
Politicking with Crimes in Jamaica: Specially Established Paramilitary Units in the Jamaica Constabulary Force, Zones of Special Operations, and States of Emergency

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Abstract

Introduction: Historically, the Jamaica Constabulary Force (JCF) emerged as a result of the Morant Bay rebellion of 1865. Despite its over 100 years of existence in Jamaica, the JCF has continued by being enlarged as a paramilitary organization in crime fighting.

Objectives: An evaluation of the effectiveness or otherwise of established paramilitary units in the JCF along with states of emergencies that have been implemented in Jamaica using data from 1970-2020.

Methods and materials: Secondary time series data (1970-2020) were collected from the Statistical department of the JCF to be compared with corresponding paramilitary units in the Force. The data were statistically examined after being entered in the Statistical Packages for the Social Sciences (SPSS) for Windows, Version 25.0.

Findings: For the studied period (1970-2020), the average murder rate per 100,000 during the PNP's governance of Jamaica was 31.0 ± 14.0 (95% CI: 25.7-36.2) compared to 35.6 ± 19.3 (95% CI: 26.3-44.9) for when the JLP is in governance of the nation, with there being no statistical difference between the numbers ($t\text{-test}_{47} = -0.964$, $P = 0.340$). The introduction of the State of Public Emergency (SOE) has reduced the homicide pandemic in the nation which saw a 32% reduction in intentional homicides compared to the implementation of ZOSO.

Conclusion: Paramilitary initiatives and states of emergency have some curtailing role to play on major crime reduction; but they cannot be used solely as a long-term 'crime-fighting' initiative.

Keywords: Hardcore policing, homicide, JCF, murders, states of emergency, ZOSO, policing strategy, paramilitary units.

Introduction

The issue of crime is a longstanding phenomenon in the Caribbean and more so in the wider developing world, exhibiting itself at various observed intensities within different societies. These variations are due to the cultural models as espoused by disparate geographic regions and their intrinsic response to crime and violence. In addition, peoples' tolerance for autocracy and totalitarianism and the constraints imposed by society in confronting individual freedom alongside the legal framework embedded in the solution set offered as intervening mitigations are the core ingredients to crime fighting and the maintenance of law and order. The need for society to sustain the scourge attributable to crime has been a perpetual challenge for governments across the Caribbean region.

Wilson Center (2007) affirmed that the reality of criminal manifestations has consumed much of the focus and resources of the CARICOM region concerning the safety and protection of their inhabitants. The author asserted in a study that the United Nations and the World Bank proclaimed the region possessing a homicide measure that was greater than the supremum of most countries, where such statistical values are available. It was argued that the discrepancies among scheduled and designed methodologies concerning law-enforcement gatekeeping and the implementation and execution of proposed security tactics had in large part failed to provide the required amelioration to adequately safeguard both nationals and visitors to the Caribbean region. The realization of crime and violence expectations to the actual deliverables materialized in the form of reduction in felonious violations and murderous offences have wholly fallen short of its mark, resulting in a disgruntled and dissatisfied electorate.

To offer a direct discussion of these crime and violence incidents and the crime fighting activities deliberately employed to suppress those actions, this paper will look into the specific measures of the specially established paramilitary units in the JCF and the States of Emergency (SOE) that sometimes accompany those teams in the field. The attempt will be made to evaluate and assess the effectiveness of this anti-crime utility and its efficacy in the suppression of violent public atrocities, mayhem and murders meted out by individuals, groups and their co-conspirators. Quite a few of these paramilitary units have been employed throughout the years and their efforts in combatting crime in Jamaica, is oftentimes mandated with particular objectives targeting specific areas of crime. While the appraisals of these paramilitary units are being undertaken, some emphasis will be paid to the political influence that has been brought to bear on criminality and how this has affected crime fighting strategies.

There has been this constant struggle to provide adequate safety and security of citizens against the rise in global crime statistics (IMF, 2019; Jassop, n.d.; OSAC, 2019; United Nations, 2007; United Nations, 2010; World Bank, 2020). Many scholars, including Professors Anthony Harriott and Bernard Headley, renowned Caribbean criminologists, have

empirically examined the crime phenomenon in Jamaica and there appears to be a consensus between these two investigators and among various other researchers that this issue requires urgent resolution because of the continued rise in violent crimes (Bourne, Blake, Sharpe-Pryce, & Solan, 2012; Bourne, Hudson-Davis, Sharpe-Pryce, Lewis, Francis, Solan, Irving, Watson-Coleman, & Nelson, 2015; Bourne, 2011; Harriott, 2003a, 2003b, 2003c, 2004a, 2004b; Headley, 1994, 2002; Ellis, 1991, 1992; Sives, 1997, 2003). Some scholars have argued that the crime situation in Jamaica can be attributed to politics and the strife to attain communal and community ascendancy for the governance and control of the nation's economic, commercial affairs and scarce resources. The conditions and circumstances fueling this link towards politics and criminality has been exacerbated by the polarized atmosphere which is closely associated with the two major political parties, namely the JLP [Jamaica Labour Party] and PNP [People's National Party]. These political entities have emerged as the dominant organizational forces, directing the social transformation of the country towards its attempts to realize its true independence and growth in the global stratosphere, amid the profound criminal maneuvers that has become endemic to the Jamaican society. Sives (2003) opined that "By 1949 both political parties were engaged in violence to achieve political goals and enforce the ideological strategies as advanced by the different group's leadership philosophies: The JLP to keep the PNP off the streets of Kingston, and the PNP to force their way back, to campaign for their party and their union movement" (p. 59). The pursuit of the diametrically opposing political ideologies led to the formation of garrison politics which became a characteristic and feature of inner-city communities. Campbell & Clark (2017) identified garrison politics as aggressive, intemperate and the authoritative enforcement of a particular political parties will and ideology irrespective of its constituent's individual views or personal perspectives on politics and other social issues. The author indicated that garrison politics was characterized by absolute loyalty to the party in control of the jurisdiction or territory under a severe polarized political authority. It was explained that these tribal and political enclaves emerged predominantly from governmental housing construction that were built to serve housing accommodation for party loyalists and activists articulating the doctrine, tenets and philosophy of the political entity controlling a specific geographical area. Campbell & Clark (2017) shared that garrison politics is located in communities of West Kingston and Southside, and constitute mostly of low income housing constructed "during the 1960s and 1970s" political renaissance in the urban ghettos. Garrison politics did not cease in the 1940s as Figueroa and Sives (2003), using data for the 1997 general elections, empirically established that criminality was a feature of politics in Jamaica and included violent political crimes, and this concurred with the findings of Harriott (2003d) and Bourne, Sharpe, Peterkin, & Dyer (2017). The unstoppable crime situation in the Caribbean has resulted in much research on this pervasive political phenomenon and its relationship with corruption, law-breaking and social misconduct. Ongoing crime measures to mitigate the seillegal offences and provide the required intervention for the social malfeasance include the support of paramilitary units in the Jamaica Constabulary Force (JCF). These teams

constituted a fundamental and reliable crime fighting tool to stem the civil aggression among rival Jamaicans and avert the mounting crime waves which appeared to be immensely accentuated during elections. In recent times, those efforts and actions have been augmented by more community and social engagements that targets the root of the unlawful and delinquent activities in an effort to reduce violent crimes.

The current political climate, especially the last three (3) major general elections since 2011 has seen some seemingly apparent divorce of crime from politics. Criminality has in the 21st century Jamaican society taken on a more sophisticated and independent role, weaning itself from the influence of the tight stranglehold of the political directorate and those corrupt representatives and activists of earlier years. However, the association between politics and criminality still persists but at more limited and diminished levels. Witbooi (2020) affirmed and attested to the constrained presence of criminal and political links when it was reported that the usual political affiliation among citizens and their association with crime through gang activities had experienced a much weaker partisan commitment and political adherence to more self-serving gang activities. The author reasoned that the possibility for such actions were due to a myriad of factors which included:

1. More organized and systemic operations from gangs
2. Greater autonomy and a decreased dependence on political handouts which had being reduced due to scarcity of political spoils and a depressed economy
3. Collective participation in the lucrative world of drug trafficking and extortion.
4. Improved access to illicit markets afforded by globalization

Despite intervention of the World Bank in 1996 (Levy, 2020) to aid the Caribbean region in addressing the crime phenomenon, the deplorable and illicit criminal activities have prevailed, with more violent interactions and encounters being recorded, which at times appears to be in free fall. This perception of vicious, intemperate and reprehensible unlawful occurrences has permeated the entire Caribbean region with larger countries like Trinidad and Tobago, and Jamaica most adversely impacted. UNDP (2020) in their report stated that the Caribbean region possesses one of the “highest murder rates in the world”.

Bourne, Hudson-Davis, Sharpe-Pryce, Solan, Nelson, Smith, George, Brown, Julian, & Francis (2015), using time series data for Jamaica and New York from 1970-2013, found that intentional homicides were at least twice in Jamaica than that in New York even though the population of the latter is at least 10 times more than that in former nation. Undoubtedly, the crime situation in Jamaica is escalating and appears to be beyond policy makers’ efforts to curb the issue (Morris-Francis, Gibson, & Grant, 2018). In fact, a group of Caribbean scholars classified the crime phenomenon as a health pandemic (Bourne, Hudson-Davis, Sharpe-Pryce, Francis, Solan, & Nelson, 2015). The health pandemic of the crime situation in Jamaica is empirically supported by a study that found a positive statistical correlation between intentional homicides and attendance to mental health facilities in Jamaica (Bourne,

& Hudson-Davis, 2016) as well as one on influence of homicides on premature births (Bourne, & Hudson-Davis, 2016). and another on physical ill-health and murders (Bourne, 2012). As a result of the crime pandemic, successive Jamaican governments as well as policy makers have employed of many interventions to include

1. Changing of leadership in the Jamaica Constabulary Force (JCF),
2. Special established units in the JCF, and
3. Joint military and JCF programmes (Jamaican Parliament, 2017).

The establishment of the JCF in 1867 was as a result of the Morant Bay Rebellion of 1865 (JCF, 2020). The JCF is a paramilitary organization that has continued to respond to crime and violence in somewhat of a guerrilla/commando style from its inception over its 153 years of existence (Anderson & Bourne, 2012; Harriott, 2000). Over its existence, the JCF has had 29 executive leaders, who represented the top role of commissioners of police. In its 153 years history, the JCF has had eight military personnel who have served as commissioners. This leadership typology has not altered the crime situation in the society any different from when the head of the organization emerged from within entity.

Table 1. Commission of Police in the Jamaica Constabulary Force, 1867-2018

Year	Commission
1867-1878	Major J. H. Prenderville
1879-1886	Mr. E H. B. Hartwell
1887-1891	Captain L. F. Knollys, C.M.G.
1892-1895	Major M. J. Fawcett, C.M.G.
1900-1904	Mr. Edward F. Wright, C.M.G.
1904-1919	A. E. Kershaw, C.M.G.
1919-1925	Mr. William E. Clarke, C.M. G
1925-1932	Col. M. D. Harrell
1932-1947	Mr. Owen (Jack) Wright, C.B.E.
1948-1953	Mr. W. A. Calver
1953-1958	Col. R. T. Mitchelin, C.M.G., C.V.O., O.B.E.
1957-1962	Mr. L.P.R. Browning [6]
1962-1964	Mr. N.A. Croswell, C.M.G, M.B. E
1964-1970	Mr. A.G. Langdon, C.M.G. C.V.O, Q.P.M, J. P
1970-1973	Mr. J.R. Middleton, M.B. E
1973-1977	Mr. B.L. Robinson, O.J., C.D. Q.P.M, J. P
1977-1980	Mr. D. O. Campbell, C.D.
1980-1982	Mr. W.O. Bowes, C.D.
1982-1984	Mr. J.E. Williams, C.D.
1984-1991	Mr. H.E. Ricketts, C.D., L.V.O.
1991-1993	Mr. R.E. Thompson, C.D.
1993-1996	Col. T.N.N. MacMillan, O.D., J. P
1996-2005	Mr. F.A. Forbes, C.D., J.P., L.L.B.
2005-2007	Mr. Lucius Thomas, C.D.

