Scientific Research Publishing

Open Journal of Social Sciences, 2022, 10, 192-212
https://www.scirp.org/journal/jss
ISSN Online: 2327-5960
ISSN Print: 2327-5952

# Established Corruption in the Demand for Public Services by Congolese: Associated Factors

**Mantempa Nzinunu Jocelyn[1], Nsita Zaya Nsita Bienvenu[1,2], Kamanga Ngolusungu Jean Pierre[1,3], Lothape Mandimbo Nelson[1,4], Mavula Banda Nicaise[5], Bambula Mudiasa Jean Pierre[1], Nkangi Mbadika Olivier[6], Oyaya Mundala Joseph[2], Bokana Mpanya Richard[7]**

[1]Department of Population and Development Sciences, Faculty of Economics and Management, University of Kinshasa, Kinshasa, DR Congo
[2]Department of Management of Health Organizations at the Higher Institute of Medical Techniques of Kinshasa, Kinshasa, DR Congo
[3]Faculty Institute for Development (IFAD), Kinshasa, DR Congo
[4]National Assembly of the Third Parliament, Kinshasa, DR Congo
[5]Interdisciplinary Centre for Development and Lifelong Learning, Kinshasa, DR Congo
[6]Department of Management Sciences, Faculty of Economics and Management, University of Kinshasa, Kinshasa, DR Congo
[7]Higher Institute of Medical Techniques of BOSOBE in the Province of Mai-Ndombe, National Institute of Statistics, Kinshasa, DR Congo
Email: jocelynmantempa@gmail.com

**How to cite this paper:** Jocelyn, M. N., Bienvenu, N. Z. N., Pierre, K. N. J., Nelson, L. M., Nicaise, M. B., Pierre, B. M. J., Olivier, N. M., Joseph, O. M., & Richard, B. M. (2022). Established Corruption in the Demand for Public Services by Congolese: Associated Factors. *Open Journal of Social Sciences, 10,* 192-212.
https://doi.org/10.4236/jss.2022.1011014

**Received:** September 12, 2022
**Accepted:** October 16, 2022
**Published:** October 19, 2022



## Abstract

The established corruption in this research concerns the person who offered the bribe or who gave it after requesting it in order to obtain a public service. The present study, which analyzed data from the 2016 Unified Core Welfare Indicator Questionnaire national survey, made it possible to determine the socio-demographic and economic profile of corruptible Congolese as well as the factors associated with corruption in the demand for a public service in the DRC. Using descriptive and explanatory analyses, a close link was established between corruption and certain socio-demographic and socio-economic characteristics. Indeed, corruption is more prevalent among males who live in urban areas and provincial capitals and who are between 25 and 34 years of age. This predominance of corruption is also established for people with secondary and university education and for the most part owners of their own businesses.

## Keywords

Established Corruption, Education, Salary, Active Briber, Passive Briber

## 1. Introduction

Corruption is a scourge that strikes all countries of the world to varying degrees.

Etymologically, it is defined as "to destroy, to bribe is to destroy" (National Textual and Lexical Resources Centre, nd). There is a consensus that the consequences of corruption not only undermine good governance and hamper economic growth, but also undermine trust in public institutions (Mauro, Medas, & Fournier, 2019).

Established corruption (passive or active) causes multiple harms especially for the DRC, such as wasted financial resources, increased transaction costs, lower quality, etc. (Mtiraoui, 2020). In the absence of effective measures, it can undermine the country's efforts to establish good governance.

This scourge that plagues the management of public affairs in the Democratic Republic of Congo is a practice that is so decried, but few analyze it in depth in order to eradicate it. Corruption favours the weak to the detriment of the strong, it does not encourage effort, it destroys any aspiration to discover one's potential. It facilitates the emergence of an immoral and disreputable class. This justifies the backwardness of many countries in the world and in Africa.

Although corruption cannot be generalised, it should be noted that a category of the population that takes advantage of its position and assets indulges in it every day (World Bank, nd; Waterbury, 1973). Moreover, the 1-2-3 surveys conducted in the DRC in 2005 and 2012 addressed this issue, as did the Unified Core Welfare Indicator Questionnaire Survey (UCWIS) in 2016.

To slow down or better reduce this scourge, the DRC Presidency created in March 2020 an Agency for the Prevention and Fight against Corruption, a public institution with the mission of preventing and fighting corruption (Mediacongo, nd). It succeeds the office of the former special advisor to the Head of State in charge of the fight against corruption, terrorism and money laundering.

This study focuses on data from the QUIBB survey. It will seek to answer the following questions:

What is the socio-demographic profile of Congolese who easily engage in corruption?

What are the factors associated with corruption in the public service in the DRC?

If the main objective of this research is to propose elements that could help improve the structures for fighting corruption in the DRC, it will specifically involve determining the profile of Congolese who are corrupt and corruptible in public services determine the factors associated with corruption in the demand for public services.

This research is structured around the following points, in addition to the introduction and conclusion: literature synthesis, methodology and presentation of results.

## 2. Summary of the Literature

Corruption has long been presented as a means to compensate for the deficient functioning of public institutions. Some authors present corruption as an effi-

cient way to circumvent slow or cumbersome regulations or administrative procedures. For example, Leff (1964) and Huntington (1968) argue that corruption promotes economic efficiency. According to them, it would overcome government-imposed rigidities that impede investment and interfere with other growth-enhancing economic decisions. They go on to argue that corruption often facilitates economic life by "oiling the wheels". Yet this positive view of corruption and the arguments behind it are contested. In particular, its central assumption that corruption is an exogenous element of administrative regulations and procedures is highly debated. Indeed, it is possible that public officials create bureaucratic slowness or red tape solely for the purpose of collecting bribes (Myrdal, 1968; Bardhan, 1997). Kaufmann & Wei (1999) show that corruption is an endogenous element in the setting of administrative rules and procedures. Based on observations from various company surveys, they show a positive and significant relationship between the actual bureaucratic hassles encountered and the amount of bribes paid by firms. In the same vein, Hunt & Lazlo (2005) show, based on a household survey in Peru, that the reduction of bureaucratic hassles following the payment of a bribe offsets those artificially created by the official to receive the bribe.

