
The Influence of Public Perception of Corruption and COVID-19 on the Implementation of National Security Policies and/or Programmes in a Caribbean Nation

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Abstract

Introduction: Corruption has been a long-standing problem in the Jamaican society. Successive administrations have promised strong anti-corruption actions, but in 2019 Jamaica fell from 70 to 74 on the Corruption Perception Index published by Transparency International, indicating the problem is getting worse. Despite this, there has been relatively little research on the full range of impacts that corruption has on national and citizen security. This study, therefore, seeks to answer whether the perception of political, business and administrative corruption has negatively impacted Jamaica's national security.

Methods and materials: The study employed an associational research design and the standardized instrument was used to collect data from 1,100 Jamaicans. A non-probability sample design was used to collect data from Jamaicans via way of Survey Monkey.

Findings: The public perception is that the level of corruption in Jamaica is very high (2.6 ± 1.3 , 95% CI: 2.57-2.72, with the maximum being 4.0). Males are less likely to believe that there is serious corruption in Jamaica (70.7%, $n=376$) compared to females (83.4%, $n=697$; χ^2 ($df=1$) = 5.847, $P = 0.016$). Jamaicans indicated that the national security policies and/or measures implemented to protect the society are low-to-moderate effective (86.4%) with 14.7% of males indicating that the effectiveness of national security policies and/or measures are high compared to 13.0% of females. Generally, Jamaicans do not believe that the national security policies and/or measures are protecting them, with males having a greater belief in the effectiveness of national security policies and/or measures than females. The findings revealed a negative statistical correlation between corruption and national security policies and/or measures, with the relationship being an exceptionally weak one ($r_{xy} = -0.091$ or -9.1%, $P = 0.003$). This finding implies that corruption plays a minimal role on

influencing national security policies and/or measures in Jamaica. A linear model can be established with selected independent variables (corrupt institutions, corruption index, COVID-19, gender, and age) on national security ($F [5,896] = 6.028, P < 0.0001$). Of the 5 independent variables chosen for examination on national security, four emerged as factors of national security. The four factors are corrupt institutions, corruption index, COVID-19, and age. The four factors account for 3.3% (R^2) of the variance in national security.

Conclusion: These findings should help to frame the discussion of corruption in Jamaica.

Keywords: Corruption, Corruption Barometer, COVID-19, National Security Policy.

Background

Corruption can be defined as dishonest behavior by those in positions of power, such as managers and/or government officials (Waller, Bourne, Minto, & Rapley, 2007; Waller, Satchell, Daley, & Hawthorne, 2017; Wei, 2000; Transparency International, 2020). It can include giving or accepting bribes or inappropriate gifts, double-dealing, under-the-table transactions, manipulating elections, diverting funds, laundering money, and defrauding investors (Wei, 2000; Helps, 2012; Investopedia, 2018). In one way or another, countries across the world have been victims to corruption, sometimes stemming from years of alleged scandals and misappropriation of public funds by different governmental bodies (Tanzi, 1998; Terziev, Nichev, & Bankov, 2016; Transparency International, 1999-2017).

In 2007, a cross-sectional probability survey of 1,140 Jamaicans found that 85% of respondents indicated that public officials can be easily corrupted and that the police force is the most corrupt public institution in the society (Waller, et al., 2007). In 2018, Transparency International (2018) also found that the most perceived corrupt public institution in Latin America and the Caribbean was the police force (47% of people). One year prior to the Transparency International report, Waller, Satchell, Daley, & Hawthorne (2017) empirically established that the police force was the third most corrupt institution in Jamaica. The reality is that for decades people believed that corruption was rampant in the society, and this was not addressed by political administrators. In 2006, the Prime Minister of Jamaica, (the Most Honourable Portia Simpson-Miller) made the following statement in her inauguration public address: “I want to pledge to the Jamaican people to work tirelessly to eradicate corruption and extortion. I am committed to their eradication” (Jamaica Information Service, 2006: 1). According to Waller, et al., (2007) “It should therefore come as no surprise, neither to the novice nor the schooled Jamaican criminologist, that corruption claimed high priority on the new Prime Minister’s agenda” (p. 1) simply because the

media brought this phenomenon to the mindset of people. Despite the perspective of various political agents, alleged corruptions have continued unabated(See Table 1).

Disclaimer: Some of the individuals listed below have not yet been found guilty of the charges laid against them.

**Table 1. People arrested and-or found guilty of corruption
by the courts in the world (including Jamaica)**

Year	Details	Country	Status
2011	Keiko Fujimori, Opposition leader	Peru	Guilty
2013	Eric Stevenson, New York State Assemblyman	US	Arrested
2016	Corporal Damion Martin	Jamaica	Arrested
2016	Senator Abel Nazario	Puerto Rico	Arrested
2017	Jephthah Ford, a medical doctor and People’s National Party(PNP)politician	Jamaica	Guilty
2019	Ruel Reid, former Minister of Education	Jamaica	Arrested
	Prof Fritz Pinnock, former president of Caribbean Maritime University	Jamaica	Arrested
	Kim Brown, Counsellor of Brown’s town Division	Jamaica	Arrested
	Detective Corporal Valrie McIntosh	Jamaica	Guilty
	Constable Otwani Deer	Jamaica	Guilty
	Sharen Reid, wife of former Minister of Education	Jamaica	Arrested
	Sharelle Reid, daughter of former Minister of Education	Jamaica	Arrested
	Michel Temer, former Brazilian President	Brazil	Arrested
	Alejandro Toledo, Ex-Peruvian President	Peru	Arrested
	Nairobi County Governor Gideon Mbuvi	Kenya	Arrested
Bongani Bongo, former state security minister	South Africa	Arrested	
2020	Massachusetts State Rep. David Nangle	US	Arrested
	Detective Constable Oneil Barrett	Jamaica	Guilty

In other cases, the citizens took matters in their own hands by holding a mass protest against government negligence when handling the nation’s money. According to Mind for Peace (n.d.), there are different types of corruption. These include political corruption, business corruption, corruption in health care education, etcetera. They have postulated that corruption creates huge psychosocial and socioeconomic losses to the public and is highly prevalent in the world as working-class and innocent people are not strong enough to question or object to them. Corruption also significantly challenges democracy. Leslie (2010) posits that:

Corruption in its varied forms limits the constitutional rights of citizens to exercise their freedom to choose their desired leader through a free and fair voting process. When brute force and

intimidation are employed, citizens are forced to simply vote for the leader that the don requires them to vote for. These elected representatives usually fail to address the social and economic concerns of the people who they 'represent,' yet they are sure of a victory whenever there is an election. Situations like these do not only indicate an attack on democracy, but it is also a clear sign of human rights violation.

Corruption is a longstanding issue in the developing nations (Waller, et al, 2007; Transparency International, 2014-2019; Harriott, Lewis, & Zechmeister, 2014). In 2018, Transparency International ranked Jamaica as the 70th most corrupt of 180 nations. This fact has worsened since 2016 (see Table 2) when the former Prime Minister, Portia Simpson-Miller (Waller, et al., 2007) indicated that her administration would address the issue(see Table 2).

Table 2. Corruption Perception Index for selected nations, 2015-2019

Rank ¹	Country	2019	2018	2017	2016	2015
70	Jamaica	43	44	44	39	41
60	Cuba	48	47	47	47	47
168	Haiti	18	20	22	20	17
12	Canada	77	81	82	82	84
12	U. K	77	80	82	81	81
146	Nigeria	26	27	27	28	26
30	Barbados	62	68	68	61	NA
29	Bahamas	64	65	65	66	NA
4	Switzerland	85	85	85	86	86
1	Denmark	87	88	88	90	91
1	New Zealand	87	87	89	90	91
70	Suriname	44	43	41	45	36
9	Germany	80	80	81	81	81
85	Trinidad	40	41	41	35	39
85	Guyana	40	37	38	34	29
23	United States	69	71	75	74	76
180	Somalia	9	10	9	10	8
96	Colombia	37	36	37	37	37

Source: Adopted from transparency.org (2018)

¹The Ranks are based on calculations for 2019

Table 2 presents the degree of corruption in many nations including Jamaica. Undoubtedly, the issue of corruption has been increasing in Jamaica and the numbers can be concretized with some cases. Hence, some cases of corruption will be documented here, providing some context for increasing corruption in Jamaica. In October 2019, the former Jamaican Minister of Education, Youth, and Information, Mr. Ruel Reid, his wife Mrs. Sharon Reid, their daughter Ms. Sharelle Reid, Councillor Mrs. Kim Brown-Lawrence, and the President of Caribbean Maritime University (CMU), Professor Fitz Pinnock, were all arrested on allegation of fraud,

misappropriation of public funds, and corruption (The Jamaica Gleaner, 2019a; Barrett and Hyman, 2019). Scandal at the CMU has already cost Jamaica's minister of education his job. Now he, his wife and daughter, the principal of the school and a local government official are all before the court facing charges of corruption. These and other cases may be accounting for the Opposition Leader of Jamaica, Dr. Peter Phillips, calling for updates on corrupt practices in the society (The Jamaica Gleaner, 2019c).