2007-2009	Rear Admiral Hardley Lewin, C.D. JP, psc (n)
2010-2014	Mr. Owen Ellington, C.D.
2014-2017	Dr. Carl Williams, OD, CD, JP, PhD
2017-2018	Mr. George Quallo
2018-present	Major General Antony Bertram Anderson, CD, JP, MDA, BEng (Hons)

The various commissioners of the JCF have sought to employ different strategies to combat the crime phenomenon. Among the strategies to arrest crime and violence in Jamaica has been specially instituted paramilitary units, which date back to 1976 (Table 2). There have been some 14 established paramilitary units instituted by the JCF's hierarchy, with some 85.7% being during the political administration of the People's National Party (PNP). Furthermore, the issue of construction, reconstruction, and annihilation of special paramilitary units in the JCF is a well-known policy initiative that has been repeatedly employed to address the crime situation in the society (Gilchrist, 2019; Hall, 2019; Loop, 2019; Overseas Security Advisory Council Bureau of Diplomatic Security (OSAC, 2019). During the PNP's governance of Jamaica, paramilitary units have been relied upon to curb crime and violence. Despite the emergence of these special paramilitary units, the crime situation has worsened in the last two decades (Lemard & Hemenway, 2006; Harriott, 2003a, 2003b, 2004a, 2004b; Harriott & Jones, 2016) with some of the murders being attributable to the police (Amnesty International, 2003).

Table 2. Special Police Squads established by the JCF by year and party in government

Special Police Squads	Year formed	Party in Government
Echo Squad	1976	PNP
Ranger Squad	1980	PNP
Eradication Squad	1980/1981	JLP
Area 4 Task Force	1986-1987	JLP
ACID	1993	PNP
Operation Crest/Justice	1995	PNP
Operation Dovetail	1997	PNP
Organized Crime Unit	1998	PNP
Operation Intrepid	1999	PNP
Special Anti-Crime Task Force (SACTF)	Oct 1999	PNP
Crime Management Unit (CMU)	2000	PNP
Major Investigative Team	2002	PNP
Operation Kingfish	2004	PNP
Operation Resilience	2013	PNP
ZOSO	2017	JLP

Source: <https://commonsenseja.wordpress.com/2012/03/28/special-police-squads-formed-to-fight-crime/> and modified by Paul Andrew Bourne

The JCF has employed many paramilitary units as a strategy to curb the crime pandemic in Jamaica, yet the situation continues unabated (Harriott, 2000; Harriott, 2016), The Council on Hemispheric Affairs (COHA) (2002), referred to these and other measures as being ineffective in addressing the crime situation. In fact, scholars have opined that paramilitary units have alienated the citizens from the police, and some postulated that the outcome is the undermining of law enforcement efforts (Harriott, 2000; Reisig, & Lloyd, 2009). Unlike the military in Jamaica (Jamaica Defence Force), McDavid, Clayton, & Cowell (2011) opined that “Caribbean police forces continue to move further away from their former quasi-military roles, functions and attitudes, and become fully modern police services” (p. 40). This highlights a glaring challenge in the operations of the JCF and the need to modernize the thinking and strategies employed in policing the society. This is supported by the fact that there were 968 extra-judicial killings by the police in Jamaica and epitomizes the alienation of some citizens from the police (McDavid, Clayton, & Cowell, 2011). The United Nations Office on Drugs and Crime (2013) and The Overseas Security Advisory Council (OSAC), (2019) provides some explanation for the continued employment of special units in the JCF as well as States of Public Emergencies (SOE) to address the obvious crime pandemic.

Jamaica’s post -independence environment has been characterized by high (and until recently increasing) rates of violent crimes and relatively low and declining rates of property crimes. In 2009, Jamaica’s homicide rates peaked at 62.2 incidents per 100,000 inhabitants. From 2000-2010, Jamaica was one of few places in the world where homicides neither declined nor stabilized (Malby 2010, 22) and despite a decline starting in 2009, Jamaica’s homicide rate was still ranked sixth highest in the world, according to the Global Homicide Report (UNODC, 2013)

In January 2018, due to rampant violence and murders, the Government of Jamaica (GoJ) declared States of Emergency (SOE) and Zones of Special Operations (ZOSOs) for several parishes including the Kingston Metropolitan Area (KMA) and the parish of St. James. The Embassy warned visitors to avoid some areas of Kingston, Montego Bay (St. James), and Spanish Town due to violent crime. Under SOE, security forces deployed to address organized crime, including gang violence related to drug and gun trafficking and lottery scams. The Emergency Powers Act allows the security forces to detain and deport suspicious persons, to enter premises and seize property without a warrant, and declare curfews. The three SOEs and two ZOSOs lowered the murder rate by 22%, due largely to the steep decline in murders in St. James. However, the SOE lapsed the end of January 2019, after Jamaica’s Parliament did not approve its extension. For more information on the SOE, review OSAC’s report, Jamaica State of Emergency (OSAC , 2019, p. 1)

The latest strategy employed by the Jamaican government is the institution of States of Public Emergencies (SOEs) to address the glaring and frightening crime problem affecting the nation (Jamaican Parliament, 2017). The OSAC outlined the rationale for the SOE, and indicated that murders declined by 22% in one of the “hot spots” in Jamaica, Montego Bay,

St. James. However, there is no statistical data or empirical analysis of the general intentional homicide figures outside of hotspots in St. James and whether or not SOEs are effectively reducing murders in Jamaica. The SOE's have resulted in lower mobility of Jamaicans, rescinding some basic human rights, constricting and reducing murders, and curtailing economic activities (Figure 1; Cummings & Lewis, 2019; Frater, 2019; Loop Jamaica, 2020a, 2020b; Simpson, 2020a, 2020b; Thomas, 2019). Yet, OSAC advised its personnel against traveling or visiting many geographical locations in Jamaica such as Arnett Gardens, Cassava Piece, Grants Pen, Mountain View, Tivoli Gardens, Trench Town, and Standpipe (in Kingston and St. Andrew), Canterbury, Clavers Street, Flankers, Hart Street, Norwood, and Rose Heights (in St. James) because of the high levels of crimes, particularly intentional homicides, in these areas. Figure 1 is the latest employed strategy by the Jamaican government owing to the escalating crime situation in the society (Jamaican Parliament, 2017). In Parliament, the current Prime Minister of Jamaica, Mr. Andrew Holness, in seeking to substantiate a joint police and military strategy, indicated that the homicide rate rose from 34.1 in 2000 to 61.7 in 2009 (Jamaican Parliament, 2017) and that this calls for giving more power to both the Jamaica Defense Force and the JCF.

Historically, administrators during the PNP's governance of Jamaica have mostly used paramilitary units in the JCF. The strategies employed by the JCF during the PNP's and that JLP are somewhat different, which explains why an opposition PNP's member of parliament for Kingston Eastern and Port Royal, Mr. Phillip Paulwell, indicated that the current JLP's administration should replace SOE with ZOSOs (Jamaica Observer, 2020a). The JLP administration has been employing SOE's instead of special paramilitary units in the JCF (Jamaica Observer, 2020b). However, there is consensus and an immediate urgency among political leaders in Jamaica that the crime situation must be addressed. These strategies given their strategic focus, differ based on political administration and the embraced ideology being pivoted. SOE is the latest strategy conceptualized and believed by policy makers to be effective in arresting the crime phenomenon. Ironically, the crime statistics continued to rise in one area after another following the implementation of the SOEs in additional geographic zones (Jamaica Observer, 2020a, 2020b; Ministry of National Security, Jamaica, 2020; Office of the Prime Minister, Jamaica, 2020). The ongoing crime pandemic in Jamaica is worrisome as there appears to be no ending in sight, given the mediocre impact the SOEs employed by the Prime Minister have had on reducing crime and violence statistics.

Table 3.10 Most Murderous Nations in the world, 2019 & 2016

2019			2016		
Rank	Nation	Rate (/100,000)	Rank	Nation	Rate(/100,000)
1	Venezuela	60.3	1	El Salvador	81.2
2	Jamaica	47.4	2	Venezuela	59.0
3	Honduras	41.2	2	Honduras	59.0
4	Trinidad & Tobago	37.4	3	Jamaica	50.00
5	El Salvador	36	4	Guatemala	27.3
6	Belize	33.5	5	Brazil	25.7
7	Mexico	27.0	6	Colombia	24.4
8	Colombia	25.4	7	Puerto Rico	20.0
9	Guatemala	21.5	8	Mexico	16.2
10	Puerto Rico	20.1	9	Dominican Republic	15.8
			10	Costa Rica	11.8

Source: UN Office on Drugs and Crime's International Homicide Statistics database.

Many war-torn nations (ongoing armed conflicts in a nation) such as Syria, South Sudan, Mexico, Iraq, Nigeria, Somalia, Libya, Yemen, Pakistan, Afghanistan, and the Democratic Republic of Congo have seen physical destruction of infrastructure, impoverishment of humans, increases in illnesses and diseases, violence, food insecurity, mass migration, erosion of civil liberties, and high security risks or security challenges (Del Castillo, 2008; Quaglio & Mezzelani, 1996; South, Elise, McMaster, Willock, & Plunkett, 1996; United Nations Development Program, 2020). Many of these war-torn states boast lower murder rates than in Jamaica and some Latin American nations (Table 3). The similarities between war-torn nations and Latin American and Caribbean nations including Jamaica also underline the severity of the crime problem in those regions. One such similarity is the visibility of the security forces; whose presence dominate the crime and violence affected areas and suppressing the natural freedoms of law abiding citizens. In Jamaica, large contingent of police officers with high powered weapons have been observed on the streets in an effort to protect the citizens because of the escalating violence and social upheavals.

Addressing the House of Representative, the Prime Minister of Jamaica, Mr. Holness, opined that intentional homicides have declined by 35% since the implementation of SOEs (see also, Fitz-Henley, 2020). According to Fitz-Henley:

He [Prime Minister of Jamaica, Mr. Holness] informed the country that for the comparative 162-day period prior to and during the SOE, that is November 19, 2018 to April 29, 2019 and April 30 to October 8, 2019, respectively, the tri-parish area experienced an overall reduction in murders by 35 per cent, moving from 142 to 93, and shootings by 43 per cent, decreasing from 140 to 80.

The prime minister said that over the period April 30, 2019 to October 8, 2019, during the period of the state of public emergency, reductions were recorded in all three parishes.

He [Prime Minister of Jamaica, Mr. Holness] informed that murders and shootings in the parish of St James reduced by five per cent, moving from 64 to 61, and 13 per cent for shootings, from 61 to 53, respectively, when compared to the similar period last year.

Outside of the articulations of Prime Minister of Jamaica, the crime figures since 2018, on the matters of the effectiveness of these specially established paramilitary units in the JCF and joint JDF programs with the JCF, collectively those crime-fighting efforts have never been objectively and empirically examined. The fact is, in 2018, Jamaica was classified as the third most murderous nation in the world (Table 4) and that this worsened in 2019 (Table 3). This brings into focus the need to impartially analyze the true value, successfulness and efficacy of the specially established paramilitary units in the JCF and joint JDF programs with the JCF since 1976.

Table 4.10 Most Murderous Nations in the world, 2018

Rank	Nation	Rate/100,000
1	Venezuela	81.4
2	El Salvador	51.0
3	Jamaica	47.0
4	Honduras	40.0
5	Trinidad & Tobago	37.5
6	Belize	35.9
7	Mexico	25.8
8	Brazil	25.0
9	Colombia	25.0
9	Guatemala	22.4
10	Puerto Rico	20.0

Source: UN Office on Drugs and Crime's International Homicide Statistics database.