### 2.1. Gender and Corruption

Gender seems to be the source of very different attitudes towards corruption. Numerous studies point to a particular behaviour of women towards corruption. At the macro level, Dollar, Fisman, & Gatti (2001) show that countries with a high representation of women in politics are also those with the lowest levels of corruption. While this country-level result is now disputed, many studies at the individual level point out that women are less tolerant of corruption than men (Dollar, Fismam, & Gatti, 2001; Gatti, Rigolini, & Paternostro, 2003; Swamy, Knack, & Azfar, 2001). Also, many studies point out that women are less victims of corruption than men (Seligson, 2006).

### 2.2. Wages and Corruption

Several theoretical arguments suggest that corruption decreases with the salaries of public officials. Incentive theory shows that there is an efficiency wage that can be equated with the expectation of a bribe associated with corruption that can prevent corruption. Although the efficiency wage is costly and therefore difficult to implement in a context of budgetary restrictions, incentive theory suggests that, other things being equal, an increase in the wage should reduce the corruption of public officials (Lavallee, Razafindrakoto, & Roubaud, 2008).

However, other authors have not been able to find a link between wages and corruption. There are several possible explanations for the lack of a relationship between corruption and wages. On the one hand, most of the work has been done at the macro level using indicators of perceived corruption. On the other hand, this work also neglects the complementarity between wages and control.

The study by Di Tella & Schargrodsky (2003), based on an anti-corruption experiment in hospitals in Buenos Aires, shows that the impact of wages on corruption depends considerably on the probability of detection. They show that in the absence of control an increase in wages has no impact on corrupt behaviour, but can be effective if accompanied by an increase in the control of civil servants.

### 2.3. Residence (Stratum) and Corruption

Seligson's studies in Latin America highlight that corruption is a rather urban phenomenon. For example, he points out that in Honduras living in an urban area increases the probability of not only having been a victim of corruption but also of having witnessed it.

### 2.4. Age and Corruption

Age also appears to be a factor that reduces exposure to corruption (Seligson, 2006; Hunt & Lazlo, 2005). Several hypotheses have been put forward to explain this phenomenon. Seligson (2006) suggests that this phenomenon is explained by the frequency of contact with the administration: young people are more often victims of corruption because they have to establish themselves in life and are therefore more in contact with the administration. Hunt (2004) suggests that older people are less likely to be victims of corruption because they have had time to build up a "network of trust". As life progresses, reciprocal exchanges (social capital) would replace corruption.

### 2.5. Educational Attainment and Corruption

Corruption negatively affects the motivation of students. In developing countries, where corruption in the school environment is widespread, children stay in school less and also achieve lower levels of achievement. Children stay in school less and also achieve lower levels of achievement.

It also undermines the moral values of younger generations. Indeed, the leakage of information before exams, the abuse of the teacher-student relationship for private purposes and corrupt practices (favouritism, nepotism, clientelism, politics, bribery, etc.) in the elite selection process at all levels of education send the wrong message to the younger generations that personal effort and merit do not count and that success is achieved through manipulation and favouritism (Mokaddem, 2010).

Regarding the direct relationship between corruption and educational effort Seka (2005) tested the relationship between the Corruption Perception Index (CPI) and the level of higher education (SCOL) as a variable representing human capital accumulation. The estimation results show a negative, and highly significant, relationship between the Corruption Perception Index and the higher education enrolment rate.

However, in India, for example, cheating in examinations is so widespread that universities that have tried to punish it have been met with protests from

students, who demand their traditional "right" to cheat. There have been reports of beatings, and even murders, of conscientious staff members trying to do their jobs honestly. The selling of subjects before exams and the manipulation of results are also common (Virtual Anti-Corruption Resource Centre, nd).

Furthermore, in Georgia, teachers are reported to circulate the price list for admission to examinations. Students can actually buy their education, paying for each exam and then buying their diploma. They can even bypass the whole university education system and simply buy a degree from a university (Virtual Anti-Corruption Resource Centre, nd).

In the DRC, some of the practices found in universities and higher institutes regarding passing or moving up to a higher class are unsatisfactory. For each course, students are charged fees in order to confirm their grades (for brilliant students) or to pass for the less strong. This has even been described as "hooking up". In most cases, it is the teachers' intermediaries who are in charge of collecting this bribe and a list of them reaches the teacher for accounting and identification of eligible students.

On the other hand, the education variable is related to urban dwellers who experience corruption. On the one hand, individuals with a higher level of education might know more about public services and thus be in a better position to assess the degree of corruption. This may have a positive or negative impact on the justification of corruption by the state response. On the other hand, they may not be more involved in corruption, as they better understand the opportunities of corruption. Thus, the effect of educational level on corruption is unclear and there is a lack of empirical studies on the subject (Torgler & Valev, 2004). For Swamy, Knack, & Azfar (2001), for example, they could not include education level in their study. Mocan (2004) found that the higher the level of education induced the higher the likelihood of being targeted for bribery.

### 2.6. Socio-Professional Category

According to the Virtual Anti-Corruption Resource Centre (nd), a particular dynamic arises when small and medium-sized civil servants are entrusted with the task of implementing anti-corruption policies emanating from their ministry or the donor community. This is because staff members may be tempted to jump the gun, ignore regulations and bypass standard procedures in order to get the job done faster. The pressure to perform can therefore create an environment for corruption. Where some see corruption, others simply see effective project management.

Another problem arises when donors agree to pay government officials to "get things done". Similarly, donors may pay project managers to obtain information that should be publicly available anyway. The maintenance of such practices often creates a vicious circle, in which donors are inclined to extort the partners and institutions they are trying to support.

## 3. Methodology

### 3.1. Data Sources and Analysis Methods

Data sources: The data used in this study are those from the DRC's E-QUIBB/ 2016 household survey across the national territory.

The main objective of the first survey with the Unified Questionnaire with Basic Indicators of Well-being in the Democratic Republic of Congo in 2016 (E-QUIBB/RDC1-2016) was the rapid production of basic socio-economic indicators on the living conditions of the population (literacy, education, health, employment, housing, food security, governance, possession of durable goods, etc.).