In 2018 the country's Energy Minister, Dr. Andrew Wheatley, was also implicated in another major corruption probe at the Petroleum Corporation of Jamaica (PCJ) (The Jamaica Observer, 2018). His then Human Resource Manager, Yolande Ramharrack and Former General Manager, Floyd Grindley were also forced to step down in light of several management breaches (Hall, 2019). However, the JLP, has been adamant that the corruption did not take root under their administration but had soared before under the management of Opposition Spokesman on Energy, Phillip Paulwell (Jamaica Labour Party, 2018).

There have been many allegations of corruption existing among the privileged class at the expense of the working class (Bardhan, 1997; Lyman, Fletcher, & Gardiner, 1978) which has significant implications on Jamaica's National Security. National security can be defined as the requirement to maintain the survival of a state using economic power, diplomacy power projection, and political power (Katzenstein & Okawara, 1993; Lustgarten & Leigh, 1994; Myles, 1995; Holmes, 2015; United Nations, 2020). Holmes (2015) indicated that "National security is the safekeeping of the nation as a whole. Its highest order of business is the protection of the nation and its people from attack and other external dangers by maintaining armed forces and guarding state secrets" (p. 23). For any country or state to possess national security it needs to possess economic security energy, environmental security etc. However, according to the law teacher, security threats involve not only conventional foes such as other nation-states but also non-state actors such as narcotic cartels, multinational corporations and non-governmental organisations (The Law Teacher: Free Law Study Resources, 2018).

From Waller et al.'s study (2007), Jamaicans indicated that the police force is the most corrupt public institution in the society. Professor Stephen Vasciannie, former president of the University of Technology (UTECH), summarized police misconduct (killing) as a 'disregard for human rights' (The Jamaica Gleaner, 2008). Both political and public sector misconduct and corruption have continued to increase in Jamaica, and these seems to be worsening with time based on the Corruption Perception Index. It appears that civil society, the media, and non-governmental watchdog groups have been responsible for bringing to the public's attention corrupt practices of public officials (The Jamaica Gleaner, 2019a, 2019b; Robinson, 2019). This therefore means that more cases are likely to be reported by the media and the country's national integrity watchdog. Social media has become the voice of civil society and the general populace's medium of highlighting corrupt practices, because they seek a corrupt free society (Scott and Woods, 2019). The continued rise in corruption in Jamaica (Transparency International, 2019; Robinson, 2019) is a cause for concern as this retards economic growth and development. This problem was the

rationale for this study, and it provided some insights into how social media is aiding the ‘fight’ against corrupt practices in the society. The research also provided insights into implications of political, business, and administrative corruption on Jamaica’s national security.

According to Terziev (2016), corruption practices directly infringe on the normal functioning of the state; they damage its redistributive mechanisms and limit the constitutional rights of the citizens. In this light the high degree of public tolerance promotes the dissemination of corruption at all levels and creates prerequisites for turning it into a norm that is perceived as generally accepted. Corruption seems to have taken root in the Jamaican society, casting doubt on the effective governance of the country. Based on the 2019 Corruption Perspective Index (C.P.I), Jamaica was ranked 74 and this declined to 70th in 2018. According to Transparency International, who funds the yearly index, the 2019 analysis showed that corruption was more pervasive in countries where big money can flow freely into electoral campaigns and where governments listen only to the voices of wealthy or well-connected individuals. (Transparency International: The Global Coalition Against Corruption, 2019).

Although political corruption seems to be the most popular practiced abuse of power, Jamaica have also experienced business and administrative corruption. According to Mousavi (2013) the consequences of administrative corruption appear in the form of such problems as abusing one’s position, bribery and embezzlement, fraud, nepotism, injustice, blackmail, leaving the client dissatisfied, stealing the property and assets of organizations, selling secret information of the organization, etc. Similarly, business corruption relates to dishonesty in government and private entities and can be categorized as fraud, bribery, embezzlement, and kickbacks (Segraves, 2018). Webley (2013), postulates that corruption of this nature stifles economic growth, especially those of emerging economies. He also notes that the prevalent and continuous presence of corruption in these aspects of our country’s business can discourage foreign investors from investing in the country. This further supports the fact that corruption at the business, political, and administrative levels do have negative implications for the country’s national security. The people of a country suffer when their tax contributions are being misappropriated. This stifles the country’s economy when foreign investors are fearful of investing in ventures offered by the country. This study examined the following research assumptions and hypotheses:

1. The level of public perception on corruption is high in Jamaica.
2. More than 70% of respondents believe that there is a high prevalence of national security in Jamaica.
3. Political, business, and administrative corruption negatively impacts Jamaica’s national security.
4. Jamaicans view corruption among the five leading national problems in the society.
5. COVID-19 directly influences national security as well as corruption in a society
6. Corruption directly influences crime and victimization in Jamaica

Literature Review

Another, less obvious route involves placing contractors under pressure to take on unnecessary labour. About 80% of all major construction projects in Jamaica come via the government, so all major contractors understand the need to maintain good relations with the party in power, and some are particularly close to key decision-makers in one or both of the parties. If a contractor is awarded a large contract, he may then be expected to take on additional labour from other organizations that are affiliated to the party in power. This may take the form of providing site 'security', construction materials, and casual labour, all of which will come with an additional overhead. This means that the construction is significantly more expensive than it should have been. The difference is the cost of corruption. Corruption, fraud, extortion, and money laundering are a cost to human development, which can be referred to as economic crimes (Mehta, n.d). The people of Jamaica pay a quadruple price for corruption, including:(1) The loss of legitimate businesses, which cannot compete with those who are corruptly favoured. (2) Lost economic development, investment, and prosperity. (3) A legacy of deficient infrastructure (National Security Policy).

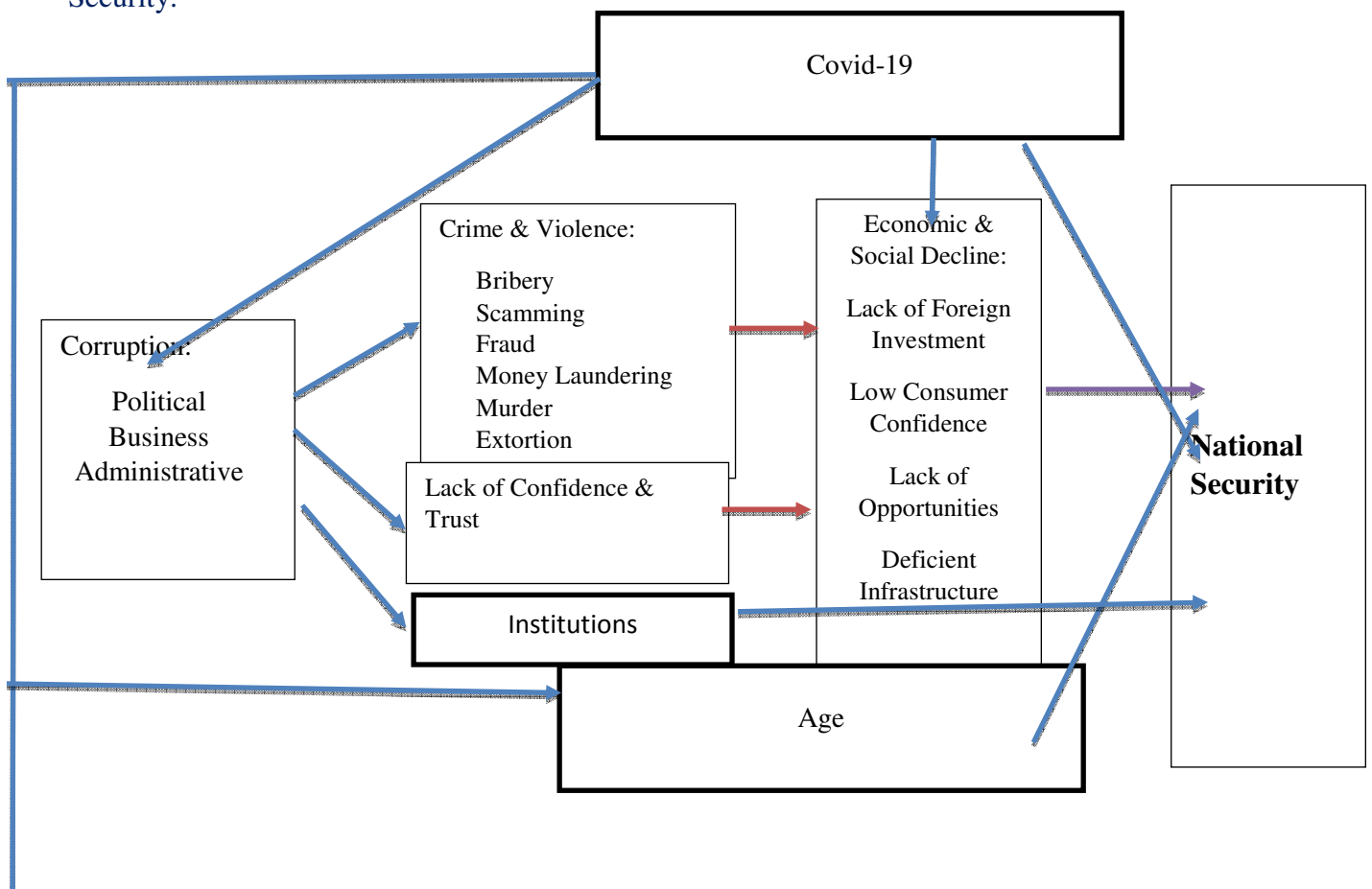
In establishing a foundation for this research, a conceptual framework was needed to support the topic and give guidance to the arguments posited by this paper. This concept helped the researchers with supporting documentations to draw conclusions and eventual recommendations at the end of this paper. Abend (2008) describes theoretical frameworks as theories that introduce and explain why the research problem under study exists. Empiricism plays a critical model in building of scientific theories. According to McVoy, Wang, and Bhat (1989), empiricism refers to collection of data using evidence that is collected through observation or experience or by using calibrated scientific instruments. All the above origins dependents on observation and experiments to collect data and test them to arrive at conclusions. The origin was derived from the ancient empiricists, a fundamental understanding that powered the emergence of medieval science during the renaissance period (Bhat, date).