The crime problem in Jamaica has created much anxiety, fear, victimization. Harriott (2003c) postulated that "...yet the society is in danger of becoming very tolerant of crime, especially if the victims are not readily identifiable" (p. 4). Even though, there is no empirical evidence that Jamaicans have become tolerable to the escalating crime problem, there appears to be less public outcry to crimes outside of people's self-interest. Nevertheless, in 2007, a cross-sectional study of some 1,338 Jamaicans found that crime and violence were identified as the leading national problem (Powell, Bourne, & Waller, 2007), for both citizens and the government (Jamaican Parliament, 2017).

The fear of violent-crime victimization, especially intentional homicides, continues to cripple economic development, psychological creativity, and human mobility. Owing to the fact that

violent crimes retard economic development and growth as well as human longevity, policy makers continue to institute measures to reverse the result of the crime pandemic. Violent crimes not only limit economic activities in a society, but also account for human depopulation, demotivation and destruction. It is this problem that explains the rationale for the trial and usage of crime strategies such as SOEs to address violent crimes and more so intentional homicides.

Research Questions

This research will answer the following research questions:

1. Has the establishment of special paramilitary units in the JCF since the 1970s assisted in the reduction of violent crimes in the Jamaican society?
2. Are ZOSOs and the States of Public Emergencies more effective in reducing violent crime in Jamaica than other paramilitary units established in the JCF in the past?
3. Is there a significant difference in intentional homicides when the JLP is in governance as opposed to the PNP, using data for the period 1970 -2019?
4. Does a strong statistical correlation exist among 1) homicide, 2) larcenies, 3) break-ins, 4) robberies, 5) aggravated assaults, 6) rape, and 7) intentional murders in Jamaica?

Research Hypotheses

H_{a1}: There is a significant difference in intentional homicides occurring in Jamaica while the JLP is in governance compared to when the PNP is in governance, using intentional homicide data for Jamaica from 1970-to-2020.

H_{a2}: The establishment of special paramilitary units in the JCF since the 1970s has inversely influenced violent crimes in the Jamaican society.

H_{a3}: There exists strong statistical correlations among 1) homicide, 2) larcenies, 3) break-ins, 4) robberies, 5) aggravated assaults, 6) rape, and 7) intentional murders in Jamaica

Literature review

To better understand the written literature, this study examined various studies on violent crimes and strategies employed by police divisions, within the context of the cost of crime and punishment theory developed by Becker (1968). The cost of crime and punishment theory is the theoretical framework that is framed for this study.

Theoretical Framework is critical to the foundation of a research (Crotty, 2005). The author emphasized that such efforts aid in formulating and framing as well as explaining, predicting and assisting in understanding the phenomena of a research topic. Abend (2008), defined theoretical framework as the structure that can hold or support the theory of a research study. The author asserted that a theoretical framework introduces and describes the theory that

explains why the research problem under study exists. An empirical framework, on the other hand, is based on observation and measurability of a phenomenon from which knowledge on actual experiences emerge, and not the establishment of a theory. Hence, many scholars and researchers have used theoretical and empirical framework because this allows for the engagement mathematical modeling and the establishment of theorizing of thoughts (Bryant, 1985; OECD, Kenkel, & Miyamoto, 2010). Therefore, it is against the aforementioned background that this study employs a theoretical and empirical framework developed by Becker (1968), which examines factors that influence crime.

Regression analysis is widely used in econometric and social science study to evaluate many factors influencing a single dependent variable, (Polit, 1996; Mamingi, 2005; Blalock, 1963, 1964, 1967, 1971; Blalock & Blalock, 1968). In fact, March & Bourne (2011), used regression analysis models and established correlations of intentional homicide in Jamaica. Positivism which is a theoretical framework has been used to guide methodologies that were primarily quantitative and accounts for discoveries like Newton’s Law “ $F=ma$ ” (Force is equal to the product of mass and acceleration). For centuries, scientific attitude was guided by this theoretical framework as science was embodied in proof, verification, validation and objectification. This explains the preponderance of inquiries that utilize the positivism and post-positivism theoretical framework and methodologies that were solely objective. The precision and objectivity which are embedded in positivism was used by Becker in his seminal work on factors of crime in the 1960s (Becker, 1968), and has been widely used by other scholars.

Becker’s theoretically and empirically multifactorial mathematical model (i.e., Crime and Punishment) describes the cost of people’s choice to engage in crime. He forwarded a *utility maximization crime* framework that expresses crime as a function of many variables. This econometric crime function is described in Equation [1], below:

$$y = f(x_1, x_2, x_3, x_4, x_5, x_6, x_7) \dots\dots\dots [1]$$

where y = hours spent in criminal activities,

x_1 = wage for an hour spent in criminal activity,

x_2 = hourly wage in legal employment,

x_3 = income other than from crime or employment

x_4 = probability of getting caught,

x_5 = probability of being convicted if caught,

x_6 = expected sentence if convicted, and

x_7 = age

Becker's work establishes that crime is a function of factors such as employment (return from employment), the psychology of fear, crime statistics, economic activities, outcome of criminal actions, demographic characteristics, and economic betterment from engagement in crime. The Crime and Punishment function sets the foundation for the quantitative assessment of crime from a multifactorial perspective, and this has been expanded on by many scholars. From the theoretical framework identified by Becker, the solution of crime is a complex one, which must commence from crime statistics, crime victimization, crime strategy, and the psychology of crime (Bourne, Sharpe, Evans, Green, Lawrence, Newsome-Myrie, & Dyer, 2017; Bourne, Sharpe, Beecher, Crossfield, Evans, Solomon, & Nicholas-White, 2017; Deering, Amin, Shoveller, Nesbitt, Garcia-Moreno, Duff, Argento, & Shannon, 2014; Priestley, 2014).

Crime Statistics

Violent crimes continue to plague the Caribbean and Latin America (United Nations Office on Drugs and Crime & the World Bank., 2007; Levy, 1996), and they have become the leading social problem in the region (World Bank, 2005; Powell, Bourne, & Waller, 2007). In 2007, a national probability cross-sectional survey research conducted by Powell, Bourne, & Waller found that crime and violence was identified as the leading national problem facing Jamaicans. The United Nations Office on Drugs and Crime & the World Bank (2007) singled-out intentional homicide (or murders) in the Caribbean as higher than that in many other nations in the world. Additionally, the World Health Organization (2002) indicated that violent crimes in some Caribbean nations (Guyana, Haiti, Dominica Republic, Antigua & Barbuda, St. Kitts & Nevis, Bahamas, St. Vincent & the Grenadines) were greater than those for the world. In fact, the United Nations Office on Drugs and Crime & the World Bank (2007) forwarded that "In Caribbean countries overall, homicide rates are 34 percent higher and robbery rates are 26 percent higher than in countries with comparable macroeconomic conditions" (p. v), which highlights a social problem that began decades ago.

In 1995, the World Bank sponsored an ethnographic study on crime and violence in the Caribbean because of the exponentially high rates of homicides (Levy, 1996). Levy (1996), opined that the homicide pandemic can be attributable to the political violence that occurred in the 1980s. Since the 1980s, violent crimes, particularly murders, have drastically risen to the point where many nations in the Caribbean and Latin America are among the top 10 most murderous nations in the globe (United Nations Office on Drugs and Crime & the World Bank, 2007; WHO, 2002). However, Harriott (2004b) outlined that property and violent crimes have been on the decline in Jamaica since the 1980s.

For decades, Jamaica like many developed and developing nations have been plagued by high rates of homicide and this seems unabated (Bourne and Hudson-Davis, 2016; Bourne and Solan, 2012; Bourne, Hudson-Davis, Sharpe-Pryce, et al., 2015a, 2015b, 2015c; Harriott, 2004a, 2004b, 2004c; Koppensteiner and Manacorda, 2015; WHO, 2012). The state of major

crimes in the Caribbean, especially homicide (murder), have led to studies being conducted on the matter, with one being sponsored by the World Bank (Levy, 1996) and another by the Department of Government, University of the West Indies (Powell, Bourne and Waller, 2007). There is no denial that the Caribbean has been experiencing a homicide pandemic (Griffiths, 2004, 200b; Bourne, et al., 2015a), and Okeba Gray ascribed this situation to the state of the economy and the societal culture (Gray, 2003a, 2003b). He contended that:

The failure of economic policies, near-weekly accounts of human rights abuses, and recurrent disclosures of the corruption of power, the political bosses have retained their predominance, and the political apparatus that supports them has remained largely unchanged... (Gray, 2003, 73)

Gray's perspective offers some insights into the state and reasons for social deviance in Caribbean nations, particularly Jamaica, and at the nexus of the crime monster (homicide or murder) is the state of the economy. When a national probability cross-sectional study was conducted by Powell, Bourne and Waller in 2007 of some 1,338 Jamaicans, crime and violence were identified as the leading national problem faced by the society, with economic uncertainty being an issue highlighted as a social problem. An internationally reputable sociologist, Professor Don Robotham, believed that poverty is at the heart of the crime problem in Jamaica (Robotham, 2004). The high rates of major crimes, particularly homicide (murder), have resulted in many studies in the area in an attempt to understand the phenomenon (Simmonds, 2004; Sives, 1997, 2003; Tremblay, 1995)-including the United Nations and Economic Commission for Latin America and the Caribbean (2008) and the United Nations and World Bank (2007). The state of the homicide pandemic is at an alarming rate in Jamaica as an empirical study conducted by Bourne et al., (2015c) found that Jamaica reported more homicide per 100,000 population than New York.

In order that one can comprehend the gravity of the homicide pandemic in Jamaica, Bourne and colleagues' work provide this reality, "The homicide and sexual assault and rape rates have shown varying trends in Jamaica and New York during the period between 1970-2013, with the rates for Jamaica almost twice that of New York" (Bourne, et al., 20015c, p. 231). In addition, Bourne et al.'s study revealed that on average 3.3 people are murdered in Jamaica compared to 1.8 in New York and this was in 2013 when the population of the latter was 7.24 times greater than that of Jamaica's population (i.e. New York, 19.651,127 people; Jamaica, 2,714,734)-(Bourne, et al, 2015c, p. 248). The homicide pandemic is atypical in the Caribbean as the Caribbean Region reported the highest rate of homicide in the world for the period 1999-2005 (United Nations and World Bank, 2007, p. iv)-see Figure 1.

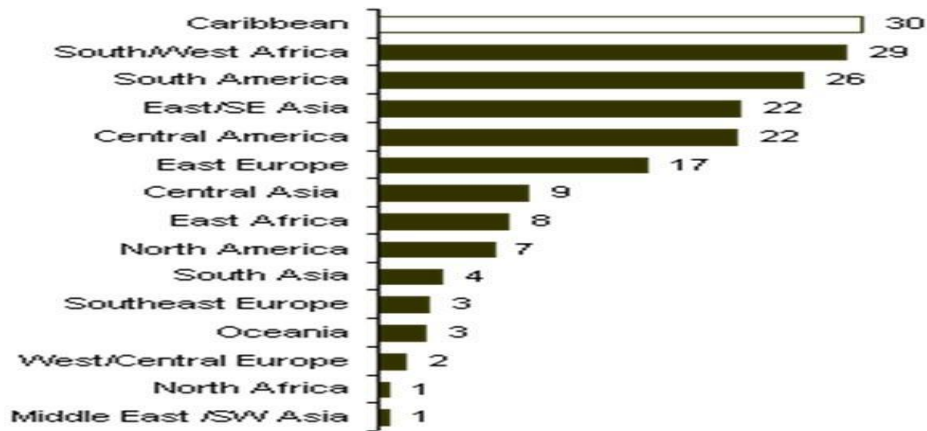


Figure 1. Homicide rate in the world, 2002

According to the data published by the United Nations and the World Bank (2007), for 2005, The Dominican Republic, Trinidad and Tobago, and St. Lucia reported murder rates greater than for most nations in the globe, with it being documented that Jamaica and Haiti reported more homicide rates than all other Caribbean nations (p. vi)-see Figure 2.