The survey was intended to 1) enable the development and monitoring-evaluation of development policies, programmes and projects, and in particular the development of the National Strategic Development Plan (PNSD) 2017-2021; 2) study the living conditions of the population as part of the final evaluation of the implementation of the second-generation Growth and Poverty Reduction Strategy Paper (GPRSP2); 3) Calculate the Human Development Index (HDI) for 2016; 4) Obtain a reference situation for certain Sustainable Development Goals (SDGs) indicators; and 5) Strengthen the capacities of the National Statistical System in the use of New Information and Communication Technologies for data collection and processing.

The E-QUIBB/DRC 1-2016 was carried out by means of a nationwide survey of 18,480 ordinary households grouped into 60 data collection pools. The sample drawn made it possible to calculate indicators for the 26 current provinces and even for the 11 former provinces. The field staff consisted of 367 interviewers supervised by 60 supervisors who travelled to the selected villages and neighbourhoods to collect data from the households and their members concerned by this operation (Ministère du Plan-RDC, 2016).

Data analysis: In order to achieve our objectives, we conducted two types of analysis: 1) Descriptive analysis consisted in our study of cross-tabulations and chi-square tests to measure the degree of association between the independent variables and the dependent variable. This association is highly significant if the chi-square is at most significant at the 5% threshold. 2) The objective of the explanatory analysis was to identify the factors associated with the practice of corruption in the demand for and supply of public services. Using a multivariate analysis model, the net effects of the independent variables on established corruption were determined. Since the dependent variable is a nominal qualitative variable with two modalities, the most appropriate statistical model is binary logistic regression. This model was implemented by the statistical analysis tool, SPSS 25.0 software.

### 3.2. Variables of Interest and Their Roles

Variable of interest: Established corruption. This variable does not exist in the database in this format. We had to create it by composing two variables from the following questions:

Have you ever been asked to pay a bribe to obtain a public service in the last

12 months (GV15) = ACTIVE BRIBER for those who answered "yes" to this question.

Have you ever been asked to pay a bribe for a public service in the last 12 months? (GV14) = PASSIVE BRIBER, the one who says so.

"ESTABLISHED CORRUPTION = ACTIVE BRIBER + PASSIVE BRIBER." Indeed, bribery is established when the person has acknowledged that he/she was asked for the bribe and the bribe was paid. In addition to the payment of the bribe independently of the demand for the service obtained. This is in line with the definition of active and passive bribery.

The active briber is a person who offers, directly or indirectly, offers, gifts, presents or benefits to obtain from a public authority, a person entrusted with a public service mission or an elected official, the performance or not of an act falling within the scope of his or her functions or facilitated by them. A passive briber is someone who accepts to give, directly or indirectly, offers, gifts, presents or advantages to a public authority, a person entrusted with a public service mission or an elected official who offers them.

### 3.3. Identification Variables

The literature review allowed us to identify the following variables as explanatory factors of corruption in the DRC: level of education, socio-professional category, stratum of residence, province of residence, being a salaried employee, age, gender.

### 3.4. Hypotheses of the Study (Main and Subsidiary)

Corruption in the demand for public services in the Democratic Republic is a function of the socio-demographic and socio-economic profile of the person who practices it (Hp). Indeed: This corrupt practice concerns men much more than women (H1);

The higher one's level of education in the DRC, the more one is exposed to corruption (H2);

The older one gets in the DRC (65 years and over), the less corruptible one is (H3).

### 3.5. Conceptual Diagram

See Figure 1.

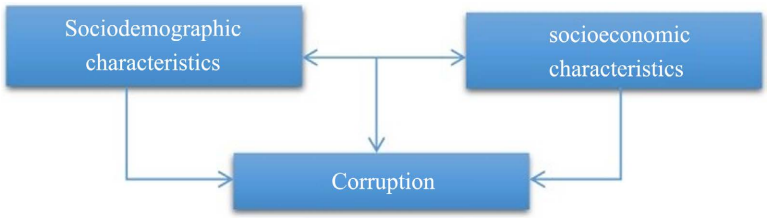


Figure 1. Links between corruption and sociodemo and socioecon characteristics.

### 3.6. Analysis Grid

- Univariate analysis: tables of numbers and percentages.
- Bivariate analysis: cross-tabulations with Pearson's Chi-square search (at the 0.05 threshold).
- Multivariate analysis: binary logistic regression model.

## 4. Results and Discussion

### 4.1. Univariate Analysis

This consists of presenting the variables of the study in the form of tables showing the frequency and the valid percentage in addition to the modalities.

#### 4.1.1. Socio-Demographic Characteristics

Sex, age, province and stratum of residence constitute the group of variables known as socio-demographic characteristics. The total number of observations per variable is 47,023 for all 26 provinces (Table 1).

More than half of our sample are men (52.5%) and the other half are women. The majority (76%) of the people involved in this study are under 45 years of age. The province of Kinshasa provided more observations (14.2%) than Bas-Uélé (0.9%). Almost half of the respondents live in rural areas (57.6%) and 34.6% of them were interviewed in the provincial capital.

#### 4.1.2. Socio-Economic Characteristics

Among the socio-economic characteristics, we retained the variables Level of education, socio-professional category, being employed and informality (Table 2).

More than half of the respondents (59.7%) have secondary education (51.3%) and higher or university education (8.4%). Only 11% of the respondents are employed in the formal sector and 89.3% work in the informal sector, i.e. without a fixed salary.

#### 4.1.3. Dependent Variable

Our dependent variable is corruption. It is a composite variable derived from the variables "active briber" and "passive briber" (Table 3).

Indeed, in 2016, almost 9% of Congolese aged 15 and over had corrupted or been forced to corrupt.

### 4.2. Bivariate Analysis

#### 4.2.1. Corruption by Socio-Demographic Characteristics

Table 4 shows corruption according to the socio-demographic characteristics of the respondents.

**1) Corruption and Gender**

Corruption is more a matter of men than of women. Indeed, more than twice as many women are corruptible. Nearly 13 out of 100 men engage in bribery compared to 5 women with the same denominator (Figure 2).