Corruption at the government level leaves a country or state in the possible path of unrest, instability, and economic decline (key components that govern a country's national security). A prime example of this is Jamaica's Caribbean neighbour, Haiti. Upon being the first liberal black island in the Caribbean, following the Haitian Revolution, the country has been marred by 'poor governance' practices. In 2018, the citizens of Haiti participated in days of mass protest in the capital, Port-au-Prince. According to Milfort (2019) in Equal Times (date), a trilingual news and opinion website focusing on labour, human rights, culture, development, the environment, politics, and the economy from a social justice perspective,

The root of this series of popular protest movements are a multitude of causes: falling purchasing power, the opacity of public spending, bad governance, galloping inflation and the devaluation of the national currency against the dollar. As a result, many Haitians are leaving the country in search of a better life elsewhere, sometimes risking their lives or their rights. About 10 to 12 per

cent of Haitians live outside their home country, according to the Zile Foundation, quoting statistics from the International Organisation for Migration (IOM), mostly in the Dominican Republic, Canada, the United States, Brazil and ever greater numbers in the rest of south America. (Milfort, 2019)

Milton also cited Economist Emmanuela Douyon in his article, who stated that the structural problems in Haiti are a long way from being solved. She further argues that the response to the demonstrations has been purely political and have not tackled the protesters’ demands. On March 18, 2018, Haiti’s former Prime Minister, Jen-Henry Céant resigned following a vote of no confidence (Milfort, 2019). The then President, Jovenel Moise, was later pressured to resign amidst allegations of mismanaging the country’s economy and tolerating corruption. The protest for his resignation led to closure of many schools across the island as violence and tension soared throughout the French territory. This incident is a prime example of how corruption can affect a country’s national security which ultimately comprises protection for its citizens and economic prosperity. Figure 1 displays a conceptual framework of how corruption can affect National Security.



Source: Current authors

Figure 1. Conceptual Framework of Corruption and National Security Model

Political corruption

Political corruption is described as “the behaviour of (elected) public officials which diverges from the formal components - the duties and powers, rights and obligations - of a public role to seek private gain” (Kramer, 1997). Over the years Jamaica has been marred by political scandals that seemed to have manifested itself both in the People’s National Party as well as the Jamaica Labour Party. Waller, Bourne, Minto, and Rapley (2007), in examining the landscape of political corruption in Jamaica, stated:

The present reality of Jamaica is that the laws governing acts of political corruption-the Jamaica Constitution, The Corruption Prevention Act of 1931 and the Representation of the People’s Act of 1944-are weak in some instances and/or not enforced in others (Waller, Bourne, Minto & Rapley, 2007).

Following Jamaica falling four spaces on the 2019 Corruption Perception Index, Head of the National Integrity Action (NIA), Professor Trevor Munroe, blamed the fall in ranking on the country’s political corruption woes. He noted that the sacking of former Education Minister Ruel Reid and his subsequent arrest and corruption-related charges contributed to the fall. He also revealed that another possible contribution to the fall in ranking was the disclosure by the Integrity Commission that the statutory declaration of Prime Minister Andrew Holness was not “cleared” (Campbell, 2020).

Business corruption

Corruption is one of the worst enemies of businesses because it can result in far-reaching consequences, including total closure of a company. This vice can be perpetuated by an individual or a clique of employees within a business organization. Corruption in business involves misappropriation of funds, bribery, misuse of office by company officials and dishonesty in financial matters. Its magnitude notwithstanding, corruption can hurt the image of the business and jeopardize its profitability (Robinson, 2018). Rigoglioso (2007) also postulates that prevalent business corruption is associated with lower GNP per capita, and lower investments and growth rates. A research by Martin Rossi (date) of the Universidad de San Andrés in Argentina, also found that corruption in business damages nations by making firms inefficient (Rigoglioso, 2007).

Administrative corruption

As with Business corruption, Administrative corruption deals with abusing one’s public power for private gain. Bribery and abusing one’s position for private gain can be considered the common aspect of the definitions. The consequences of administrative corruption appear in the form of problems such as abusing one’s position, bribery and embezzlement, fraud, nepotism (favoritism), injustice, blackmail, leaving the client (beneficiaries) dissatisfied, stealing the

property and assets of the organization, selling secret information of the organization (Administrative corruption: Ways of tackling the problem, 2013).

This nature of corruption in Jamaica can be likened to incidents such as a case in 1990, when JAG Smith, a former labour minister in the then Jamaica Labour Party (JLP) administration, and Probyn Aitken, then Permanent Secretary in the Labour Ministry, were convicted and sent to prison for corruption charges related to the United States Farm Work Programme (The Jamaica Gleaner, 2020). The scandal was described by the Florida-based Sun-Sentinel as the biggest government scandal in Jamaica's history. The ordeal left workers in Florida's sugarcane fields complaining for many years that large portions of their wages had been delayed or never deposited in their bank accounts back home in Jamaica. In addition, Jamaican government audits later revealed that the money had been diverted from the Canadian part of the program to a Belgian bank. The money was reportedly spent on a Mercedes-Benz, a Volkswagen, architectural drawings, a repair business owned by Smith, travel on the Concorde, agricultural equipment, and private contract work (Gibson, 1990).

National Security

National security may be described as the measures taken by a State to ensure its survival, and protection of its interests. National security is considered to be synonymous with defence from external threats in particular. The term National Security was developed in the United States on July 26, 1947 and signed by the US President Harry S. Truman (National Security Act of 1947).

In the period after World War II, as the ideological struggle between the United States and the Soviet Union intensified, the federal government became increasingly concerned about protecting scientific information. The Atomic Energy Act of 1946, for example, precluded public dissemination of most of the results of the Manhattan District Project or subsequent atomic research. The act, which was amended in 1954, included a "born secret" provision, meaning that all information about atomic energy was automatically classified at the moment of its creation. In 1950 President Truman issued an executive order that contained a vaguely defined standard for protecting national security as the rationale for classifying secret documents. This justification on the grounds of a need to protect national security has continued to the present day, although the definition of national security has been modified several times (National Academy of Engineering, 1982).

In reality, and particularly in the Jamaican context, national security includes the maintenance of armed forces; maintenance of order by non- military agencies, including emergency preparedness; creation of resilience and redundancy in national infrastructure; maintenance of intelligence services to deter threats; protection of sensitive information, and maintenance of law and order internally through the police and other arms of the criminal justice system (National Security Strategy for Jamaica Towards a Secure and Prosperous Nation , 2006). According to a Green Paper submitted by the then Minister of National Security, Dr. Peter Phillips, a national security strategy (NSS) is crucial to pull together several initiatives and to put in place other

mechanisms that are required to ensure a comprehensive, multifaceted approach to Jamaica's security issues (National Security Strategy for Jamaica Towards a Secure and Prosperous Nation, 2006). According to the Government of the Netherlands, the six greatest threats to national security are (1) territorial security (2) economic security (3) ecological security (4) physical security (6) social and political stability (Government of Netherlands).

According to the government of Jamaica, threats to the country's National Security include (1) crime (2) terrorism (3) military and paramilitary (4) disasters & sustainable loss of natural resources (5) socio-economic threats and (6) key capabilities. Under crime, the government's national security policy lists organised crime as a major threat. This includes corruption at the government and law enforcement levels which deplete a weak State's resources (The Government of Jamaica, nd). The policy also highlighted white collar crimes as a threat to national security, which poses a risk and a cost to businesses, from theft of intellectual property to financial crimes and the fraudulent use of commodity and service brands which run into billions of dollars annually (The Government of Jamaica, nd).