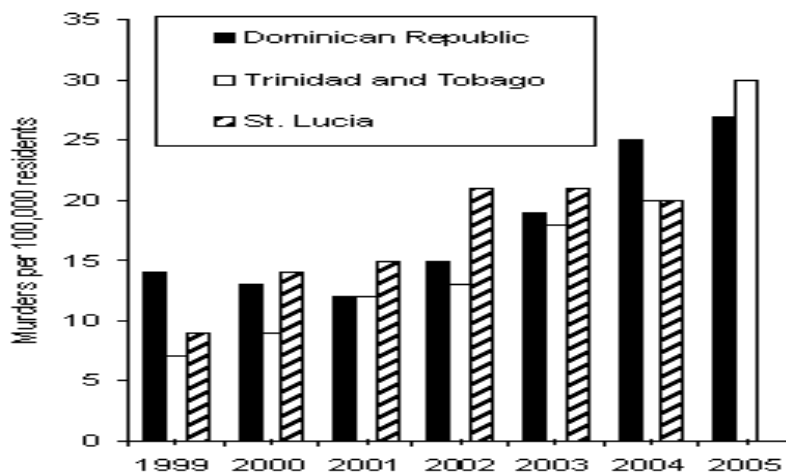


Figure 2. Homicide rate per 100,000 pop. In selected Caribbean nations

Using homicide rate data for the Caribbean and Latin America, Gange (2016) revealed Jamaica is ranked 5th among those with the highest rates-45 per 100,000 for 2015. El Salvador reported the most homicide rate in the Region with 103 per 100,000 population followed by Venezuela that reported 90 per 100,000 population (Gange, 2016). On the contrary, for 2014, the homicide rate in Barbados was 21 per 100,000 population compared to 34 per 100,000 population in St. Lucia, 9 per 100,000 population in Dominica and 13 per 100,000 population in Antigua displaying the high crime realities in many Caribbean nations (Bureau of Diplomatic Security, United States Department of State, 2015). In order to provide a clear understanding of the severity of the homicide problem in the Caribbean region, a quotation from UNICEF is aptly fitting and reads “Latin America and the Caribbean

is considered to be one of the most violent regions in the world. Six million children and adolescents in Latin America and the Caribbean suffer severe abuse, including abandonment, each year” (UNICEF, n.d). UNICEF concluded that “The Caribbean ranks first, globally, when it comes to murder rates and claims the highest rates of homicides among young people aged 15-17. Boys are six times more likely to be victims than girls” (UNICEF, n.d), indicating a high rate of social ills in those societies.

There is absolutely no denial that there is a homicide pandemic in the Caribbean region, with Jamaica being the chief among the evils. Emmanuel and Campbell (2012) opined that:

Homicide rates, however, have increased over the past 15 years, especially in Jamaica and Trinidad. The link between suicide, homicide, and homicide followed by suicide (H-S) is not well established. A newspaper review of H-S events in a selection of Caribbean territories revealed a surprising number of these events. Characteristics of perpetrators were similar to those documented in the literature. The authors agree with Roma et al. that national tracking systems for H-S are needed. Empirical research on this topic in the Caribbean is also desperately needed (p. 469)

While Emmanuel and Campbell give the impression that the homicide problem in the Caribbean dates back 15 years ago, this is further from the truth as matter goes back to the 1990s. Harriott (2004b), indicated that “The problem of crime in the Caribbean-its causes, its consequences, and its control-emerged as a major concern during the 1990s” (Harriott, 2004b, 1). Professor Harriott, a Caribbean criminologist, continued that “The Caribbean Community (CARICOM) Heads of Government Conference, at its Twenty-Second Meeting held in Nassau, the Bahamas in July 2001 expressed disquiet with regard to this problem and the threats that it poses to public safety and to the social and economic well-being of the people of the region” (Harriott, 2004b, 1). The reality is, in spite of the plethora of empirical studies and simultaneous intervention programs, there has been an increase in the homicide rates in Caribbean nations surpassing that which obtained in the 1990s. The Library of Congress (1987) laid the foundations that accounted for violence, particularly political violence. The Library of Congress writes:

The nation's political violence derives from the socioeconomic structure of Jamaican politics, that is, social stratification along racial and economic class lines. Increasing political, social, and economic polarization in Jamaica has contributed to both political and criminal violence (Library of Congress, 1987, chap. 2. The page number would have been more appropriate than the chapter since it is a direct quote)

Owing to the state of major crimes in Latin America and the Caribbean region, a plethora of empirical studies have been conducted on the matter, particularly homicide, in attempt to understand the root causes so as to create the right intervention programs. Tremblay (1995) and Ellis (1991, 1992) have used multiple regression techniques to determine factors that

predict crime. Long before Tremblay (1995), the use of econometrics was introduced and used in the examination of crime and its correlates (Becker, 1968). All the aforementioned scholars collected survey data (survey questionnaire) to collect data on crime. Using survey data from Jamaica for 1950 to 1984, Ellis (1992) empirically establishes factors that account for crimes. The empirical model by Ellis (1992) identified socio-economic correlates of crime.

The major crime pandemic in the Caribbean region (including homicide) has resulted in many books being written on the matter, with most of them being written from an objectivist epistemology. In a book edited by Harriott, Brathwaite and Wortley (2004) entitled 'Crime and Criminal Justice in the Caribbean' of the nine chapters (studies), all used a positivist theoretical perspective and/or a combination of quantitative and qualitative methodology. Another book by the title 'Understanding crime in Jamaica: New challenges for public policy' edited by Harriott (2003), of the ten chapters, eight employed a quantitative methodology (or survey research. Even in articles entitled 'Fear of Criminal Victimization in reputedly violent environment', 'The Jamaican Lumpenproletariat: Rogue culture or avatar of liberation?', 'Fear of crime and the risk of victimization: An ethnic comparison' by Harriott (2003a), Gray (2003a) and Chadee (2003) respectively, two used quantitative methodology. In fact, both Harriott's and Chadee's works employed multivariate statistical techniques, logistic regression and multiple regression analysis respectively. Chadee went further when he used path analysis to establish factors, direction and inter-correlation between factors in a path model of fear of crime in three major ethnic groups in Trinidad.

Among the factors that have been empirically established as associated with crime in the Caribbean are 1) age, 2) area of residence, 3) subjective social class, 4) poverty, 5) politics, 6) (Ellis, 1992; United Nations and the World Bank, 2007; Bourne, 2011). One anthropologist, using established empirical work on the association between crime and poverty as well as other factors (Tremblay, 1997), contended that poverty (or material deprivation and marginalization) is exploited by the political arena in Jamaica and has produced the violent society that is today (Robotham, 2003). Unlike other studies that utilized survey research methodology and advanced statistical techniques, Robotham (2003) used various social constructions to argue his perspective about the marriage between crime and politics in Jamaica.

Robotham (2003) having brought up the issue of politics to explain the major crime pandemic in the Caribbean, more so Jamaica, offers yet another insight to the matter. One year later, using historical analysis (constructionism), Simmonds comprehensively examined crime in Jamaica. She dated the study to the early Nineteen century back to Western Kingston and how the crime phenomenon blossomed and has continued ever since. On examination of a work written by Simmonds (2004), it can be extrapolated there that the nexus between politics and crimes can be traced to the early Nineteenth Century, when slaves established a

community in Kingston (Western Kingston) to provide a source of survivability because of the neglect of the political structure at the time.

...the granting of civil rights to the members of the freed population in the 1830s might be viewed as more than the consequence of political demands made by the more privileged coloureds. It can be seen as an attempt to create an ‘aristocracy’ in the community, thereby inserting a wedge between the slaves and some of their more mobile and influential free collaborators (Simmonds, 2004, 31)

The nexus of crime and politics, therefore, has its historical roots in the Jamaican society long before the 1970s (Simmonds, Sives, 2003, 1997) and clearly the ‘Badness-honour’ which permeates the current nation can be ascribed to the 1970s (Gray, 2003a) although it began even before this date (Sives, 2003). In an article entitled ‘The historical roots of violence in Jamaica: The Heart Report 1949’ Sives (2003) contended that “strong-arm politics” was used in the 1940s by the two political Institutions (namely, Jamaica Labour Party, JLP; People’s National Party, PNP) to seek governance of the nation. She noted that the rivalry was intense and that many people lost their lives in the process, particularly political followers. This continued and became even more intense in the 1970s (Gray, 2003a). According to Obaka Gray (2003), both political parties (JLP and PNP) had political enforcers. Killers and political patronage were introduced into the society, and ‘badness’ became a part of the Jamaican culture. Within the context of the intense political rivalry among members of the two traditional political parties (PNP and JLP), the confrontation of the members to protect resource allocation has led to violent crimes (Sives, 2003; Gray, 2003a, 2003b), and electoral crimes (Figueora and Sives, 2003).

Statistics revealed that the 1980s marks a transition in wanton murders, although its genesis began in the 1970s. Obaka Gray opined that 1) “...unforgiving ghetto during the party civil wars in the 1970s” (Gray, 2003, 2) “This study focuses on the period of the 1970s, a time of great upheaval, political violence, and social polarization in Jamaica” (Gray, 2003, 3), 3) “Activists during the 1970s reported that Barth [criminal], was familiar with former CIA agent Philip Agee’s critique of U.S. imperialism...” (Gray, 2003, 28), and 4). Indeed, by the late 1970s urban gangsters for both the political and criminal underworlds were becoming a growing source of patronage with which politicians had to compete” (Gray, 2003, 30).

The decade of the 1990s saw a 54.6% increase in murder over the 1980s, and at the end of the decade of 2000, murders grew by 76.4% compared to the previous decade (Bourne, 2011). The 1970s and 1980s pale in significance to the number of murders in 2000, and although Gray postulated that “...the period of the 1970s, was a time of great upheaval, political violence, and social polarization in Jamaica” (Gray, 2003, p. 3), the demands for close protection by the police grew as more people expressed feelings of fear of physical harm. The ‘micro-environment’ was changing and people began demanding a solution to the crime problem as well as the eradication of the synergy between politics and crime.

Globally, instead of a broad discussion on major crimes across Latin America and the Caribbean, the discourse is more in keeping with homicide. The rationale for the singling out of homicide from major crimes is simply because of the escalation and severity of homicide-cases. Using data from the United Nations Office on Drugs and Crime, the World Bank (2016) revealed that for 2012 and 2014, the Caribbean is well represented in the 15 nations with the most murders (homicide) in the world with Jamaica featured in the top 4 for both years (Table 5).

Table 5. Selected Nations and their homicide rates for 2012 and 2014

Details	Homicide rate per 100,000 population	Details	Homicide rate per 100,000 population
Honduras	93	Honduras	75
Belize	43	El Salvador	64
El Salvador	43	Jamaica	36
Jamaica	40	Belize	34
Guatemala	34	South Africa	33
St. Kitts and Nevis	34	Guatemala	31
Colombia	31	Colombia	28
South Africa	31	Caribbean Small States	27
The Bahamas	30	Trinidad and Tobago	26
Caribbean Small States	29	Brazil	25
Trinidad and Tobago	28	Dominican Republic	17
St. Vincent and the Grenadines	26	The Bahamas	
Brazil	24	St. Kitts and Nevis	
Dominican Republic	22	St. Lucia	
St. Lucia	22	St. Vincent and the Grenadines	
World	6.2	World	5.6

Source: World Bank (2016)

Latin America and the Caribbean (Americas) have higher rates of homicide than any other region in the globe according to the United Nations Office on Drugs and Crime (2013). From data for 2012 published by the UNODC, it was revealed that the homicide rate in the Americas was 16.3 per 100,000 population compared to 12.5 per 100,000 in Africa; 3.0 per 100,000 in Europe as well as Oceania, and 2.9 per 100,000 in Asia (p. 21). The reality is the

homicide rate in the Americas is 2.6 times more than that for the globe. Singling out those Latin America and Caribbean nations listed in Table 1, it is clear that they all have a homicide rate that is at least 3 times that for the globe. In fact, the rate for Jamaica is 6.5 times more than that for the world in 2012 and 6.4 times more in 2014. However, when the Region's homicide figures (Africa; Americas; Asia; Europe; Oceania) are disaggregated into sub-regions, the top five areas with the highest homicide rates in descending order were Southern Africa; Central America; South America; Middle Africa, and the Caribbean (United Nations Office on Drugs and Crime, 2013, p. 23). The United Nations Office on Drugs and Crime's statistics revealed that homicide rates in the world is predominantly a male-phenomenon, and this is equally the same across the continents with the exception of Asia (p. 29-32).

