical practices and eliminate corruptible practices in both corporate and governmental institutions;
- the mass media must endeavor to use some of their air time to continuously promote good governance, non-biased and fair decisions, the rule of law, and transparent procedures and structures to combat corruption;
- incentives should be offered to whistle-blowers who reveal and report all corrupt practices in their organizations.

Corruption is a global scourge. It has been a social canker and a menace, and it continues unabated despite efforts to combat it. The effects of corruption are numerous, but with a combined effort and will power on the part of all stakeholders, it is our fervent belief that we can make headway in combating this social menace. Declarations of conflicts of interest: none

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