**2) Evolution of Corruption by Age**

The corruption curve in the DRC increases proportionally with age between

**Table 1.** Distribution of respondents by socio-demographic characteristics.

| Variables | Categories | Frequencies | % |
|---|---|---|---|
| Gender | Male | 22,325 | 47.5 |
| | Female | 24,698 | 52.5 |
| Age | 15 - 24 | 15,316 | 32.6 |
| | 25 - 34 | 11,790 | 25.1 |
| | 35 - 44 | 8378 | 17.8 |
| | 45 - 54 | 5462 | 11.6 |
| | 55 - 64 | 3715 | 7.9 |
| | 65 and more | 2363 | 5.0 |
| Province | Kinshasa | 6682 | 14.2 |
| | Kongo central | 3203 | 6.8 |
| | Kwango | 1126 | 2.4 |
| | Kwilu | 3148 | 6.7 |
| | Mai-Ndombe | 902 | 1.9 |
| | Equateur | 1140 | 2.4 |
| | Sud-Ubangi | 1217 | 2.6 |
| | Nord-Ubangi | 773 | 1.6 |
| | Mongala | 625 | 1.3 |
| | Tshuapa | 605 | 1.3 |
| | Tshopo | 1908 | 4.1 |
| | Bas-Uélé | 423 | 0.9 |
| | Haut-Uélé | 1097 | 2.3 |
| | Ituri | 1554 | 3.3 |
| | Nord Kivu | 3566 | 7.6 |
| | Sud Kivu | 3905 | 8.3 |
| | Maniema | 1151 | 2.4 |
| | Haut Katanga | 3009 | 6.4 |
| | Lualaba | 1149 | 2.4 |
| | Haut-Lomami | 1617 | 3.4 |
| | Tanganyika | 721 | 1.5 |
| | Lomami | 2304 | 4.9 |
| | Kasaï-Oriental | 1639 | 3.5 |
| | Sankuru | 826 | 1.8 |
| | Kasaï-Central | 1601 | 3.4 |
| | Kasaï | 1131 | 2.4 |

**Continued**

| | | | |
|---|---|---|---|
| Stratum of residence | Provincial capital | 16,289 | 34.6 |
| | Other City/Town | 3648 | 7.8 |
| | Rural | 27,087 | 57.6 |
| **Total** | | **47,023** | **100.0** |

Table 2. Distribution of respondents by socio-economic characteristics.

| Variables | Categories | Frequencies | % |
|---|---|---|---|
| Education | No education | 7108 | 15.1 |
| | Primary/Kindergarten | 11,861 | 25.2 |
| | Secondary | 24,122 | 51.3 |
| | Higher | 3932 | 8.4 |
| Socio-professional category | Executive | 360 | 0.8 |
| | Collaborative executive | 619 | 1.3 |
| | Supervisor | 582 | 1.2 |
| | Employee, Skilled worker | 2191 | 4.7 |
| | Employee, unskilled worker | 1439 | 3.1 |
| | Laborer | 1150 | 2.4 |
| | Boss | 798 | 1.7 |
| | Self-employed worker | 18,036 | 38.4 |
| | Apprentice | 265 | 0.6 |
| | Family helper | 4459 | 9.5 |
| | Disabled or long-term sick | 1779 | 3.8 |
| | Unemployed | 1526 | 3.2 |
| | In school | 7364 | 15.7 |
| | Retired | 362 | 0.8 |
| | Housewife | 3680 | 7.8 |
| | Pensioner | 200 | 0.4 |
| | Other | 2213 | 4.7 |
| Employed | Yes | 5033 | 10.7 |
| | No | 41,990 | 89.3 |
| Total | | 47,023 | 100.0 |

Table 3. Distribution of respondents by bribery practice.

| Corruption established | Frequencies | % |
|---|---|---|
| No | 42,809 | 91.0 |
| Yes | 4214 | 9.0 |
| **Total** | **47,023** | **100.0** |

**Table 4.** Corruption by socio-demographic identification variables.

| socio-demographic characteristics | | Corruption established | | Total | Chi-square |
|---|---|---|---|---|---|
| | | No | Yes | | |
| Sexe | Male | 86.7% | 13.3% | 22,325 | 1000.5*** |
| | Female | 95.0% | 5.0% | 24,698 | |
| Age | 15 - 24 | 94.8% | 5.2% | 15,316 | 537.3*** |
| | 25 - 34 | 88.6% | 11.4% | 11,790 | |
| | 35 - 44 | 87.9% | 12.1% | 8378 | |
| | 45 - 54 | 89.4% | 10.6% | 5461 | |
| | 55 - 64 | 89.9% | 10.1% | 3715 | |
| | 65 and more | 95.5% | 4.5% | 2363 | |
| Province | Kinshasa | 91.2% | 8.8% | 6682 | 1266.4*** |
| | Kongo-central | 87.0% | 13.0% | 3204 | |
| | Kwango | 94.5% | 5.5% | 1125 | |
| | Kwilu | 97.2% | 2.8% | 3147 | |
| | Mai-Ndombe | 96.2% | 3.8% | 903 | |
| | Equateur | 94.4% | 5.6% | 1140 | |
| | Sud-Ubangi | 93.7% | 6.3% | 1218 | |
| | Nord-Ubangi | 98.1% | 1.9% | 773 | |
| | Mongala | 94.7% | 5.3% | 626 | |
| | Tshuapa | 92.6% | 7.4% | 606 | |
| | Tshopo | 93.5% | 6.5% | 1908 | |
| | Bas-Uélé | 96.5% | 3.5% | 423 | |
| | Haut-Uélé | 93.9% | 6.1% | 1097 | |
| | Ituri | 94.9% | 5.1% | 1554 | |
| | Nord-Kivu | 81.3% | 18.7% | 3566 | |
| | Sud-Kivu | 89.4% | 10.6% | 3905 | |
| | Maniema | 94.9% | 5.1% | 1151 | |
| | Haut-Katanga | 87.9% | 12.1% | 3009 | |
| | Lualaba | 95.9% | 4.1% | 1149 | |
| | Haut-Lomami | 82.9% | 17.1% | 1618 | |
| | Tanganyika | 98.3% | 1.7% | 721 | |
| | Lomami | 93.0% | 7.0% | 2304 | |
| | Kasaï-Oriental | 83.8% | 16.2% | 1639 | |
| | Sankuru | 97.0% | 3.0% | 825 | |