When corruption is not addressed it weakens the democratic fabric of a country. When the right to engage in free and fair elections is threatened it can prove detrimental to national security when citizens are forced to live under a rulership that they did not willingly to support. According to Grossett (date)

Corruption limits the constitutional rights of citizens to exercise their freedom to choose their desired leader through a free and fair voting process. When brute force and intimidation are employed, citizens are forced to simply vote for the leader that the don requires them to vote for. These elected representatives usually fail to address the social and economic concerns of the people who they 'represent,' yet they are sure of a victory whenever there is an election (Grossett).

Sives, (2002) highlights that clientelism in Jamaica has filtered through both the People's National Party (PNP) and the Jamaica Labour Party (JLP) and has been instrumental in creating a hegemonic society. She notes that one of the main features of clientelism is that it can be controlled by elite actors; and that unlike violence that threatens the political system, this violence does not challenge the system under which it operates. Therefore, in cases such as these clientelism in the political domain can be a catalyst for corruption that can lead to the death of citizens when they fail to vote for a particular party. One prime example of this was the 1980 General Election in Jamaica which led to over 800 murders in a bitter fight influenced by ideology.

Corruption Barometer

According to Transparency International, the Global Corruption Barometer (GCB) is the world's largest survey of corruption done worldwide?, It asks citizens from various parts of the world about their direct personal experience with bribery in their daily lives, their perceptions of

corruption challenges in their own countries, and their willingness to act against corruption (Transparency International, 2017). The Barometer, which debuted in 2003, is derived from a subset of questions commissioned through the survey. The survey investigates a wide variety of areas and issues across many countries. Fieldwork for the survey was first conducted in July 2002. According to the international non-profit organization

Question 1 looks at how seriously respondents believe corruption affects the different spheres of life, such as their personal and family life, the business environment, political life, and the culture and values of society in their country. Question 2 investigates respondents' expectations as to how the level of corruption will change over the next three years. Finally, Question 3 asks respondents for their first choice to eliminate corruption from an institution such as courts, political parties, police, the private sector etc. (Transparency International, 2003)

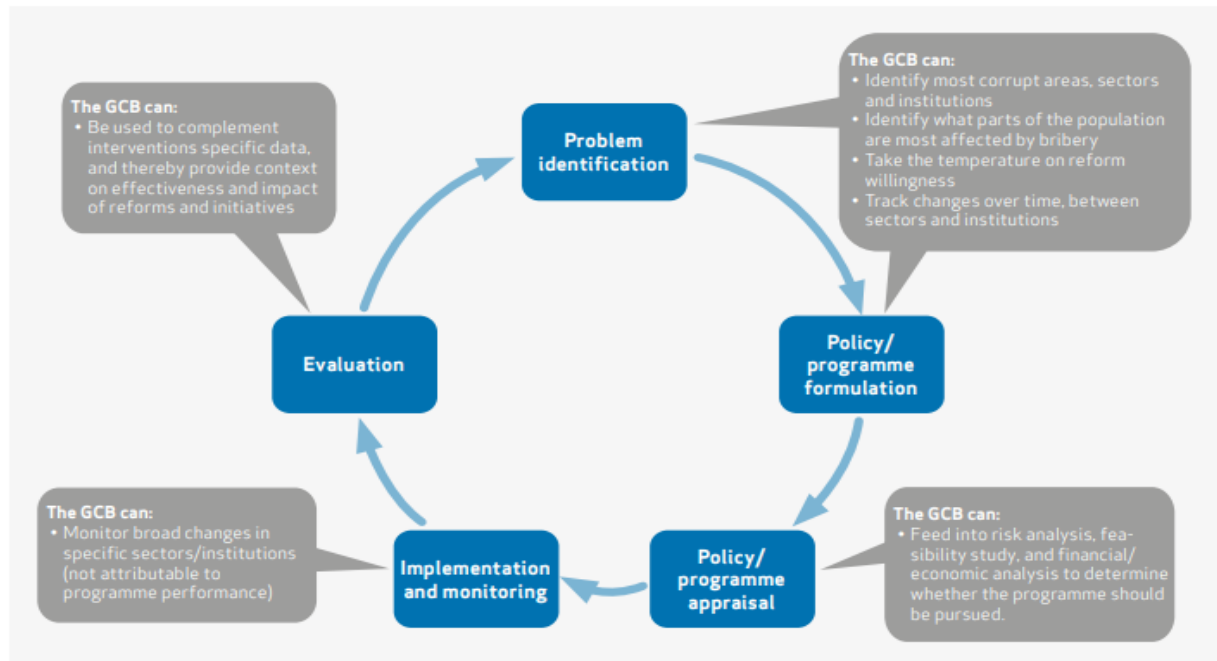
According to the founders, depending on the country context, interviews are conducted either face-to-face, by telephone or online surveys. The survey can also identify regional and global trends and make cross-country comparisons with respect to people's perceptions and experiences of corruption. Additionally, unlike most other indices, the GCB allows for disaggregation of data by gender, income, age group, and urban/rural residence. This is useful for policymakers and programme managers to tailor their interventions and track progress (Chr. Michelsen Institute, 2012). The report further postulates that as a barometer, the GCB measures the "pressure" of corruption based on people's attitudes and experiences, not only with respect to governments' effectiveness in dealing with the issue, but also regarding public readiness to stand up against corruption. It is based on an in-country survey; it is harder for governments to dismiss the findings compared to international surveys based on "expert" opinion. Figure 1 shows an analysis of when and how the GCB is useful in relation to different stages in the policy/programme cycle. The GCB data is particularly useful at the early identification and formulation stages, for diagnostic purposes, but can also be used for appraising and monitoring and evaluating policies, programmes, and institutions.

Social Media and Corruption

Social media is computer-based technology that facilitates the sharing of ideas, thoughts, and information through the building of virtual networks and communities (Dollarhide, 2019). By design, social media is internet-based and gives users quick electronic communication of content. Content includes personal information, documents, videos, and photos. Users engage with social media via computer, tablet or smartphone via web-based software or web application, often utilizing it for messaging (Dollarhide, 2019). Social media in Jamaica has played and is continuing to play an integral role in communication in the society by being a medium through which to publish and broadcast information to a large number of people in a short period of time. Journalists, politicians and public influencers have been able to use new media as an avenue to communicate news and information to the masses. This can be seen by the active Instagram, Twitter, and Facebook pages that are owned by Ministers and Government Ministries. Prime

Minister of Jamaica, Andrew Holness, has in the past used his twitter account to announce policies such as the declaration of States of Public Emergencies and Zones of Special Operations (Twitter, 2019).

Figure 1: The Global Corruption Barometer's usefulness in relation to different stages in the policy/programme cycle



Source: Transparency International (2012)

According to Vox CEPR Policy Portal, an online platform that was set up to promote research-based policy analysis and commentary by leading economists, social media has become a channel through which citizens can hold public officials and corporate leaders to account. Social media platforms such as Facebook and Twitter have quickly become an important alternative source of information for citizens, as low entry barriers make it much easier for civic activists and ordinary citizens to share information about wrongdoings by public officials or corporate leaders (Ruben Enikolopov, 2016).

The World Economic Forum (2014) indicates that communication via social media is most effective when it is integrated within a broader strategy of reporting and reform. This requires coalition building and wider support from those in government and the private sector. Therefore, social media can support how these actors coalesce around an issue but cannot single-handedly champion anti-corruption legislation or compliance procedures (World Economic Forum, 2014).

Journalists and media houses in Jamaica have also used social media as a tool to highlight corruption in Jamaica. During the scandal and the Energy Minister's scandal, popular journalists such as Nationwide's, Abka Fitz Henley and Television Jamaica's, Andrea Chisolm, took to social media sites such as Twitter to provide live updates on news and information related to the case (Henley, 2019).

Research Methodology

Research Design

An associational research design was used for this study thereby allowing for descriptions and bivariate correlations (Leedy, and Ormrod, 2009; Babbie, 2010; University of Leicester, 2011; Neuman, 2014; Krause, 2018). The associational design allows for the examination of relationships between two or more variables (Walliman, 2011; Linder, Schnipper, & Middleton, 2012; Lau, 2017; Krause, 2018). The prime focus of this study was to evaluate the influence of public opinion of corruption on national security, therefore, this research aptly fits an associational research design (Hoy, 2009; Babbie, 2010; Neuman, 2014; Rea & Parker, 2014; Lau, 2017). The study was conducted using a non-probability approach (i.e. purposive sampling). This research is an associational cross-sectional design, using a standardized instrument (see Appendix I). The survey method allows for the 1) measurement, 2) statistical analyses, 3) objectivism (Blalock, 1982; Blalock and Blalock, 1968; Powell, Bourne and Waller, 2007; Crotty, 2005; Creswell, 2014; Rea and Parker, 2014), and the collection of a large volume of data using a standardized instrument.