There is a major crime pandemic in Latin America and the Caribbean, and this has been underway for decades. The United Nations and the World Bank (2007) study entitled 'Crime, violence, and development: Trends, costs, and policy options in the Caribbean' noted that:

[t]he Governments of the Caribbean countries recognize the seriousness of the problem and are exploring innovative policy responses at both the national and regional levels. (United Nations and World Bank, 2007, p. 8)

Long before 2007, Caribbean governments have sought to understand and address the crime situation. Despite the plethora of empirical and constructivist studies that have been conducted in the last two decades, the homicide rates continue to rise, and this has left many scholars wondering "what is the rationale for the unabated increase?" From Robotham's perspective "Probably the most intractable factor contributing to violent crime in Jamaica is the interconnecting network of criminal gangs, drug running, politics and the police" (Robotham, 2003, p. 215). The matter becomes even more complex and warrants even more empirical inquiries.

Crime Victimization and Fear of Crime

Violent crimes in the Caribbean and Latin Americas, particularly homicides, have accounted for more deaths per 100,000 population than in many other nations across the globe (Emmanuel and Campbell, 2012; World Bank, 2016). The shootings and intentional homicide have created much fear among people across the region. Wood, Gibson, Ribeiro, & Hamsho-Diaz (2010), postulated that "Using Latinobarometro public opinion surveys of approximately 49,000 respondents residing in 17 countries in 2002, 2003, and 2004, the results of a Hierarchical Generalized Linear Model found that, net of individual and country-level control variables, the probability of seriously considering family migration to the United States was around 30% higher among respondents who reported that they or a member of their family was a victim of a crime sometime during the year prior to the survey" (p. 3).

The fear of crime is easily explained among Caribbean nationals and Latin Americans because of the death rates (Chadee, 2003; Harriott, 2000, 2003a, 2003b, 2003c, 2003d; Heinemann, & Verner, 2006; Alda, 2011; Natarajam, 2016). Millions of peoples in the developing world fear crimes simply because they are highly vulnerable to becoming victims of violence (Alda, 2011; Serrano-Berthat, & Lopez, 2011). Alda (2011) opined that the crime phenomenon has become a preoccupation for policy makers as they seek to address the violence pandemic. A Caribbean criminologist, Professor Harriott, argued that a by-product of the high rates of crimes is the fear of crime because of the high risk of becoming a victim (Harriott, 2003a). Furthermore, using a sample of 1,340 Jamaicans, Harriott (2003a) found that age, educational status, occupation type, gender, urban areas, and victims were identified as factors of the fear of crime, with 31% of victims being worried about the probability of being murdered.

The fear of crime speaks to the 1) low perception among people on the probability of the perpetrators being caught, 2) low public perception of safety, 3) low prevention crime strategies, and 4) the low confidence of citizens in the security forces ability to arrest criminals, all of which increase the level of fear among the general populace (Harriott, 2003a; King, 2003). Like people across the developing world, Jamaicans are not confident in the employed crime strategies instituted to protect them.

Crime Strategies

The escalating violent crime phenomenon has resulted in the implementation of various strategies. Police and military services, an efficient judiciary, and social intervention programs have been widely used as crime solution strategies (Harriott, 2003a, 2003b, 2003c; Robotham 2003). Robotham (2003) postulated that the solutions to Jamaica's crime problem must take a multisectoral approach to include crime control, socioeconomic, and situational causal factors. He outlined that the socioeconomic conditions should include community policing strategies and the criminal justice system, which is supported by Harriott (2004b). Harriott (2004b) summarized the crime solution strategies this way "These suggestions will not solve the problem of violent crime, but will perhaps make it more manageable and help to rescue Jamaica from the proverbial brink of lawlessness to being simply a country with a serious crime problem" (p. 282).

Harriott's perspective seems to mitigate against the whole notion of a crime solution. Because the idea of a solution would suggest that crime will be eliminated. However, the crime statistics would support the difficulty in solving this problem and concurs with the views of Harriott. Nevertheless, for decades, the implemented strategies to address crime seem to have failed even though the policy makers believe the contrary (Bryan, 2018). There can be no objective denial that 'crime-fighting' strategies employed by successive governments in Jamaica have failed, and this is even concretized by the governments changing the initiatives as the crime statistics, particularly homicide, continue to rise (Harriott, & Jones, 2016;

Robinson, 2018; Jamaica Information Service (JIS), 2018; Loopjamaica.com, 2018). It is increased intentional homicides and their nature that justify people's unwillingness to support the crime initiatives of various governments. It is an inescapable truth that the crime phenomenon has not been solved in the developing nations and more so in the Caribbean and Latin America (United Nations Office on Drugs and Crime & the World Bank, 2007; World Bank, 2017, 2018), because the social conditions and structure in those nations' breathe' criminality as recorded by the increasing crime statistics ((United Nations Office on Drugs and Crime & the World Bank, 2007; World Bank, 2016).

Since the establishment of the Jamaica Constabulary Force (JCF), the crime problem in Jamaica has continued to increase irrespective of the initiatives (Harriott& Jones, 2016; Bourne, Blake, Sharpe-Pryce, & Solan, 2012; Bourne, Hudson-Davis, Sharpe-Pryce, Lewis, Francis, Solan, Irving, Watson-Coleman, & Nelson, 2015; Bourne, 2011; Harriott, 2003a, 2003b, 2003c, 2004; Headley, 1994; Ellis, 1991, 1992; Sives, 1997, 2003) as is the case in many developing nations (WHO, 2002; United Nations Office on Drugs and Crime & the World Bank., 2007; United Nations Office on Drugs and Crime, 2013). In fact, violent crimes in Jamaica is a longstanding issue that dates back to slavery (Simmonds, 2004) and has more than increased by over 1000% since that era.

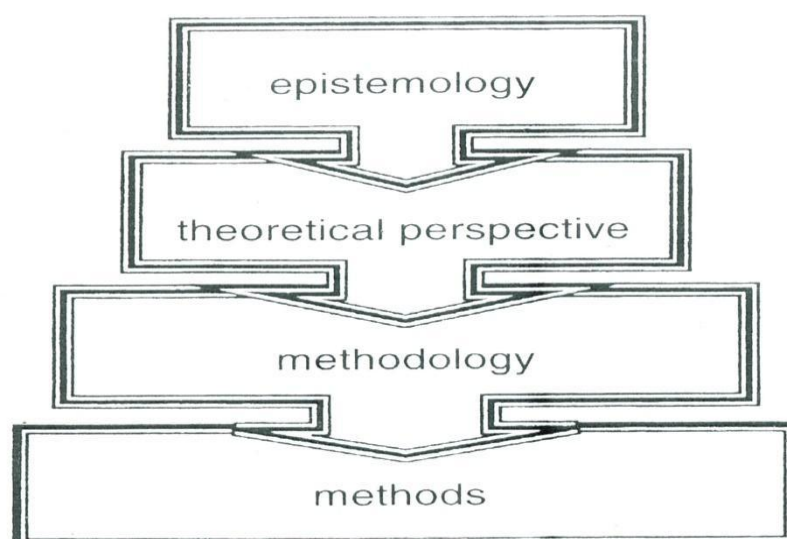
Many nations have employed paramilitary style policing as well as states of emergencies to address their crime problems (Harriott, 2000). Robotham (2003) identified policing as an important causal factor in violent crime reduction. One scholar argued that the paramilitary type policing initiative is a 'hardcore' approach to crime fighting that oftentimes lead to police brutality (Robotham, 2003). In fact, Robotham (2003) postulated that 'hardcore' policing is a widely employed strategy used by many states. Robotham (2003) made a claim that assassination was employed by United States as a crime fighting state strategy prior to the assassination of Kennedy (p. 226). Historically, Jamaican governments have widely employed 'hardcore' or paramilitary policing strategy to address the crime problems (Table 2) with little emphasis on social and economic interventions (including the criminal justice system) that are really the gateway to crime reduction alongside paramilitary policing. Social interventions can be considered as the welfare cost of crime reduction (Jaitman, Soares, Olavarria-Gambi, & Guerrero Compean, 2015), however nations in Latin America and the Caribbean have placed much emphasis on paramilitary policing strategies ('hardcore policing) in crime reduction.

In concluding, many developing nations have sought to implement various crime initiatives to address the crime problem. Clearly, these have had a miniscule effect on crime reduction. Coupled with states of public emergencies, paramilitary policing has been widely used as a crime initiative but there seems to be no empirical study that has examined that strategy's effect on violent crimes. There is a gap in the crime literature on the effectiveness of states of emergencies and paramilitary forces employed by the JCF, which will be filled by the current study.

Materials and methods

This research design is a correlational secondary one, which has been extensively used by many scholars in examining the crime phenomenon (Bourne, Blake, Sharpe-Pryce, & Solan, 2012; Bourne, Hudson-Davis, Sharpe-Pryce, Lewis, Francis, Solan, Irving, Watson-Coleman, & Nelson, 2015; Bourne, 2011; Harriott, 2003a, 2003b, 2003c, 2004; Headley, 1994; Ellis, 1991, 1992; Sives, 1997, 2003). The type of research design is framed from objectivistic epistemology. Hence the researchers reviewed the work of Crotty (2005) as he used a diagrammatic representation that guides this paper within an objectivist epistemology (Figure 3.1). The research process commenced from the general epistemology, theoretical framework, methodology and method (Crotty, 2005). For this study an objectivist epistemology will be employed, followed by a positivist theoretical framework and survey research methodology, and then by employing standardized instrumentation, statistical tools for analyses, and adhering to all ethics standards for research. Crotty (2005) opined that those issues previously mentioned are in four schemas, the research process. The four schemas of the research process according to Crotty (2005, 2-4) are encapsulated into a flow chart (See Figure 3). Crotty (2005), contended that any research is guided by the choice of a methodology and method.

The schema of the research process is simply not a unidirectional model (Crotty 2005, 2-4). Crotty (2005) pointed out that the research process begins with an epistemology followed by a theoretical perspective, methodology and method. Embedded in this schema is process of carrying out research and there is a stringency to the direction that must be followed, which guided this research process.



Source: Crotty (2005, p. 4)

Figure 3. Linking epistemologies, theories, methodologies and methods

Objectivism is the epistemology that will be used for this study. Embedded in this epistemology are 1) precise measurement, 2) impersonality, 3) statistical assessment of issues, 4) hypothesis testing, and 5) systematic research design. Based on the objectivist epistemology of this study, the research has utilised an objective theoretical framework as this is in keeping with objectivism. The methodology that will answer the research question or test the hypothesis, is survey research methodology. The methodology of this paper is guided by the epistemology and theoretical framework that feeds into methodology and methods. Hence the justification for survey research methodology because of the objectivist epistemology.