**Continued**

| | | | | | |
|---|---|---|---|---|---|
| | Kasaï-Central | 93.1% | 6.9% | 1602 | |
| | Kasaï | 90.8% | 9.2% | 1132 | |
| Stratum of residence | Provincial capital | 88.0% | 12.0% | 16,289 | 328.6*** |
| | Other City/Town | 89.9% | 10.1% | 3647 | |
| | Rural | 93.0% | 7.0% | 27,087 | |
| **Total** | | **91.0%** | **9.0%** | **47,023** | |

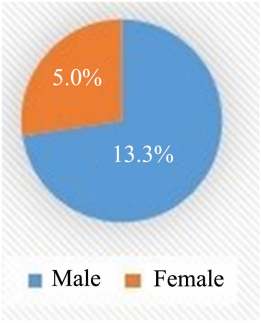


**Figure 2.** Corruption and gender.

15 and 44 years, where it reaches its peak. It then decreases indirectly proportional to age between 45 and 65 years and more (Figure 3).

**3) Evolution of corruption by province of residence**

According to the results in Figure 4, the province of North Kivu (18.7%) is the province where corruption is most established, followed by Haut-Lomami (17.1%) and the province of Kasaï-Oriental (16.2%). The link is established between the province of residence; the chi-square value is 1266.4 at the 0.00 threshold (***).

#### 4.2.2. Corruption by Socio-Economic Characteristics

Statistical relationships are established between the selected socio-economic characteristics and corruption at the 0.05 level (Table 5).

The socio-professional categories most prone to corruption are supervisors (23.0%) and managers (21.4%). They are followed by managers (20.6%).

**Evolution of Corruption by Level of Education**

Corruption in the DRC increases in proportion to the level of education. Indeed, the higher the level of education, the more one is exposed to corruption (Figure 5).

### 4.3. Multivariate Analysis

#### 4.3.1. Factors Associated with Established Corruption

The variables for which the significance column is less than or equal to 0.05 for one of the categories are considered as factors associated with established corruption in the DRC. The interpretation of the results is based in relation to the reference category (RC) (Table 6).

Table 5. Corruption by socio-demographic and socio-economic characteristics.

| Catégorie socioéconomiques | | Corruption established (yes) | Total | Chi-square |
|---|---|---|---|---|
| education | No education | 5.2% | 7108 | 703.9*** |
| | Primary/Kindergarten | 6.4% | 11,861 | |
| | Secondary | 9.7% | 24,122 | |
| | Higher | 18.8% | 3931 | |
| socio-professional Category | Executive | 21.4% | 359 | 1487.8*** |
| | Collaborative executive | 14.5% | 619 | |
| | Supervisor | 23.0% | 582 | |
| | Employee, Skilled worker | 18.9% | 2191 | |
| | Employee, unskilled worker | 17.3% | 1439 | |
| | Laborer | 17.0% | 1150 | |
| | Boss | 20.6% | 798 | |
| | Self-employed worker | 10.2% | 18,036 | |
| | Apprentice | 12.1% | 265 | |
| | Family helper | 4.8% | 4459 | |
| | Disabled or long-term sick | 3.7% | 1780 | |
| | Unemployed | 11.9% | 1526 | |
| | In school | 3.6% | 7364 | |
| | Retired | 6.6% | 362 | |
| | Housewife | 4.4% | 3679 | |
| | Pensioner | 8.5% | 201 | |
| | Other | 3.5% | 2213 | |
| Employed | Yes | 17.7% | 5033 | 530.6*** |
| | No | 7.9% | 41,990 | |
| **Total** | | **9.0%** | **47,023** | |

Table 6. Logistic regression model of established corruption in the DRC.

| Variables | Categories | B | Sig. | Exp(B) |
|---|---|---|---|---|
| Age | 15 - 24 | 0.441 | 0.000 | 1.555 |
| | 25 - 34 | 0.789 | 0.000 | 2.201 |
| | 35 - 44 | 0.756 | 0.000 | 2.129 |

**Continued**

| | | | | |
|---|---|---|---|---|
| | 45 - 54 | 0.637 | 0.000 | 1.891 |
| | 55 - 64 | 0.655 | 0.000 | 1.926 |
| | 65 and more | RC | | |
| Gender | Male | 0.877 | 0.000 | 2.403 |
| | Female | RC | | |
| Stratum of residence | Provincial capital | 0.608 | 0.000 | 1.836 |
| | Other City/Town | 0.425 | 0.000 | 1.530 |
| | Rural | RC | | |
| Province of residence | Kinshasa | 1.201 | 0.000 | 3.323 |
| | Kongo central | 2.071 | 0.000 | 7.932 |
| | Kwango | 1.339 | 0.000 | 3.814 |
| | Kwilu | 0.431 | 0.165 | 1.539 |
| | Mai-Ndombe | 0.841 | 0.013 | 2.318 |
| | Equateur | 1.108 | 0.000 | 3.029 |
| | Sud-Ubangi | 1.402 | 0.000 | 4.063 |
| | Nord-Ubangi | 0.014 | 0.971 | 1.014 |
| | Mongala | 1.169 | 0.001 | 3.219 |
| | Tshuapa | 1.656 | 0.000 | 5.240 |
| | Tshopo | 1.220 | 0.000 | 3.387 |
| | Bas-Uélé | 0.636 | 0.107 | 1.888 |
| | Haut-Uélé | 1.331 | 0.000 | 3.784 |
| | Ituri | 1.318 | 0.000 | 3.736 |
| | Nord-Kivu | 2.347 | 0.000 | 10.451 |
| | Sud-Kivu | 2.046 | 0.000 | 7.734 |
| | Maniema | 1.158 | 0.000 | 3.184 |
| | Haut Katanga | 1.607 | 0.000 | 4.986 |
| | Lualaba | 0.860 | 0.008 | 2.364 |
| | Haut-Lomami | 2.766 | 0.000 | 15.901 |
| | Kasaï | 1.838 | 0.000 | 6.283 |
| | Lomami | 1.502 | 0.000 | 4.492 |
| | Kasaï-Oriental | 2.381 | 0.000 | 10.813 |
| | Sankuru | 0.731 | 0.039 | 2.077 |
| | Kasaï-Central | 1.366 | 0.000 | 3.921 |
| | Tanganyika | RC | | |