Population and Sampling design

The population for this research was resident Jamaicans as on May 1, 2020. Using 2017 population for Jamaica and the sample was based on 2017 population estimates for Jamaica. The number of people for the sample was computed by using a population of 2,728,339 Jamaicans, 95% confidence interval, and a 3.0% margin of errors. Based on those conditions, the sample frame is 1,067 respondents. The sample was selected based on (inclusion-exclusion criteria) 1) being a resident Jamaican at the time of the survey (May 1-30, 2020); and 2) people of Jamaica who were residence on the day of the research (see **Table 3**). This means a sample of 1,067 Jamaicans constituted the sample frame, and this was guided by the chosen statistical analysis used for the current study (Green, 1991; Maxwell, 2000). Owing to the COVID-19 and the constraints of human mobility, the research team opted to use Survey Monkey, and the prospective respondents were purposefully selected via their email address or WhatsApp telephone numbers. Based on the uncertainty of employing this data collection medium, the research team sent the instrument to 1,327 resident Jamaica across the various parishes in keeping with the computed numbers in Table 3. An addition 20 people were sent the instrument in each parish based on the computed sample size, with the response rate being 82.6% (n=1,096).

Table 3. Population of Jamaica for 2017 and calculated sample for current study

Parish	2017			
	Population	Pop (in %)	Sample	Sample (in %)
Kingston & St Andrew	670,183	24.6	262	24.6
St Thomas	94,997	3.5	37	3.5
Portland	82,694	3	32	3
St Mary	114,937	4.2	45	4.2
St Ann	174,309	6.4	68	6.4
Trelawny	76,028	2.8	30	2.8
St James	185,810	6.8	73	6.8
Hanover	70,309	2.6	28	2.6
Westmoreland	145,718	5.3	57	5.3
St Elizabeth	151,932	5.6	60	5.6
Manchester	191,999	7	75	7
Clarendon	247,854	9.1	97	9.1
St Catherine	521,569	19.1	204	19.1
Total	2,728,339	100	1,067	100

Conceptualizations and operationalizations

Corruption can be defined as dishonest behavior by those in positions of power, such as managers or government officials (Waller, et al., 2007).

National Security is the requirement to maintain the survival of the state using economic power, diplomacy, power projection, and political power. This variable is measured by way of 9 Likert scale items.

Corruption Perception Index is an index published annually by Transparency International since 1995 which ranks countries "by their perceived levels of public sector corruption, as determined by expert assessments and opinion surveys." (Transparency International, 2019). This research employed the corruption perception index developed by Transparency International to assess corruption in Jamaica.

Nepotism is the practise among those with power or influence of favoring relatives or friends, especially by giving them jobs.

Kickbacks- A kickback is a type of bribe that gives someone in power a 'cut of the action' for making an income possible for another individual or organization.

Clientelism- This can be defined as giving material goods in return for electoral support. For example, the practice of vote-buying, and patronage can be described as clientelism (Sives, 2002).

Hegemony- is an attempt to present the interests of the ruling class as the universal interests of society but, crucially, to be effective it must have a material basis in the ‘concrete coordination of interests’ between the ruling class and subordinate groups (Vidal, 2015).

Instrumentation

A standardized questionnaire was developed to evaluate ‘Public Opinion on Corruption and National Security (CNSS)’ in Jamaica. The primary purpose of the survey questionnaire was to solicit general information from a wide sample of respondents (See Appendix I). The CNSS consists of 62 close-ended items and 1 open-ended item (See Appendix I). Items 1-59 were Likert scale questions (See Appendix I). Waller et al. (2007) adapted and modified the Global Corruption Barometer, which was used for this study.

Administrative procedure

To administer the questionnaire, the research team informed participants of their rights and responsibilities. Informed consent forms were given or read to each participant and only those who agreed by way of verbal or written consent were allowed to be engaged in the research process. The administrative procedure in completing the questionnaires were also explained. In addition to the issues, those who participated were made cognizant of their option to withdraw at any time during the process if they so desire. The item was given to each respondent in his/her email or private WhatsApp telephone number. On completion of the instrument, the participant opened Survey Monkey and their responses were stored in a SPSS repository.

Pilot Study

Pilot testing was done to validate the instrument and ensure its reliability as well as to verify readability of the items. The research team pilot-tested the instruments with some 20 participants from different locations across Jamaica. In addition, the instrument was submitted to academicians in research, who vetted the items before the initial pilot-testing. Following the vetting, editing, and modification processes with the stakeholders, the research team again pre-tested the instrument by way of factor analysis for suitability and reliability of the items. The estimated time for completion of the instrument should be about 20 minutes \pm 10 minutes. If there were any errors or corrections to be made to the items, these modifications were done before the final version of the document was printed for distribution to the prospective respondents.

Validity and Reliability

Kuhn (1996) indicated that the validation and verification of issues are important in scientific methodologies and is the basis for constituting a science. Knowing how things operate was not singly embedded in empiricism, objective measurability, and statistical analyses (Kuhn, 1996; Balashov and Rosenberg, 2002) as meaning accounts for actions that are sometimes outside the

realm of objectivism. It can be extrapolated from Kuhn's perspectives that validity and reliability are equally important in all scientific inquiry, and the issues of conceptualization and measurement must include an aspect of validity and verification.

For any research project to be credible, its reliability and validity must be clearly established (Babbie, 2010; Creswell, 2014). As such, the necessary steps taken to ensure that the proposed project has both internal and external validity and internal and external reliability on the instrument used are outlined. According to Babbie (2010) and Neuman (2014), reliability is concerned with the reliability and consistency of the methods, conditions and results while validity deals with the accurate interpretability and the generalizability of the results.

In order to ensure a high response rate on the questionnaire, the research team ensured that all steps were taken to elicit the required information; thus, avoiding unnecessary and ambiguous questions. The research team also established a directory of the respondents to facilitate making the relevant follow up calls. The research team also did personal deliveries and pickup of the instruments, in an effort to personally outline to the respondents the importance of their responses to the project.

In this study, reliability of some items was based on *Equivalence Reliability* - Cronbach alpha (Neuman, 2014). This was compared based on high or low values of Cronbach alpha. Reliability was also increased by way of using 1) previously tested items (or questions); 2) pre-testing, testing and post-testing of items. The research team adhered to the following types of measuring validity-1) Face validity, 2) Content validity, 3) Criterion validity, and 4) Concurrent validity, (Neuman, 2014).

Prior to administering the final question, the instrument went through a process of testing, retesting, and modifications in keeping with issues raised in the vetting and pilot testing processes. Initially, the research team constructed several items that would adequately collect data to test the hypothesis and address the objectives of the study. The entire process of instrument design was aided by Rea and Parker's book on designing and conducting survey research (Rea and Parker, 2014).

Method of Analysis

For this survey instrument (questionnaire), the large volume of data was stored, retrieved, and analyzed using the Statistical Packages for the Social Sciences (SPSS) for Windows version 25.0 (SPSS Inc.; Chicago, IL, USA). Descriptive statistics were performed on the data as well as percentage and frequency distributions (include percentages and frequency counts). Descriptive statistics were allowed the researchers to meaningfully describe the many pieces of data collected (Gay and Airasian, 2003). Statistical significance was determined based on a p-value less than or equal to five percentage points (≤ 0.05)-two-tailed. In addition to descriptive statistics, scatter plots and box plots were also used to analyze and present the data. Multi-analysis of variance was

used to examine linear dependent variable by multi-independent variables. Factor analysis was performed on the various components for indexation (i.e., corruption and national security).

Data Analysis

The data collected was entered in the Statistical Packages for the Social Sciences (SPSS) for Windows Version 25.0 as well as Microsoft Excel. The responses for each statement on the questionnaire were totaled and the sum was the score for the survey. Descriptive statistics including frequencies and measures of central tendency were used to obtain the mean, mode, and standard deviation of participants' attitude toward corruption and national security. Furthermore, statistical analyses were used to find the association between the variables which are corruption and the implementation of national security polices and/or measures for the nation. Pearson's Product Moment Correlation coefficients were used to determine the relationship between the variables as Ordinary Least Square (OLS) regression to determine factors that influence the implementation of national security polices and/or measures in an effort to assess the state of national security.

Findings

Demographic characteristics

Table 5 presents the demographic characteristics of the sampled respondents. Most of the sampled respondents were females (65.0%, n=697), tertiary level graduates (66.6%, n=661), and were single respondents (61.4%, n=714).

Table 5. Demographic Characteristics of Sampled Respondents, n= 1,096

Details	n (%)
Gender	
Male	376 (35.0)
Female	697 (65.0)
Educational level	
None	21 (2.0)
Primary	16 (1.5)
Secondary	321 (29.9)
Tertiary	714 (66.6)
Union Status	
Married	204 (19.0)
Widowed	13 (1.2)
Divorced	38 (3.5)
Common-law	85 (7.9)
Single	661 (61.4)
Visiting relationship	75 (7.0)
Age	25 years (range = 63 years)

The level of public perception on corruption is high in Jamaica

The issue of corruption was constructed using 5-points Likert scale questions. There were 28 items that had a Cronbach alpha of 0.957, which means that they are very good to assess a single variable referred to as corruption. Overall public-perceived corruption in Jamaica is very high (2.6 ± 1.3 , 95%CI: 2.57-2.72, with the maximum being 4.0). Table 6 presents a disaggregation of the corruption index, with the greatest public perceived corrupt institution being the Police Force.