Research design

In keeping with an objectivist perspective, this research will employ a correlational research design (Rea & Parker, 2014; Neuman, 2014; Babbie, 2010; Creswell, 2013). For this research, the dependent variable is major/violent crimes (homicide, shooting, rape, aggravated assault, robberies, break-ins, and larcenies) and the independent variables are the special paramilitary units established in the JCF as well as the State of Public Emergency. A correlational design is suitable for this study as Creswell (2013) emphasized that correlational designs provide the means for a study to explain and relate variables and is supported by Vogt (2007) as a means of investigating the relationship between the variables. Similarly, Fraenkel and Wallen (2003) asserted that correlational research designs study two or more variables to discover relationships among them but it does not try to find any influence, or attribute cause but rather explains the degree to which the variables are related. Likewise, Barber and Korbanka (2003) further reiterated that correlation does not imply causality between variables, but rather disclose an association that may be useful for making future predictions. Therefore, correlational research design is suitable for this study as correlation designs employ a quantitative approach with multi subjects and without manipulation of the independent variables (Creswell, 2008).

The correlational research design allows for the collection of time series data, and as such accommodates the testing of hypotheses and empirically answers selected research questions.

Conceptualizations and Operationalization

Definition of Terms

Homicide (intentional homicide or murders). unlawful killing (a crime causing death without a lawful excuse) by other person(s) within a particular geopolitical zone (excluding police killings or homicides). For this work, murders represent the total number of murders for each year.

State of Public Emergency (SOE). According to the OAS, SOE “...means any period during which there is in force a Proclamation by the Governor-General declaring that a state of public emergency exists” (Organization of American States, 1973),

Zone of Special Operations (ZOSO). The Jamaica Information Service (JIS) (2017) indicated that a ZOSO is defined within the following context:

An area can be declared a Zone of Special Operations by the Prime Minister after the Chief of Defence Staff and the Commissioner of Police have advised him in writing to do so.

During an operation, no one can be detained or arrested in a Zone unless proper grounds can be determined by the person in charge (a Major of the Jamaica Defence Force (JDF) or a Superintendent of Police of the Jamaica Constabulary Force (JCF)).

Anyone who is arrested should, upon arrest be informed of the reason. The individual should be brought before a Justice of the Peace (JP) to determine whether the reason for the arrest is justified. If the JP deems the reason justified, the person should be kept in custody for a maximum of 24 hours. Otherwise, the person should be released immediately.

No tools of legal trade should be seized.

Only female security officers may search a female citizen.

Where vehicles are seized, the owner or person in possession of the vehicle(s) must be provided with a receipt for the item(s), as well as a list noting the item(s) seized.

An Order revoking a Zone may be made at any time by the Prime Minister (JIS, 2017; see also, Jamaican Parliament, 2017).

Paramilitary unit. This is a semi-militarized force that is organizationally structured, tactically based and trained, and functions as a professional military form (Bohmelt & Clayton, 2018).

Jamaica Constabulary Force (JCF). This is the official police force of Jamaica (Ministry of National Security, Jamaica, 2020)

Data Collection Procedures

In keeping with ethical protocols when conducting research, the researcher obtained consent from the Statistics Division of the Jamaica Constabulary Force. This is in keeping with the work of Ary, Chester-Jacobs & Razavieh (2002). The researcher wrote to the Statistical Division of the JCF and sought data on violent crimes since 2002. This was forwarded in a researcher in pdf format. In addition, the JCF also forwards data to the Statistical Institute of Jamaica and the Planning Institute of Jamaica on crimes in Jamaica. The statistics on violent crimes are published in a book entitled Economic and Social Survey of Jamaica. Hence, the researcher used both the JCF documentation and Economic and Social Survey of Jamaica.

Validity and Reliability

To achieve validity and reliability of the data obtained from the JCF, the Economic and Social Survey of Jamaica was used to triangulate the data given by the Statistics Division of the JCF.

The validation and reliability testing are crucial aspects to the scientific process (Babbie, 2010; Neuman, 2014). For any research project to be credible, its reliability and validity must be clearly established (Wiersman, 2000; Kuhn, 1996; Balashov& Rosenberg, 2002)). 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 Wiersman, reliability is concerned with the reliability and consistency of the methods, conditions and results while validity deals with the accurate interpretability of the results and the generalizability of the results.

Data Analyses

For this survey instrument (questionnaire), data will be 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 will be performed on the data as well as percentages and frequency distributions. Statistical significance for this study will be a p-value less than or equal to five percentage points (≤ 0.05)-two-tailed. In order to ensure that all the assumptions of OLS will be maintained in this study, the researchers will examine 1) autocorrelation, 2) linearity and 3) collinearity (Lewis-Beck, 1980). For this study, multicollinearity will be assessed based on 1) Durbin-Watson test and 2) correlation coefficients. Where Durbin-Watson is between 1.5 and 2.5, there is no problem with multicollinearity (Mamingi, 2005). In addition to the conditions, the researchers will also assess correlation coefficients as they will provide another aspect to multicollinearity computations” (March & Bourne, 2011, 262; see also, Polit, 1996).

Ethical Considerations and Informed Consents

The issue of ethics in research evolved as a result of risk or harm that was placed on Black people during the Syphilis Study at Tuskegee. As a result, ethical principles have been established to guide Human Subjects Regulations, and these are 1) respect for people, 2) beneficence, and 3) justice. This has led to the development of an ethical code by American Psychological Association (APA’s Ethics Code), which addresses different situations and questions. The matter of ethics in research relating to human subject is critical following to Syphilis Study at Tuskegee because research is more than ascertain empirical findings as it is about protect the human subject during and after the research process. Resnik (2015) forwards that the “...most common way of defining "ethics": **norms for conduct** that distinguish between acceptable and unacceptable behavior”, which is in keeping with the

Oxford Dictionary’s conceptualization of the phenomenon (see also, Sales and Folkman, 2000; American Psychological Association, 2002). In the context of research, several writers have concluded that research has an ethical context that must be considered constantly during the process of research (Creswell, 2013; Gay, Mills & Airasian, 2009). In fact, several organizations, such as the American Psychology Association, the American Educational Research Association and the American Sociological Society, have established ethical codes to provide guidance in the matter (Gay, Mills & Airasian, 2009).

Kuhn (1996) noted science is so because of the approaches taken, the rigours followed, the objectivity, measurement and gradual development. The social science is an inquiry into social phenomena, meaning peoples’ attitudes, behaviours and perceptions. Because social science is on people, care must be taken to protect the human subjects (Neuman, 2014; Babbie, 2010). To comprehend the seriousness of ethical issues, Neuman (2014) opined that “Researchers need to prepare themselves and consider ethical concerns as they design a study so that sound ethical practices are built into the study design” (Neuman, 2014, 116). He noted further that “Ethics define what is or is not legitimate to do, or what ‘moral; research procedure involves” (Neuman, 2014, 110).

Findings

H_{a1}: There a significant difference in intentional homicides occurring in Jamaica during the JLP is in governance compared to when the PNP is in governance, using intentional homicide data for Jamaica from 1970-to-2020.

Over the last 5 decades (1970-2020), the People’s National Party (PNP) has governed Jamaica for 30 years compared to 21 years for the Jamaica Labour Party (JLP). During the PNP’s governance of Jamaica, there have been some 8,529 more murders than when the JLP is in administration (Table 6). The average number of intentional homicides would give a more precise valuation of the issue in context with the number of years the respect parties have spent in governance of the nation.

Table 6. Annual Number of Intentional homicides in Jamaica by political parties in power, 1970-2019

Year	Homicide (in JLP administration)	Year	Homicide (in PNP administration)
1970	152	1972	170
1971	145	1973	227
1980	899	1974	195
1981	490	1975	266
1982	405	1976	367
1983	424	1977	409
1984	484	1978	381
1985	-	1979	351
1986	449	1989	439

1987	442	1990	542
1988	414	1991	561
2007	1574	1992	629
2008	1601	1993	653
2009	1680	1994	690
2010	1428	1995	780
2011	1125	1996	925
2016	1354	1997	1037
2017	1647	1998	953
2018	1287	1999	849
2019	1332	2000	887
2020	653	2001	1191
-	-	2002	1045
-	-	2003	975
-	-	2004	1471
-	-	2005	1674
-	-	2006	1340
-	-	2012	1095
-	-	2013	1200
-	-	2014	1005
-	-	2015	1208
TOTAL	14,986		23,515

Table 7 presents statistics on the average number of people intentionally murdered over the last 51 years in Jamaica (1970-2020). Over the last 51 years, the average annual number of people intentionally murdered in Jamaica was 830 ± 463 (95%CI: 698-962). This means that on average, 69 people are murdered per month and 2 on a daily basis. By disaggregating the data, it was revealed that on average 899 ± 545 people have been murdered during the JLP governance of the nation compared to 784 ± 403 in the PNP's administration of the nation, with there being no statistical difference between both murder figures (t-test = -0.861, P = 0.394).

Table 7. Average Number of Intentional homicides in Jamaica by political parties in power, 1970-2019

	Mean\pmSD¹	95%CI
Homicide (in JLP administration)	899 \pm 545	644-1154
Homicide (in PNP administration)	784 \pm 403	633-934
Overage average	830\pm463	698-962

¹t-test₄₈ = -0.861, P = 0.394

The annual murder rates per 100,000 in Jamaica disaggregated by the political party in power in presented in Table 8. For the studied period (1970-2020), the average murder rate per

100,000 during the PNP's governance of Jamaica was 31.0 ± 14.0 (95% CI: 25.7-36.2) compared to 35.6 ± 19.3 (95% CI: 26.3-44.9) for when the JLP is in governance of the nation, with there being no statistical difference between the numbers ($t\text{-test}_{47} = -0.964$, $P = 0.340$).

Table 8. Annual Intentional homicide rate (/100,000 population) in Jamaica by political parties in power

Year	Homicide (in JLP administration)	Daily ¹	Year	Daily ¹	Homicide (in PNP administration)
1970	8.13	0.42	1972	0.46	8.8
1971	7.63	0.40	1973	0.62	11.51
1980	42.14	2.46	1974	0.53	9.71
1981	22.66	1.34	1975	0.73	13.02
1982	18.41	1.11	1976	1.00	17.5
1983	18.92	1.16	1977	1.12	19.26
1984	21.23	1.32	1978	1.04	17.72
1985	Not available	#VALUE!	1979	0.96	16.15
1986	19.22	1.23	1989	1.20	18.48
1987	18.8	1.21	1990	1.48	22.56
1988	17.57	1.13	1991	1.54	23.13
2007	58.82	4.31	1992	1.72	25.69
2008	59.58	4.37	1993	1.79	26.82
2009	62.32	4.60	1994	1.89	28.06
2010	52.98	3.91	1995	2.14	31.35
2011	41.67	3.08	1996	2.53	36.77
2016	49.63	3.70	1997	2.84	40.82
2017	60.36	4.51	1998	2.61	37.17
2018	47.19	3.53	1999	2.33	32.88
2019	48.79	3.65	2000	2.42	34.26
2020	Incomplete	1.79	2001	3.26	45.74
-	-		2002	2.86	39.96
-	-		2003	2.67	37.13
-	-		2004	4.02	55.76
-	-		2005	4.59	63.16
-	-		2006	3.67	50.32
-	-		2012	2.99	40.44
-	-		2013	3.29	44.2
-	-		2014	2.75	36.94
-	-		2015	3.31	44.33

¹Daily is computed based on 365 for a normal year and 366 for a leap year (Annual figure/365 or 366)

H_{a2}: The establishment of special paramilitary units in the JCF since 1970s has inversely influenced violent crimes in the Jamaican society

Table 9 provides a detailed analysis of the average number of intentional homicides committed in Jamaica over the last 51 years (1970-2020) disaggregated by the different paramilitary units established in JCF to address the crime situation in the society. On view of the statistics, there are instances in which a particular established paramilitary unit in the JCF has inversely influence the homicide statistics. The Eradication Squad, Area 4 Task Force, Organized Crime Unit, Operation Intrepid, and Operation Resilience have managed to reduce the homicide figures compared early units.