**Continued**

| | | | | |
|---|---|---|---|---|
| Education | No education | RC | | |
| | Primary/Kindergarten | 0.240 | 0.001 | 1.272 |
| | Secondary | 0.535 | 0.000 | 1.708 |
| | Higher | 0.831 | 0.000 | 2.296 |
| socioprofessional Category | Executive | 1.538 | 0.000 | 4.656 |
| | Collaborative executive | 1.033 | 0.000 | 2.811 |
| | Supervisor | 1.405 | 0.000 | 4.074 |
| | Employee, Skilled worker | 1.350 | 0.000 | 3.859 |
| | Employee, unskilled worker | 1.479 | 0.000 | 4.389 |
| | Laborer | 1.418 | 0.000 | 4.130 |
| | Boss | 1.579 | 0.000 | 4.848 |
| | Self-employed worker | 1.282 | 0.000 | 3.604 |
| | Apprentice | 1.051 | 0.000 | 2.860 |
| | Family helper | 0.697 | 0.000 | 2.008 |
| | Disabled or long-term sick | 0.525 | 0.003 | 1.691 |
| | Unemployed | 0.808 | 0.000 | 2.243 |
| | In school | −0.078 | 0.566 | 0.925 |
| | Retired | 0.924 | 0.000 | 2.519 |
| | Housewife | 0.619 | 0.000 | 1.858 |
| | Pensioner | 1.071 | 0.000 | 2.919 |
| | Other | RC | | |
| Employed | Yes | −0.101 | 0.116 | 0.904 |
| | No | RC | | |
| Constant | | −6.766 | 0.000 | 0.001 |

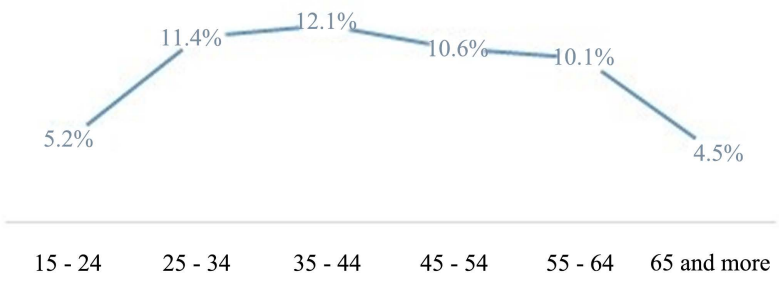


**Figure 3.** Corruption and age.

Age, gender, province, stratum of residence, socio-professional category and level of education are significantly associated with the practice of corruption in the Democratic Republic of Congo.

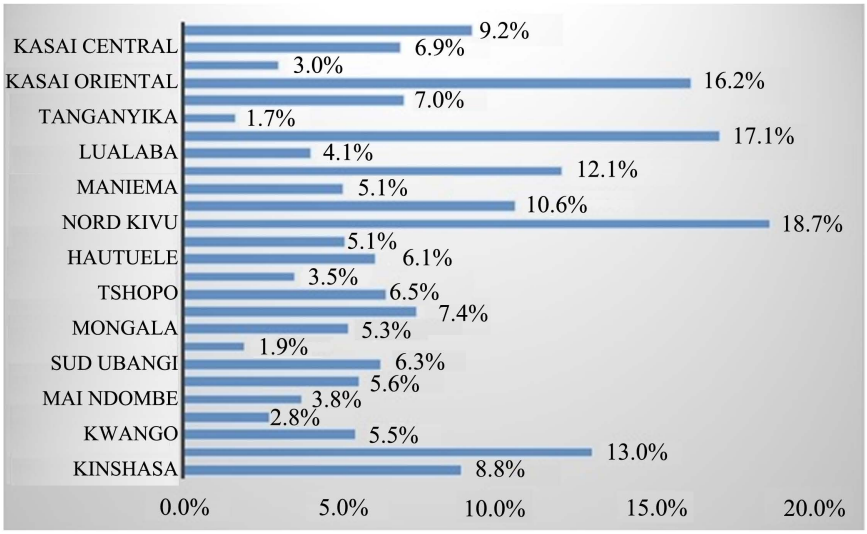


Figure 4. Corruption and province of residence.

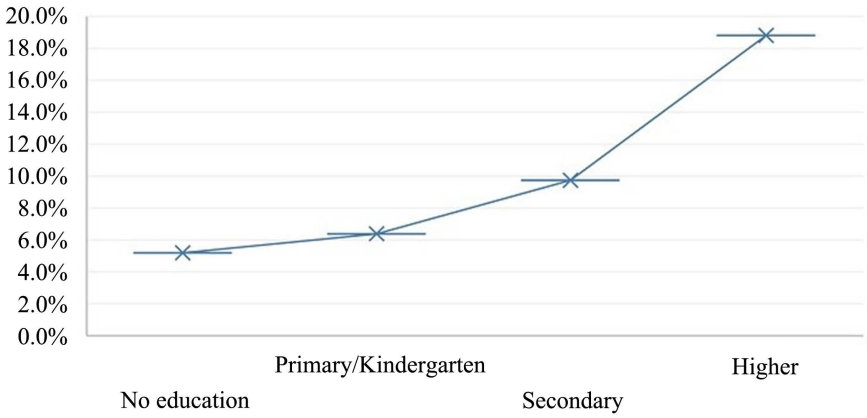


Figure 5. Corruption and education.