Table 6. Descriptive Statistics of Public Perceived Corruption

	Mean	S _x	N
Influencing the hiring of friends or relatives in the public sector	2.66	1.41	984
Influencing the award of government contracts to friends or relatives	2.55	1.46	984
Requesting money or gifts for public services that should have been provided for free	2.42	1.46	984
Influencing the hiring of friends or relatives in the private sector	2.64	1.38	984
Influencing the award of contracts to friends or relatives in the private sector	2.51	1.45	984
Requesting money or gifts for private benefit instead of the benefit of the company	2.22	1.51	984
Influencing the career advancement of their friends or relatives on the basis of patronage instead of merit	2.38	1.48	984
Influencing the award of contracts to companies/ individuals close to themselves	2.62	1.40	984
Using public funds or property for personal or family needs	2.59	1.41	984
Taking bribes or gifts to influence public contracts or public decisions	2.57	1.42	984
Manipulating government records or public accounts	2.08	1.56	984
Manipulating electoral processes/ electoral fraud	2.08	1.52	984
One can compromise investigative functions in Jamaica	2.17	1.51	984
Compared with 3 years ago, do you think that the overall level of corruption in Jamaica has frequently increased or decreased?	2.55	1.51	984
How frequently do you believe corrupt practices currently take place in Parliament/Legislature	2.87	1.35	984
How frequently do you believe corrupt practices currently take place in State (or national) government?	2.82	1.36	984
How frequently do you believe corrupt practices currently take place in Local government	2.90	1.32	984
How frequently do you believe corrupt practices currently take place in Law courts/tribunals	2.56	1.41	984
How frequently do you believe corrupt practices currently take place in the Police Force	3.20	1.23	984
How frequently do you believe corrupt practices currently take place in the	2.22	1.42	984

Army			
How frequently do you believe corrupt practices currently take place in the Tax Office	2.50	1.44	984
How frequently do you believe corrupt practices currently take place at Customs	2.84	1.39	984
How frequently do you believe corrupt practices currently take place in Immigration service	2.35	1.45	984
How frequently do you believe corrupt practices currently take place in Public utilities (electricity, water and sanitation)	2.64	1.45	984
How frequently do you believe corrupt practices currently take place in Public hospitals	2.50	1.41	984
How frequently do you believe corrupt practices currently take place in Public schools (primary/secondary/tertiary)	2.45	1.35	984
How frequently do you believe corrupt practices currently take place in Land registry/agency	2.23	1.51	984
How frequently do you believe corrupt practices currently take place in Car registration/driving license agency	2.81	1.42	984

Seven items were used to assess perceived corrupt institutions. The items were assessed by way of a 4-point Likert scale item, with Cronbach alpha being 0.940. Overall, Jamaicans perceived that public institutions were moderate corrupt (1.5 ± 0.84 , 95%CI: 1.4-1.5).

Table 7. Descriptive Statistics for selected issues in corruption

A public officer being recruited based on family ties and friendship networks	1.7812	.96266	1065
A public officer asking for a bribe to speed up administrative procedures	1.5127	.88962	1065
A private citizen offering a bribe to a public official to speed up administrative procedures	1.5192	.89372	1065
An elected official taking public funds for private use	1.4282	.86535	1065
An elected official using stolen public funds to assist his or her community	1.4432	.82193	1065
A law enforcement officer (police, customs, immigration, army) asking for a bribe	1.4779	.87667	1065
A company official asking for a bribe from a job applicant	1.3953	.78913	1065

The issue of corruption is a gendered phenomenon. Table 8 presented a cross-tabulation of corruption by gender of the respondents. It was revealed that there is statistical relationship between corruption and gender of the sampled respondents ($\chi^2(df=1)=5.847$, $P = 0.016$). In fact, males are more likely to perceive that there is corruption in Jamaica (70.7%, $n=376$) than their female counterparts (83.4%, $n=697$).

Table 8. Cross tabulation of corruption by gender of respondents

Corruption			Gender		Total
			Male	Female	
	No	Count	110	255	365
		% within What is your Gender?	29.3%	36.6%	34.0%
	Yes	Count	266	442	708
		% within What is your Gender?	70.7%	63.4%	66.0%
Total		Count	376	697	1073
		% within What is your Gender?	100.0%	100.0%	100.0%

Education plays a role in how corruption is perceived in Jamaica. Table 9 presented a cross tabulation of corruption and educational status of the respondents. It was revealed that there is statistical association between corruption and educational attainment of the sampled respondents ($\chi^2(df=4) = 12.573, P = 0.006$). In fact, educated people (67.5%, n=482) are more likely perceive that corruption exists in Jamaica compared to those with secondary (65.1%, n=209), primary level education (31.3%, n=5), and those who have no formal education (47.6%, n=10).

Table 9. Cross tabulation of corruption by educational level of respondents

Corruption		None	Primary	Secondary	Tertiary	Total
	No	Count	11	11	112	232
		% within What is your highest level of education?	52.4%	68.8%	34.9%	32.5%
	Yes	Count	10	5	209	482
		% within What is your highest level of education?	47.6%	31.3%	65.1%	67.5%
Total		Count	21	16	321	714
		% within What is your highest level of education?	100.0%	100.0%	100.0%	100.0%

More than 70% of respondents believed that there is a high prevalence of national security in Jamaica.

The concept of national security was assessed using 9 items. The nine items had a Cronbach alpha of 0.935, which indicates that these items are adequate and appropriate for evaluating the implementation of national security policies and/or measures to protect society. National security policies and/or measures to protect the society index has a summation of all 9 items. Generally, the respondents indicated that the implementation of national security policies and/or measures to protect society is low-to-moderately protecting the citizenry (Table 10), which is disaggregated in Table 11.

Table 10. Descriptive statistics for National Security Index

		Statistic	Std. Error	
Implementation of national security policies and/or measures to protect society index	Mean	43.5466	.67322	
	95% Confidence Interval for Mean	Lower Bound	42.2256	
		Upper Bound	44.8676	
	5% Trimmed Mean	43.3667		
	Median	47.0000		
	Variance	486.308		
	Std. Deviation	22.05239		
	Minimum	.00		
	Maximum	100.00		
	Range	100.00		
	Interquartile Range	27.50		
	Skewness	.010	.075	
	Kurtosis	-.373	.149	

Jamaicans rated Jamaica Defense Force (JDF) as the most secure institution in Jamaica, with the non-traditional environment being the least secure public institution (Table 11).

Table 11. Descriptive Statistics for the Disaggregated items for Implementation of national security policies and/or measures to protect society index

	Mean	Std. Deviation	N
How safe/secure/protected/stable from outside interference are Jamaica's Geographic borders	43.92	22.884	968
How safe/secure/protected/stable from outside interference are Jamaica's Harbours/ports	44.48	23.580	968
How safe/secure/protected/stable from outside interference is Jamaica's Air space	47.66	26.038	968
How safe/secure/protected/stable from outside interference is Jamaica's Défense system (i.e., Jamaica Defense Force)	50.92	26.993	968
How safe/secure/protected/stable from outside interference is Jamaica's Judiciary system	46.23	24.507	968
How safe/secure/protected/stable from outside interference is Jamaica's Political governance	42.87	24.976	968
How safe/secure/protected/stable from outside interference is Jamaica's Legislative System	44.33	23.936	968
How safe/secure/protected/stable from outside interference is Jamaica's Physical environment	45.41	24.496	968
How safe/secure/protected/stable from outside interference is Jamaica's non-traditional environment from threats (epidemic, pandemic, etc.)	41.72	24.545	968

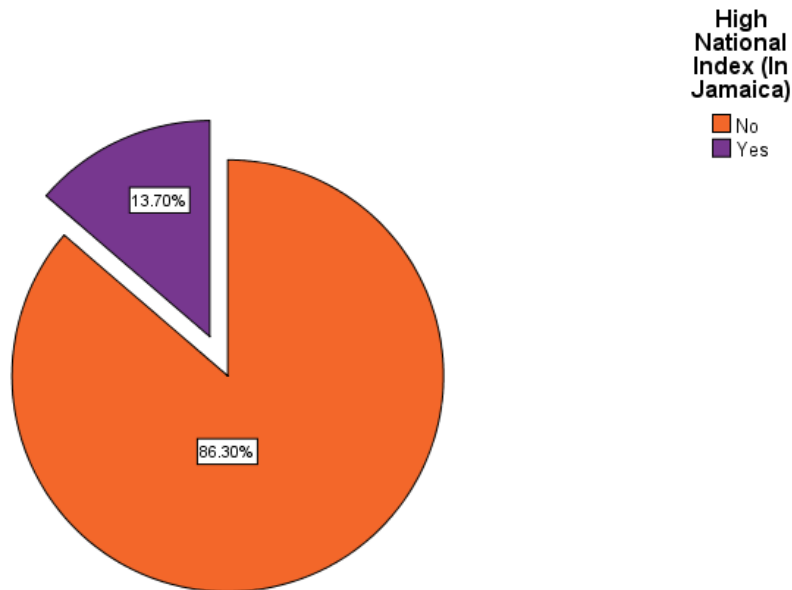


Figure 1. Respondents' belief that national security is high in Jamaica

Of the 1,096 sampled respondents for this study, the response rate for the concept of high implementation of national security policies and/or measures to protect society was 97.9% (n=1073). Of the 1,073 respondents, 13.7% of the respondents indicated that there is a high implementation of national security policies and/or measures to protect society in Jamaica compared to 86.3% who believed otherwise. This means that most Jamaicans do not accept that the implementation of national security policies and/or measures designed to protect society are effectively working.