Homicide

However, the establishment of ZOSO has not negatively affected the intentional homicides in Jamaica (Table 4.4). In fact, 2013, the JCF had increased Operation Resilience and in that time, murders fell by 271 compared to when Operation King Fish was employed. In 2017, ZOSO was established in JCF and during this framework, intentional homicide increased by 267 compared to when Operation Resilience was used. Clearly, the strategies employed by the JCF during ZOSO has not altered the homicide pandemic in Jamaica, and speaks to the underlying challenge of political administrations to tackle the crime problem. However, the introduction of the State of Public Emergency (SOE) has reduced the homicide pandemic in the nation. In fact, the introduction of SOE has seen a 32% reduction in intentional homicides committed in Jamaica compared to when ZOSO was used.

Table 9. Average number of Intentional homicides in Jamaica by paramilitary units established in the JCF

	Mean	Std. Deviation	95% CI		Minimum	Maximum
			Lower	Upper		
Echo Squad	367.00	.	.	.	367	367
Ranger Squad	899.00	.	.	.	899	899
Eradication Squad	490.00	.	.	.	490	490
Area 4 Task Force	445.50	4.9	401.03	489.97	442	449
ACID	653.00	.	.	.	653	653
Operation Crest/Justice	780.00	.	.	.	780	780
Operation Dovetail	1037.00	.	.	.	1037	1037
Organized Crime Unit	953.00	.	.	.	953	953
Operation Intrepid	849.00	.	.	.	849	849
Crime Management Unit (CMU)	887.00	.	.	.	887	887

Major Investigative Team	1045.00	.	.	.	1045	1045
Operation Kingfish	1471.00	.	.	.	1471	1471
Operation Resilience	1200.00	.	.	.	1200	1200
ZOSO	1467.00	254.56	-820.12	3754.12	1287	1647
SOE	992.50	480.13	-3321.26	5306.26	653	1332
Total	913.39	372.14	728.33	1098.45	367	1647

Selected Violent Crimes, 2002-2020

This section of the findings will analyze data for the last 19 years (2000-2020; **Table 10**) and these will be disaggregated by particular paramilitary units established in the JCF to address crimes in Jamaica (**Table 10**). In 2018, all the selected major crimes (murder, shootings, rapes, aggravated assaults, robberies, break-ins, and larcenies) was a decline with the most being in intentional homicide (21.9%) followed by shootings (21.4%) and robberies (14.0%; Annex). The following year (2019), larceny was the only major crimes that saw a reduction (6.6%), with the others revealing increases of less than 10%. These figures clearly indicated that the SOEs are effective in addressing violent crimes in Jamaica. However, the strategies employed in ZOSOs have made positive impact on reducing crimes such as rapes (5.9%), aggravated assaults (9.4%), robberies (10.5%), break-ins (8.0%), and larcenies (24.3%).

Table 10. Selected Violent Crimes on an annual basis from 2002 to 2020

Year	Murders	Shootings	Rapes	Aggravated Assaults	Robberies	Break-Ins	Larcenies
2002	1045	1269	767	-	1940	1742	-
2003	975	1165	848	-	1634	1398	255
2004	1471	1675	861	-	2107	2027	239
2005	1674	1647	754	-	2210	1644	186
2006	1340	1341	709	-	2010	1303	112
2007	1574	1450	718	-	1601	1492	99
2008	1601	1528	862	-	2663	2452	326
2009	1680	1665	710	-	3024	3796	510
2010	1428	1528	731	489	2856	3793	425
2011	1125	1354	861	333	3097	3507	426
2012	1095	1247	965	935	2773	3238	761
2013	1200	1245	865	812	2674	2537	533
2014	1005	1104	723	696	2269	2524	449
2015	1208	1077	633	607	1918	1813	338
2016	1354	1226	542	471	1433	1311	189
2017	1647	1483	510	428	1277	1206	143

2018	1287	1166	509	382	1098	1185	151
2019	1332	1250	511	381	1205	1236	141
2020	653 ¹	600 ¹	218 ¹	188 ¹	513 ¹	487 ¹	47 ¹
Average	1300	1317	700	520	2016	2036	296

¹The figures are computed from January 1 to June 27, 2020

Shootings

Table 11 presents descriptive statistics for the number of shootings in Jamaica for a 19-year period (2002-2020) disaggregated by special paramilitary units established in the JCF and a joint military strategy between the police and the arm (SOE). For the studied period, the strategy of SOE has significantly reduced the number of shootings in Jamaica compared to other paramilitary established units.

Table 11. Number of Shootings disaggregated by paramilitary units & SOE

Paramilitary units & SOE	Mean	Std. Deviation	95% Confidence Interval	
			Lower	Upper
Major Investigative Team	1269	.	.	.
Operation Kingfish	1675	.	.	.
Operation Resilience	1245	.	.	.
ZOSO	1325	224.2	-689.43	3338.43
SOE	925	459.6	-3204.52	5054.52
Total	1241.14	332.7	933.41	1548.88

Rape

ZOSOs and SOEs have reduced the number of rapes committed in Jamaica for the 19-year period (2002-2020; Table 12). In fact, at least 145 less rapes have been committed in Jamaica since the introduction of the SOEs.

Table 12. Number of Rapes disaggregated by paramilitary units & SOE

Paramilitary units & SOE	Mean	Std. Deviation	95% Confidence Interval	
			Lower	Upper
Major Investigative Team	767	.	.	.
Operation Kingfish	861	.	.	.
Operation Resilience	865	.	.	.
ZOSO	510	0.7	503.1	515.9
SOE	365	207.2	-1497.0	2226.0
Total	606	236.7	386.9	824.8

Aggravated Assaults

ZOSOs and SOEs have reduced the number of aggravated assaults committed in Jamaica for the 19-year period (2002-2020; Table 13). Since the implementation of SOE, 29.6% less aggravated assaults have been committed in Jamaica compared to the introduction of ZOSOs.

Table 13. Number of Aggravated Assaults disaggregated by paramilitary units & SOE

Paramilitary units & SOE	Mean	Std. Deviation	95% Confidence Interval	
			Lower	Upper
Operation Resilience	812	.	.	.
ZOSO	405	32.5	112.6	697.2
SOE	285	136.5	-941.	1510.6
Total	438	228.5	154.5	721.9

Robberies

ZOSOs and SOEs have reduced the number of robberies committed in Jamaica for the 19-year period (2002-2020; Table 14). In fact, less robberies have been committed in Jamaica since the introduction and implementation of ZOSO and SOE, with the latter accounting for some 27.7% less robberies than the former ‘crime fighting’ strategy.

Table 14. Number of Robberies disaggregated by paramilitary units & SOE

Paramilitary units & SOE	Mean	Std. Deviation	95% Confidence Interval	
			Lower	Upper
Major Investigative Team	1940	.	.	.
Operation Kingfish	2107	.	.	.
Operation Resilience	2674	.	.	.
ZOSO	1188	126.6	50.3	2324.7
SOE	859	489.3	-3537.4	5255.4
Total	1545	730.2	869.6	2220.1

Break-Ins

ZOSOs and SOEs have reduced the number of break-ins carried out in Jamaica for the 19-year period (2002-2020; Table 15). Furthermore, less break-ins have occurred in Jamaica since the introduction and implementation of ZOSO and SOE, with the latter accounting for some 27.9% less break-ins than the former ‘crime fighting’ strategy.

Table 15. Number of Break-Ins disaggregated by paramilitary units & SOE

Paramilitary units & SOE	Mean	Std. Deviation	95% Confidence Interval	
			Lower	Upper
Major Investigative Team	1742	.	.	.
Operation Kingfish	2027	.	.	.
Operation Resilience	2537	.	.	.
ZOSO	1196	14.8	1062.1	1328.9
SOE	862	529.6	-3897.0	5620.0
Total	1489	669.9	869.1	2108.1

Larcenies

Larcenies in Jamaica have significantly decline since the introduction and implementation of both ZOSO and SOE, with SOE being a more effective ‘crime fighting’ strategy than ZOSO (Table 16). In fact, as a result of the introduction of ZOSO, there were 72.4% less larcenies than when Operation Resilience was used and 38.5% less larcenies than when Operation Kingfish was used as a ‘crime fighting’ strategy. SOE, on the other hand, was 2.5 more effective than Operation Kingfish, 5.7 times more effective than Operation Resilience, and 1.6 times more effective than ZOSO in reducing the number of larcenies in Jamaica.

Table 16. Number of Larcenies disaggregated by paramilitary units & SOE

Paramilitary units & SOE	Mean	Std. Deviation	95% Confidence Interval	
			Lower	Upper
Operation Kingfish	239.00	.	.	.
Operation Resilience	533.00	.	.	.
ZOSO	147.00	5.7	96.18	197.82
SOE	94.00	66.5	-503.19	691.19
Total	209.00	170.0	30.62	387.38

H_{a3}: There exists strong statistical correlation among 1) homicide, 2) larcenies, 3) break-ins, 4) robberies, 5) aggravated assaults, 6) rape, and 7) shootings in Jamaica

Table 17 presents Pearson’s product moment correlation coefficients among 1) homicide, 2) larcenies, 3) break-ins, 4) robberies, 5) aggravated assaults, 6) rape, and 7) intentional murders in Jamaica. On examination of the results, it can be concluded that there exists strong direct statistical correlation between 1) homicide and shootings ($r_{xy} = 0.876$, $P < 0.05$), 2) larcenies and aggravated assaults ($r_{xy} = 0.856$, $P < 0.05$), 3) break-ins and robberies ($r_{xy} = 0.927$, $P < 0.05$), 4) robberies, 5) aggravated assaults and rape ($r_{xy} = 0.765$, $P < 0.05$), 6) rape and robbery ($r_{xy} = 0.806$, $P < 0.05$), and 7) break-ins and larcenies ($r_{xy} = 0.842$, $P < 0.05$).

Table 17. Pearson's Product Moment Correlation among selected violent crime indicators in Jamaica

		Homicide	Shootings	Rape	Aggravated Assaults	Robberies	Break-Ins	Larcenies
Homicide	Pearson Correlation	1	.876**	.199	.057	.276	.197	-.093
	Sig. (2-tailed)		<0.0001	.413	.868	.253	.418	.713
	N	19	19	19	11	19	19	18
Shootings	Pearson Correlation	.876**	1	.549*	.249	.563*	.461*	.159
	Sig. (2-tailed)	<0.0001		.015	.460	.012	.047	.529
	N	19	19	19	11	19	19	18
Rape	Pearson Correlation	.199	.549*	1	.765**	.806**	.634**	.663**
	Sig. (2-tailed)	.413	.015		.006	<0.0001	.004	.003
	N	19	19	19	11	19	19	18
Aggravated Assaults	Pearson Correlation	.057	.249	.765**	1	.599	.505	.856**
	Sig. (2-tailed)	.868	.460	.006		.052	.113	.001
	N	11	11	11	11	11	11	11
Robberies	Pearson Correlation	.276	.563*	.806**	.599	1	.927**	.797**
	Sig. (2-tailed)	.253	.012	<0.0001	.052		<0.0001	<0.0001
	N	19	19	19	11	19	19	18
Break-Ins	Pearson Correlation	.197	.461*	.634**	.505	.927**	1	.842**
	Sig. (2-tailed)	.418	.047	.004	.113	<0.0001		<0.0001
	N	19	19	19	11	19	19	18
Larcenies	Pearson Correlation	-.093	.159	.663**	.856**	.797**	.842**	1
	Sig. (2-tailed)	.713	.529	.003	.001	<0.0001	<0.0001	
	N	18	18	18	11	18	18	18

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

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

Discussion

Researches have been critical to the decision-making process as well as framework policy formulations (Honig & Coburn, 2008; Harriott, 2003a; Tseng, 2012; Treadway, 2015; Levin, 2016; Hoylman, 2017; World Bank, 2018). Harriott (2003a), one of the leading

criminologists in the Caribbean, has widely employed positivism to the study of the crime pandemic in Jamaica. He contended that research is the gateway to understanding the crime phenomenon, and that it is through this medium that many policies have been formulated and measures implemented to combat the crime problem in the region, which is equally do by others including the World Bank (2018). The current study, using secondary time series data from 1970 to 2020, has empirically examined the crime statistics for Jamaica in attempting to understanding whether paramilitary policing strategies and/or state of emergencies are effective crime reduction initiatives. The research will, therefore, provide a platform upon which policy makers may use in planning initiatives in the future.