Logit equation of corruption in the DRC:

Y = −6.766 + 2.7 Province of residence + 1.6 Socioprofessional category + 0.87 Gender + 0.83 education + 0.78 Age + 0.61 Stratum of residence

### 4.3.2. Analysis of Factors Associated with Corruption

**1) Age and Corruption**

Being in the 25 - 34 age group is 2.2 times more likely to engage in corruption than being in the 65 age group and more.

Reaching 65 and over reduces the high corrupting pressure of youth in the demand for services in a country where corruption is a gangrene. At this age one is supposed to live off one's investments for as many years as one has worked. This is the age of wisdom and overcoming selfish interests.

The 25 - 34 age group is the period of apprenticeship, but many use it as a time to build up their financial health or to seek favors in the demand for public services. A term often used in public administration is "lightening the administration", which for many is heavy without a bribe.

**2) Gender and Corruption**

Gender is a necessary dimension in the analysis of corruption-related issues. For example, in this study it was found that men are 2.4 times more likely to engage in corruption than women.

This can be explained by the fact that Congolese women by nature like to receive than to give. Men are at the forefront of the demand for services, even if these services can benefit women. Corruption, in our context, is giving to get what is needed, and women find it difficult to give, so they avoid corrupting, not because they think it is wrong, but simply because they find it difficult to spend or give a good for a service. Also, women are not so numerous in certain positions in the civil service and know that the slightest slip or flagrante delicto can cost them their jobs. In these conditions they work in an environment where they have to prove what they are capable of and suspect any attempt at corruption.

These results corroborate with the study by Lavallee et al. (2008) which demonstrated the existence of a particular behavior of women towards corruption. Indeed, they are less willing to pay bribes in case of potential problems with the administration and are less likely to make undue payments when dealing with public services.

**3) Province of Residence and Corruption**

Corruption has been established in all provinces of the DRC. Indeed, living in one province predisposes people to corruption more than living in another. Indeed, people living in Haut-Lomami province are 15 times more likely to engage in corruption than those in Tanganyika province.

Haut-Lomami is one of the new dismembered provinces of the DRC that came out of Greater Katanga. But it is not as rich in mineral resources as its neighbours Haut Katanga, Lualaba and Tanganyika. It is cross-border trade that feeds the province. However, in order to minimize the costs of taxes and patents, traders indulge in intense corruption at all levels. Also, those in the public administration are the luckiest of all. They take advantage of their position to make a little money by offering a bribe for a service and also ensure the speedy execution of some of their tasks which is often motivated by the proposal they receive from other members of the community in need. When you have a file in the civil service, you have to take a bribe and that is known to all. It is a sad reality that in this province, there is open corruption, with MPs who have had to remove two of their governors in the space of 5 years allegedly receiving bribes from the string-pullers. This is a province that has its fourth governor while those dismembered at the same time have less than three former governors at present. The first governor was blamed for laxity and suspected embezzlement by suspending his Minister of Budget (Radiookapi, nd). Unfortunately, even for the other two, it was mismanagement once again that was allegedly sanctioned through bribes received by MPPs.

**4) Residence Stratum and Corruption**

Residing in the chief town, in a town or city as well as living in the village has

a significant impact on the practice of corruption. It appears that residents of the provincial capital are 1.8 times more likely to engage in corruption than village residents.

This is supported by the results of Seligson (2006) who found that living in an urban area increases the probability of not only having been a victim of corruption but also of having heard about it or witnessed it in Honduras.

**5) Education and Corruption**

While the practice of corruption increases with the level of education, this study shows that higher education or university education makes one 2.3 times more likely to engage in corruption than non-education.

This can be partly explained by the fact that the pathway through the universities and higher institutes in the DRC, which are now known as centers of corruption par excellence in many faculties and departments, exposes students to the risk of replicating the last experience they acquired. When students indulge in corruption in order to move up the ranks, it is difficult for them to let go.

In the vast majority of DCs, education is public; parents do not pay school fees. But the costs of corruption in the education sector are much higher than the direct costs of state-funded education. Corruption in contracting, illegal payments for school admission and tutoring, and other hidden costs increase the price of obtaining a theoretically free service. Corruption increases school costs at the expense of the poor, who are particularly vulnerable and highly dependent on public services to meet their most basic needs (Mokaddem, 2010).

If the university is the last place of professionalization for future public servants, the system needs to be revised and thoroughly improved. For example, any proven case of corruption should be severely sanctioned for both parties. This can also be done by instituting anonymous examinations at all academic levels with a credible computer application controlled at the same time at the level of juries, departments, faculties and the general academic secretariat. Thus, someone who has gone through such a rigorous educational system will tend to replicate it in the provision of services.

**6) Socio-Professional Category and Corruption**

Bosses are five times more likely to engage in corruption than others. With the responsibility he has, a boss of a sole proprietorship, small or medium-sized enterprise is more likely to engage in corruption. To minimize the taxes owed to the state, some bosses make arrangements with the agents responsible for collection to reduce their dues in return for a bribe, which in most cases is a monthly bonus. Others go further by reducing the real number of workers (false declaration of the number of workers) in order to avoid paying the IPR and the CNSS contribution, whereas these taxes are paid per head.

## 5. Conclusion

Corruption is a scourge with known causes and unfortunate consequences. When it is established as a system for managing public affairs, it is difficult to eradicate.

Moreover, the contribution of this study is worth its weight in gold by highlighting the socio-demographic and socio-economic factors associated with corruption.

Indeed, the results show that Congolese who engage in corruption are male and live in urban areas, in the provincial capitals. They are aged between 25 and 34 years.

These Congolese have a higher or university level of education and are mostly "bosses" of their own businesses. This reinforces the direction of our hypotheses, which we confirm. Thus, the link between education and corruption in the Democratic Republic of Congo is clearly established. It is largely a matter of men.

## 6. Recommendations

Any anti-corruption strategy must aim at drastically changing behavior and attitudes in order to create a collective climate hostile to corruption. This can be achieved through mutual monitoring by assigning the same task to two people from different offices. An internal or external evaluator is supposed to give his or her point of view immediately after the applicant for services has passed through these two offices and punish the corrupt person if necessary.