Table 12 presents a cross tabulation between perceived high measures of national security in Jamaica and gender of the respondents. The findings revealed that no significant statistical association existed between the two variables ($\chi^2(df=1)=0.595, P=0.440$). This suggests that 14.7% of males who indicated a high implementation of national security policies and/or measures to protect society is not statistically different from the 13.0% of females who concurred with their male counterparts.

Table 12. Cross tabulation of perceived high national security in Jamaica by gender of respondents

		Gender		Total
		Male	Female	
High implementation of national security policies and/or measures to protect society	No	318 85.3%	600 87.0%	918 86.4%
	Yes	55 14.7%	90 13.0%	145 13.6%
Total		373 100.0%	690 100.0%	1063 100.0%

Widowed Jamaicans were mostly likely to indicated that there is a high implementation of national security policies and/or measures index(38.5%, n=5) compared to divorced Jamaicans (21.1%, n=8), married people (18.1%, n=37), and so forth (see Table 13; $\chi^2(df=5)=14.977$, $P=0.010$).

Table 13. Crosstabulation of perceived high national security and union status of respondents

High National Index (In Jamaica)		Union Status						Total
		Married	Widowed	Divorced	Common-law	Single	Visiting relationship	
No	Count	167	8	30	70	580	64	919
	% within What is your current union status?	81.9%	61.5%	78.9%	84.3%	88.5%	87.7%	86.2%
Yes	Count	37	5	8	13	75	9	147
	% within What is your current union status?	18.1%	38.5%	21.1%	15.7%	11.5%	12.3%	13.8%
Total	Count	204	13	38	83	655	73	1066
	% within What is your current union status?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The educational level of Jamaicans did not account for a difference in perception on the implementation of national security policies and/or measures to protect the society (see Table 14; $\chi^2(df=3)=0.741$, $P=0.863$).

Table 14. Crosstabulation of high national security and educational level

High Implementation of National Security policies and/or measures to protect the society		Educational level				Total
		None	Primary	Secondary	Tertiary	
No		17	14	273	611	915
		81.0%	87.5%	85.6%	86.7%	86.2%
Yes		4	2	46	94	146
		19.0%	12.5%	14.4%	13.3%	13.8%
Total		21	16	319	705	1061
		100.0%	100.0%	100.0%	100.0%	100.0%

Political, business, and administrative corruption negatively impacts Jamaica’s implementation of national security policies and/or measures to protect the society. An examination of political, business and administrative corruption and the implementation of national security policies and/or measures was assessed using Pearson’s Product Moment Correlation matrix that is presented in Table 15, below. The findings revealed a negative statistical correlation between the two aforementioned variables with the relationship being a very weak one ($r_{xy} = -0.091$ or -9.1%, $P = 0.003$).

Table 15. Pearson’s Product Moment Correlation Matrix of Corruption and National Security Index

		Corruption Index	The implementation of national security policies and/or measures index
Corruption Index	Pearson Correlation	1	-.091 ^{**}
	Sig. (2-tailed)		.003
	N	1096	1073
The implementation of national security policies and/or measures index	Pearson Correlation	-.091 ^{**}	1
	Sig. (2-tailed)	.003	
	N	1073	1073

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

Jamaicans’ view corruption among the five leading national problems in the society

The respondents were asked to list the 5 (five) most important problems facing Jamaica and their responses are presented in Table 16. The respondents identified 15 important problems facing Jamaicans. Of the 15 problems, the 5 (five) most important ones in descending order are crime and victimization, unemployment, healthcare system, corruption, and COVID-19. Despite the

current COVID-19 pandemic affecting the globe, this was the fifth most pressing problem facing Jamaicans, with corruption being fourth on the list of problems.

Table 16. Most Important Problems facing Jamaicans, n=1,096

Details	n (%)
Housing	325 (29.7)
Healthcare	728 (66.4)
Religious Conflict	69 (6.3)
Ethnic or communal Conflict	72 (6.6)
Political Instability	312 (28.5)
Crime & Victimization	888 (81.0)
Unemployment	883 (80.6)
Education	388 (35.4)
Corruption	722 (65.9)
Infrastructure	175 (16.0)
High Cost of Living	560 (51.1)
Drug abuse & drug trafficking	128 (11.7)
Environmental degradation	152 (13.9)
Human trafficking	103 (9.4)
COVID-19	659 (60.1)

COVID-19 will negatively affect National Security of Jamaica

The findings revealed that Jamaicans do not believe that COVID-19 affects the implementation of national security policies and/or measures to protect the society ($\chi^2(df=1) = 0.849, P=0.357$)

Table 17. Cross tabulation of High National Index (In Jamaica) and COVID-19

High National Index (In Jamaica)			COVID-19		Total
			No	Yes	
	No	Count	375	549	924
		% within COVID-19	87.6%	85.6%	86.4%
	Yes	Count	53	92	145
		% within COVID-19	12.4%	14.4%	13.6%
Total		Count	428	641	1069
		% within COVID-19	100.0%	100.0%	100.0%

Jamaicans believed that Covid-19 will positively influence corruption in the society

A statistical difference emerged between those who perceived that corruption existed in Jamaica and that corona virus existed as a national problem ($t_{970}=2.767, P = 0.006$).

Table 18. Group Statistics

	COVID_19	N	Mean	Std. Deviation	Std. Error Mean
Corruption Index	No	434	2.7650	1.19422	.05732
	Yes	658	2.5547	1.27976	.04989

Table 19 presents an ordinary least square (OLS) regression on the implementation of national security policies and/or measures in Jamaica. A linear model can be established with selected independent variables (corruption, COVID-19, gender and age) on the implementation of national security policies and/or measures ($F [5,896] = 6.028, P < 0.0001$). Of the 5 independent variables chosen for examination on national security, four emerged as factors of national security. The four factors are corrupt institutions, corruption index, COVID-19, and age. The four factors account for 3.3% (R^2) of the variance in national security policies and/or measures implemented to protect the Jamaican society.

Table 19. OLS estimates on National Security in Jamaica

Estimates	Unstandardized Coefficients		Beta	t	Sig.	95% CI		Collinearity Statistics	
	B	Std. Error				Lower	Upper	Tolerance	VIF
Constant	39.228	3.137		12.505	.000	33.072	45.385		
Corrupt Institution	1.935	.896	.072	2.161	.031	.177	3.693	.962	1.039
COVID-19	3.066	1.534	.068	1.999	.046	.055	6.076	.938	1.066
Corruption Index	-2.246	.598	-.126	-3.756	.000	-3.420	-1.072	.954	1.048
Male	0.647	1.559	.014	.415	.678	-2.412	3.706	.969	1.032
Age.	0.197	.065	.101	3.016	.003	.069	.325	.961	1.040

Testing the Assumptions of Linear Regression

The researcher tested the assumption of ordinary least square (OLS) regression before utilizing this statistical tool. The results of the test are documented, below:

Normality

Figure 2 depicts the examination of the 5 independent variables on national security, and it is revealed that they are normally distribution on a linear model. Hence the assumption of normality is met at testing.

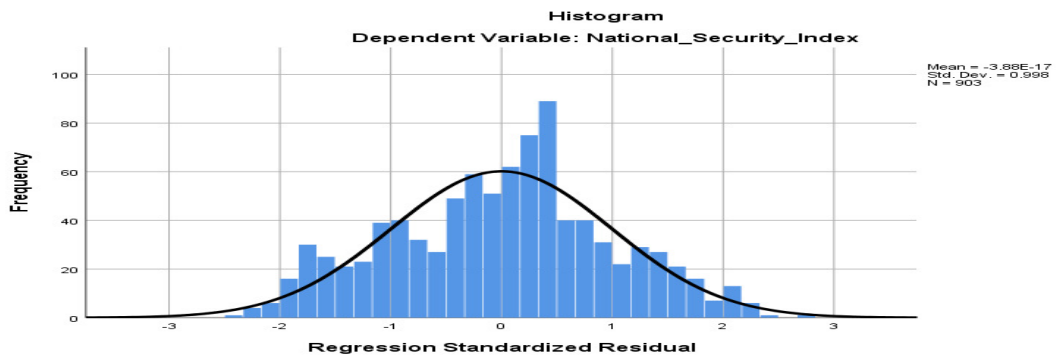


Figure 2.Normal distribution of regression model

Linearity

One of the assumptions of OLS is linearity of the dependent variable. Figure 3 shows that this assumption was adhered to.