Crime strategies and crime statistics

Becker (1968) had objectively established a crime and punishment econometric model that clearly showed that there are benefits and disbenefits for those who engage in criminal activities. Two of the factors of importance in the crime discourse are 1) the probability of getting caught, and 2) the probability of being convicted if caught. Those factors are captured among the strategies of policing and the criminal justice system. The probability of getting caught is based on the effective or lack of policing the society. It is for this matter that governments engage in policing the society in an effort to reduce crimes. So, in 1867 when the Jamaica Constabulary Force was formed it is in response to the Morant Bay Rebellion of 1865 (JCF, 2020). The JCF was established a paramilitary organization, and this explains its approaches in crime reduction. As a result, the JCF seek to ‘fight’ crime which is an indicator of ‘hardcore’ policing initiatives (Robotham, 2003). This ‘hardcore’ policing strategy has resulted in many cases of police brutality as well as police killings (Amnesty International, 2001, 2019). The tabloids have had captions such as 1) Police killing more than they are wounding-INDECOM (Henry, 2018). 2) Increase in killings by Jamaica Police raises question (Goi, 2017), and 3) Vendor alleges police brutality; cops investigate (Porter, 2018), as well as cases when police officers have been found guilty for 4) assault (The Supreme Court of Judicature of Jamaica, 2007, 2012), and 4) manslaughter and/or murder (The Supreme Court of Judicature of Jamaica, 2018, 2019).

The actions or inactions of the police officers in Jamaica have reduced people’s trust in them (Waller, Bourne, Minto, and Rapley, 2007) as well as alienated them from the citizens. In recognition of brutality meted out to citizens by the police, the Jamaican government passed an Act on April 15, 2010 for the establishment of independent body (The Independent Commission of Investigations (INDECOM), to investigate police misconduct, excessive behaviour, and policing shootings of citizens including murders (INDECOM, 2020). While the paramilitary force (JCF) continues to operate in the era of INDECOM, it has instituted many paramilitary units as ‘hardcore’ initiatives to reduce crime. Since the establishment of INDECOM, some 13,334 Jamaicans and visitors have been intentionally murdered and some 87,979 dating back to 1970. In fact, a quantitative study, using secondary time series data

from 1970 to 2013, Bourne, Hudson-Davis, Sharpe-Pryce, ... & Francis (2015) found that intentional homicide in New York was 8.6 per 100,000 population compared to 31.0 per 100,000 in Jamaica. This denotes that homicide in Jamaica was 3.6 times more than that in New York although the population of the latter was at least 10 times that of the former. Furthermore, on examination of the UN Office on Drugs and Crime's International Homicide Statistics database, in 2019, Jamaica was second nation with the most murders per 100,000, and that this had worsened since 2016 when the nation was the third most murderous country in the world. There is sufficient data to argue on effectiveness or lack of on the policing initiatives employed by the JCF.

The crime problem in Jamaica has worsened since the 1970s in spite of the implementation of various paramilitary initiatives and state of emergencies. In 1970, 4 people were murdered every 10 days, and this increased to 25 in 1980, and fell to 15 in 1990, and rose to 24 in 2000 and 39 in 2010, and fell to 18 in 2020 (using data from January 1 to June 30, 2020). A disaggregation of the crime statistics by paramilitary units and SOE as well as political party in governance may provide a holistic analysis of the effectiveness or otherwise of policing strategies employed by successive governments in Jamaica.

In 2017, approximately 5 people were murdered on a daily basis in Jamaica and this has fallen to 1 less since that time. Bryan (2018), attributed the homicide reduction to policing strategies and so does INDECOM (2018). The current study has objectively brought into the crime discourse paramilitary police initiative explanations for the crime reduction. Historically, the JCF has employed many paramilitary units in the organization, and the successes have been both favourable and unfavourable. This research has found that there are some paramilitary units that have been formed by the JCF that has reduced violent crimes. In fact, during Eradication Squad, Area 4 Task Force, Organized Crime Unit (CMU), and Operation Intrepid, homicides fell in Jamaica over the previous paramilitary unit establishments. On the other hand, during the establishment of ZOSOs, all major crimes in Jamaica rose and this offers a conclusion on the ineffectiveness of this paramilitary initiative. In fact, the average number of intentional homicides during ZOSO was 1,467 people and this represents a 267 increase in murder over the previous policing initiative of Operation Resilience.

Of the major crimes in Jamaica (aggravated assaults, break-ins, homicide, larcenies, rapes, robberies), only homicides and shootings were greater in the period of ZOSOs compared to other paramilitary initiatives employed by the JCF. This indicates that ZOSO aided in the reduction of many of the major crimes in Jamaica including larcenies, break-ins, robberies, aggravated assaults, and rapes. The matter of paramilitary policing strategies being responsible for the crime reduction may have some bearing on these results. But the police have been employing a multidimensional approach to crime reduction to include community policing (Weisburd & Eck, 2004; Braga, 2015) when they seek to stop the act before it occurs (Rowe, 2018) coupled with social intervention to include the government and other

stakeholders (Chambers, 2014). While it is not definitive that ZOSO can be ascribed as the causal factor in crime reduction of many of the major crimes, the employment of multi-faceted that include this paramilitary initiative is clearly attributed to crime realities in Jamaica. In fact, the police have indicated that technology is among the initiatives used to ‘fight-crime’ and this complements the ‘hardcore’ policing strategies (Jamaica Observer, 2018a).

The statistics revealed that during the introduction of states of emergencies, all major crimes in Jamaica fell, which concurs with findings from the Jamaica Observer (2018b) and an article published in the Jamaica Gleaner (2020). Clearly, a national suppressive or deterrence strategy (SOE) can be used to explain some of the crime reduction in Jamaica. Although policing strategies can be credited with some of the reduction in violent crimes in Jamaica as well as in the United States (National Institute of Justice, US Department of Justice, 2019), SOEs appear to be more effective crime reduction strategies than paramilitary units in the police force.

Political party governance of Jamaica and homicide

In Jamaica, only one of the two major political parties (JLP or PNP) have governed the nation. These political parties have sought to engage and support a particular set of strategies and/or initiatives to ‘fight-crimes’. Over the last 51 years (1970-2020), the PNP has mostly employed paramilitary policing initiatives. Of the studied period, the PNP have used paramilitary units established by the JCF some 12 times compared to the three times for the JLP. From the findings, there have been 14,986 murders committed while the JLP is in governance of Jamaica compared to 23,515 in the PNP’s administration. The actual number of murders may create the impression that murders seem more unstoppable under the PNP’s compared to the JLP. When the numbers of years are taken into consideration, the average number of intentional homicides in the PNP’s governance of Jamaica is 784 ± 403 (95% CI: 633-934), which is statistically the same as 899 ± 545 (95% CI: 644-1154) murders when the JLP is governing the nation.

Traditionally, politics has been used to account for murders in Jamaica. However, this study is concurring with the work of Bourne, Blake, Sharpe-Pryce and Solan’s (2012) that while political affiliation may account for some of the murders in Jamaica (Robotham, 2003), irrespective of which political party governs the nation, the policing initiatives yield the identical homicide results.

In concluding, paramilitary units and states of emergencies (SOEs) can have some influence on crime reduction in a society. In the case of Jamaica, the SOEs appear to be more effective in reducing violent crimes than paramilitary units established in the police force. While this study cannot claim that ZOSOs and SOEs have a causal effect on violent crimes, there is

enough empirical evidence to support the usage of both initiatives coupled with social intervention to reduce crimes in a society.

Recommendations

Policy

This research is proposing a multifactorial approach in the effort to address crime reduction in Jamaica. The usage of states of emergency should be for the short term while for the medium-to-long term, social and economic interventions should be the focus of policy makers.

The JCF needs to employ the implementation of extended paramilitary units for more community type policy initiatives, because suppression should not be a medium-to-long term initiative in crime fighting. Hence, the police should partner with various social agencies and business enterprises to build a multi-layered approach to sustain crime reduction.

Government

Governments should engage in systemic and structured social intervention programs while they embark on short-term suppressive crime initiatives. These social interventions should address fatherhood, motherhood, self-confidence, justice, material deprivation, economic survivability, a sense of value and belonging, and social equality along with mentorship of young people.

Future research

A quantitative study should be done on 1) disaggregating policing strategies and SOEs by gang violence, 2) assessing the role of social relationship on violence, 3) evaluating police killings and other violent acts on major violence in Jamaica, and 4) the role of social intervention on reducing violent crimes in a society.

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Annex

Year	Murders	Annual % change	Shootings	Annual % change	Rapes	Annual % change	Aggravated Assaults	Annual % change	Robberies	Annual % change	Break-Ins	Annual % change	Larcenies	Annual % change
2002	1045	-	1269	-	767	-	-	-	1940	-	1742	-	-	-
2003	975	-6.70	1165	-8.20	848	10.56	-	-	1634	-15.77	1398	-19.75	255	-
2004	1471	50.87	1675	43.78	861	1.53	-	-	2107	28.95	2027	44.99	239	-6.27
2005	1674	13.80	1647	-1.67	754	-12.43	-	-	2210	4.89	1644	-18.89	186	-22.18
2006	1340	-19.95	1341	-18.58	709	-5.97	-	-	2010	-9.05	1303	-20.74	112	-39.78
2007	1574	17.46	1450	8.13	718	1.27	-	-	1601	-20.35	1492	14.50	99	-11.61
2008	1601	1.72	1528	5.38	862	20.06	-	-	2663	66.33	2452	64.34	326	229.29
2009	1680	4.93	1665	8.97	710	-17.63	-	-	3024	13.56	3796	54.81	510	56.44
2010	1428	-15.00	1528	-8.23	731	2.96	489	-	2856	-5.56	3793	-0.08	425	-16.67
2011	1125	-21.22	1354	-11.39	861	17.78	333	-31.90	3097	8.44	3507	-7.54	426	0.24
2012	1095	-2.67	1247	-7.90	965	12.08	935	180.78	2773	-10.46	3238	-7.67	761	78.64
2013	1200	9.59	1245	-0.16	865	-10.36	812	-13.16	2674	-3.57	2537	-21.65	533	-29.96
2014	1005	-16.25	1104	-11.33	723	-16.42	696	-14.29	2269	-15.15	2524	-0.51	449	-15.76
2015	1208	20.20	1077	-2.45	633	-12.45	607	-12.79	1918	-15.47	1813	-28.17	338	-24.72
2016	1354	12.09	1226	13.83	542	-14.38	471	-22.41	1433	-25.29	1311	-27.69	189	-44.08
2017	1647	21.64	1483	20.96	510	-5.90	428	-9.13	1277	-10.89	1206	-8.01	143	-24.34
2018	1287	-21.86	1166	-21.38	509	-0.20	382	-10.75	1098	-14.02	1185	-1.74	151	5.59
2019	1332	3.50	1250	7.20	511	0.39	381	-0.26	1205	9.74	1236	4.30	141	-6.62
2020 ¹	653	-50.98	600	-52.00	218	-57.34	188	-50.66	513	-57.43	487	-60.60	47	-66.67
Average	1300		1317		700		520		2016		2036		296	

¹The figures for 2020 are computed based on January 1 to June 27.