Also, there is a need to digitize the circuit through which all sensitive files correlated with the payment of services pass. This will involve making public the pricing of any service for which the state expects revenue.

Moreover, the institution of surveillance cameras in all offices could compromise the mobilization of revenue that actually benefits the state.

At the level of universities and higher institutes, both private and public, lock in recruitment only to the deserving. In this way, teachers remain responsible for their performance and for the correction of the exams, and not for the exam papers, which are managed by a neutral unit under the authority of the presidency of the Republic or the ministry in charge.

The consolidation of these strategies requires a decent salary for all those working in the public services that are vulnerable to corruption.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

Bardhan, P. (1997). Corruption and Development: A Review of Issues. *Journal of Economic Literature, 35,* 1320-1346.

Di Tella, R., & Shargrodsky, E. (2003). The Role of Wages and Auditing during a Crackdown on Corruption in the City of Buenos Aires. *Journal of Law and Economics, 46,* 269-292. https://doi.org/10.1086/345578

Dollar, D., Fisman, R., & Gatti, R. (2001). Are Women Really the "Fairer" Sex? Corruption and Women in Government. *Journal of Economic Behaviour & Organization, 46,* 423-429. https://doi.org/10.1016/S0167-2681(01)00169-X

Gatti, R., Paternostro, S., & Rigolini, J. (2003). *Individual Attitudes toward Corruption: Do Social Effects Matter*? Policy Research Working Paper Series 3122, The World Bank. https://doi.org/10.1596/1813-9450-3122

Hunt, J. (2004). *Trust and Bribery: The Role of the Quid Pro Quo and the Link with Crime*. NBER Working Papers 10510, National Bureau of Economic Research, Inc. https://doi.org/10.3386/w10510

Hunt, J., & Laszlo, S. (2005). *Bribery: Who Pays, Who Refuses, What Are the Payoffs*? NBER Working Papers 11635, National Bureau of Economic Research, Inc. https://doi.org/10.3386/w11635

Huntington, S. (1968). *Political Order in Changing Societies*. Yale University Press.

Kaufmann, D., & Wei, S.-J. (1999). *Does "Grease Money" Speed up the Wheels of Commerce*? The National Bureau of Economic Research Working Paper, No. 7093, Washington DC. https://doi.org/10.3386/w7093

Lavallee, E., Razafindrakoto, M., & Roubaud, F. (2008). *Les mécanismes à l'origine de la corruption: Une analyse sur micro-données africaines: Document de travail* (p. 29). Développement Institutions & Analyses de Long terme. http://bibliotheque.pssfp.net/livres/LES_MECANISMES_A_L_ORIGINE_DE_LA_CORRUPTION.pdf

Leff, N. (1964). Economic Development through Bureaucratic Corruption. *The American Behavioural Scientist, 8,* 8-14. https://doi.org/10.1177/000276426400800303

Mauro, P., Medas, P., & Fournier, J.-M. (2019). *Le coût de la corruption in Finances & Dévelopement*. Fonds Monétaire International. https://www.imf.org/-/media/Files/Publications/Fandd/Article/2019/September/FR/the-true-cost-of-global-corruption-mauro.ashx

Mediacongo (nd). *Actualite*. https://www.mediacongo.net/article-actualite-107608_lutte_contre_la_corruption_plus_de_2_ans_apres_sa_creation_l_aplc_paufine_encore_ses_strategies.html

Ministère du Plan-RDC (2016). *Rapport de l'Enquête avec Questionnaire Unifié à Indicateurs de Bien être de Base en République Démocratique du Congo, INS*.

Mocan, N. (2004). *What Determines Corruption? International Evidence from Micro Data*. NBER Working Paper No. 10460. https://doi.org/10.3386/w10460

Mokaddem, L. (2010). *La corruption compromet-elle la réalisation de l'éducation pour tous? Les canaux de transmission* (p. 27). Faculté des Sciences Economiques et de Gestion de Tunis, 6 rue Abou Zakaria El Hafsi Menzah 7, 2037, Tunis.

Mtiraoui, A.-B.-A. (2020). *La corruption: Fondements microéconomiques et Déterminants macroéconomiques*. https://hal.archives-ouvertes.fr/hal-02533733/document

Myrdal, G. (1968). *Asian Drama: An Inquiry into Poverty of Nations*. Pantheon Books.

National Textual and Lexical Resources Centre (nd). *Definition-Etymologie*. https://www.cnrtl.fr/definition/corrompre

Radiookapi (nd). *Actualite*. https://www.radiookapi.net/2017/04/29/actualite/politique/haut-lomami-une-motion-de-defiance-contre-le-gouverneur-mbuyu

Seka, P. R. (2005). *Corruption et capital humain: Quels rapports* (p. 19). Université de Cocody; FR-SEG, Ouagadougou. http://www.saga.cornell.edu/saga/educconf/seka.pdf

Seligson, M. A. (2006). The Measurement and Impact of Corruption Victimization: Survey Evidence from Latin America. *World Development, 34,* 381-404. https://www.vanderbilt.edu/lapop/multicountry/2004-corruption.pdf https://doi.org/10.1016/j.worlddev.2005.03.012

Swamy, A., Knack, S., & Azfar, O. (2001). Gender and Corruption. *Journal of Development Economics, 64,* 25-55. https://doi.org/10.1016/S0304-3878(00)00123-1

Torgler, B., & Valev, N.-T. (2004). *Corruption and Age*. Working Paper No. 2004-24, Center for Research in Economics, Management and Arts (CREMA). https://www.econstor.eu/bitstream/10419/214310/1/2004-24.pdf

Virtual Anti-Corruption Resource Centre (nd). *La corruption dans le secteur de l'éducation*. https://www.u4.no/publications/la-corruption-dans-le-secteur-de-la-sante-methodes-d-apprentissage-et-d-enseignement-2

Waterbury, J. (1973). Endemic and Planned Corruption in a Monarchical Regime. *World Politics, 25,* 533-555. https://doi.org/10.2307/2009951

World Bank (nd). *Report*. http://www1.worldbank.org/publicsector/anticorrupt/corruptn/cor02.htm