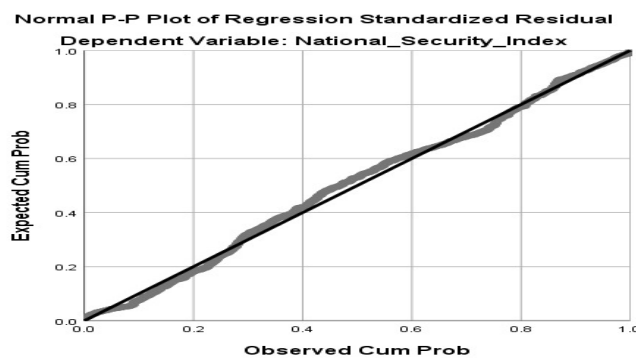


Figure 3

It can be deduced from Figure 4 that the assumptions of normality and linearity were adhered to and that a linear model can be built for this work.

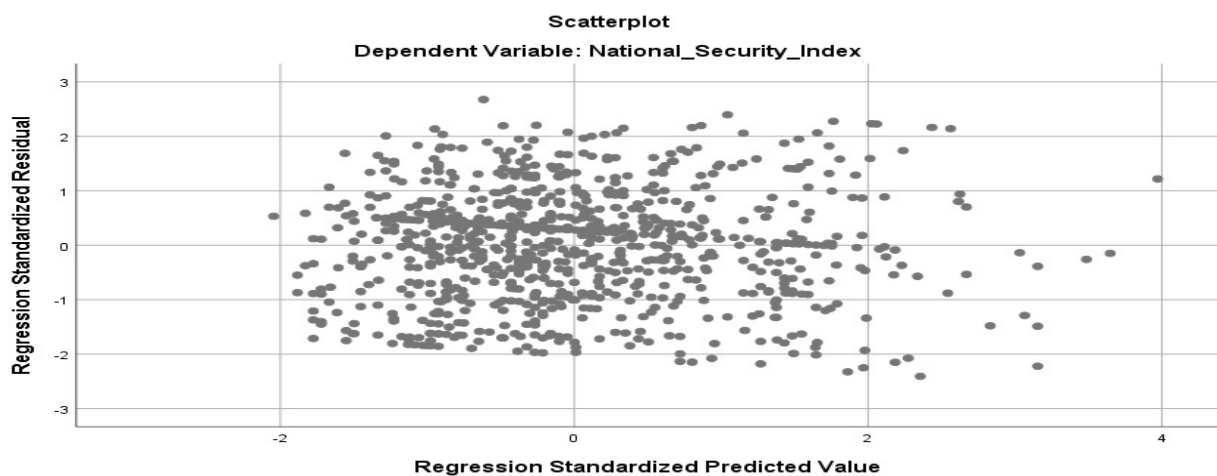


Figure 4.Scatter diagram of independent variables on dependent variable

Corruption directly influences crime and victimization in Jamaica

Table 20 presents a cross tabulation of Jamaicans’ view on crime and victimization, with corruption being national problems in the society. The cross tabulation revealed that a statistical relationship existed between the two aforementioned variables ($\chi^2(df=1) = 22.233, P < 0.0001$). Eight-five per cent of Jamaicans who indicated corruption existed in Jamaica stated that crime and victimization are a national problem compared to 73.4 per cent who indicated otherwise. This finding supports the hypothesis that corruption directly affects crime and victimization in Jamaica, with the relationship being a very weak one ($\phi = 0.142$ or 14.2%).

Table 20. Cross tabulation of Jamaicans’ views on crime and victimization, and corruption being national problems in Jamaica

			Corruption in Jamaica		Total
			No	Yes	
Crime and victimization	No	Count	100	108	208
		% within What are the five most important problems currently facing Jamaica? (Select all that apply)	26.7%	15.0%	19.0%
	Yes	Count	274	614	888
		% within What are the five most important problems currently facing Jamaica? (Select all that apply)	73.3%	85.0%	81.0%
Total		Count	374	722	1096

Discussion, Conclusion, and Recommendations

For decades, Jamaicans lambasted the system as being corrupt and this was vehemently denied by political administrators. The denial of corruption in Jamaica was finally set side in 2006 when the Prime Minister of Jamaica, the Most Honourable Portia Simpson-Miller, (Jamaica Information Service, 2006), in her budget speech, indicated that she would be addressing corruption, and that this would be paramount on her to do list. The following year, Waller, Bourne, Minto, & Rapley (2007) conducted a national cross-sectional study of some 1,140 Jamaicans and found that public corruption was rampant in the society, and that the police force was the most corrupt public institution. Thirteen years post Waller et al.’s research, the current study, concurs with seminal work of Waller, Bourne, Minto, & Rapley of the police being the most corrupt public institution. The reality is that this study comes 14 years after the budget debate of the Prime Minister of Jamaica and Jamaicans have not changed their stance on the high rate of public corruption in the society. Unlike Waller, Bourne, Minto, & Rapley’s research on corruption, this one requested Jamaicans to identify the five most important issues facing them and corruption emerged as the fourth national problem on a 15-item list.

In an effort to contextualize the high level of public corruption in Jamaica, Waller, et al. (2007) opined that “We had also attempted to get a sense of the prevalence of corruption which the individual perceives to exist in the public sector today when compared to the past” (p. 13). The current research can update the work of Waller et al.’s study, and it is evident that perceived corruption has worsened in the last decades in Jamaica, which appears to be a consistent across Latin America and the Caribbean (Transparency International, 2018). Although this study equally examined the prevalence of corruption in Jamaica as well as in public institutions, it goes further to evaluate corruption and national security as well as the impact the Corona virus (COVID-19) has on national security.

The relationship between corruption and national security was argued by Leslie (2010) who posited that:

Corruption in its varied forms limits the constitutional rights of citizens to exercise their freedom to choose their desired leader through a free and fair voting process. When brute force and intimidation are employed, citizens are forced to simply vote for the leader that the don requires them to vote for. These elected representatives usually fail to address the social and economic concerns of the people who they 'represent,' yet they are sure of a victory whenever there is an election. Situations like these do not only indicate an attack on democracy, but it is also a clear sign of human rights violation.

This study mathematically examined the corruption and national security phenomena and found that corruption inversely affects national security. In fact, this research found that national security can be expressed as a linear model in which corruption, COVID-19, gender and age are factors, with corruption being the most influential determinant. So, the inverse role of corruption of national security is not only conceptualized and recognized by Jamaicans, corruption is seen beyond a singular practice to a matter that extends beyond national security. Leslie’s perspective that corruption limits constitutional rights of citizens goes to the core of democracy, which is the point of Leslie’s theorizing. Jamaicans have recognized the eroding effect of corruption on their civil liberties and democracy, which is captured by the current findings, showing a negative correlation between corruption and national security.

On reviewing the literature on national security (United Nations, 2020), no empirical study emerged that has established the impact of COVID-19 on national security. This is the first study to empirically show that COVID-19 has an influence on national security. COVID-19 can be likened to an external agent, and this factor aids in building national security. Since the start of the COVID-19 pandemic, Jamaica has had to introduce various national protective measures to address this communicable disease. The introduction of international border restrictions, national quarantines, times for commence and trade have been some of the measured used to protect national security in Jamaica. Although those restrictions were in keeping with the likely extent of mortality on the society as was evident in the United States, Italy, and China, Jamaicans lost certain degree of civil liberties, that many people agreed with, simply because it was an

international pandemic. It is obvious that Jamaicans paid much attention to COVID-19 as it was identified as the 5th leading important national problem.

Unlike corruption that weakens national security, both corruption and COVID-19 affect the economic apparatus of society. Corruption at the government level leaves a country or state in the path of unrest, instability, and economic decline; but these are equally characteristics of COVID-19. Although the COVID-19 pandemic has framed new national protective programmes and initiatives, it has an underlining psychological component that will cause policy makers to institute precautionary measures to address future external shocks such as diseases. This pandemic has brought into focus Jamaica's capabilities to deal with national challenges.

In concluding, corruption has continued unabated in Jamaica, with little ending in sight. Instead of corruption declining in Jamaica following the recognition of Prime Minister Portia Simpson-Miller, in 2006, the matter is increasing and the perception of the police being the most corrupt public institution remains in people's minds. The issue of corruption affecting national security must be the bedrock upon which the society should build consensus to urgently address this problem. Accordingly, corruption should be labelled and defined as a national pandemic and this should guide efforts to address the matter with urgency in the Jamaican society.

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