



An Inquiry into the Time Major Crimes are Committed in Jamaica

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Abstract

Introduction: Major crimes are not linked to only parishes along the coast or major cities; they are also widespread in rural communities. The literature has yet to generate any information on the correlation between the time of day, day of the week, and month of the year in Jamaica.

Objective: This study, utilizing secondary data, seeks to determine the main times of the day, days of the week, and months of the year when robberies, shootings, and murders are reported to be reported.

Methods: This research evaluates the data collected on major crimes by the Jamaica Constabulary from 2010 to 2022. The data was recorded, stored and retrieved using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 28.0, and Microsoft Excel. The significance level used to determine statistical significance was less than 5% (0.05) at the 2-tailed significance level.

Results: The findings revealed that most murders, robberies and shootings occurred at 8 p.m. (or 20:00 hours) in Jamaica, followed by 21:00 hours (9.5%) and 19:00 hours (7.4%). Major crimes begin to increase from 6:00 p.m. and reach their zenith at 8:00 p.m., with the least number of cases occurring at 4:00 a.m. (1.8%). The probability of murders, shootings, and robberies is greatest in the evening (i.e., 0.308 or 30.8%, n=17,365 cases) compared to in the night (0.264 or 26.4%, n=14,916), afternoon (0.231 or 23.1%, n=13,033), and morning (0.197 or 19.7%, n=11,142).

Conclusion: Major crimes (murder, robbery, shooting) continue to be a challenge in Jamaica post-COVID-19, and 8:00 on Friday and Saturday appears unsafe for the public.

Keywords: Major crime, murder, police division, robbery, shooting.

Introduction

A group of Caribbean scholars have classified major crimes as at an epidemic stage in Jamaica (Bourne et al., 2015), and lawful citizens are scared of being the victim of a robbery, with the Federal Bureau of Investigation (FBI) indicating that shooting and murder occurred approximately every half an hour (FBI.gov, 2017). Victimization from major crimes denigrates us in various ways, but the most impacting is human losses from violent crimes (open.lib.umn.edu, n.d). There were 447403 robberies in the United States of America, with one occurring every minute, with the highest frequencies occurring in August and October; the lowest was in February and April in all regions (McGoey, 2020). Robberies are a daily occurrence, but Mondays and Fridays, 2 p.m. to 8 p.m., are the hours of the week with the highest frequency of robberies at ATMs, banks, subways, and centres for the treatment of drugs in the United States of America (Bernasco et al., 2016). A study conducted in Vienna, Austria, shows that robbers are most likely to congregate in the exact location and the same period on Tuesdays, Thursdays and Fridays of each week, and persons utilizing the same route close to the vicinity are likely to experience 6500% risk of repeated victimization on Tuesdays of each week (Glasner, & Leitner, 2016).

Major crimes have been a recurring endemic issue in the United States of America in schools, with 373 cases in the morning hours and 213 cases in the afternoon hours from 1970 to 2022 (Statista, 2023). Active shootings in 2022 showed that May had the highest (9) and September (1) was the month with the lowest number of cases; Weekly active shootings showed that Sundays (9) have the highest and Wednesdays (4) and Thursdays (4) were the lowest days of shooting incidents; Active shooting incidents by time of the day showed that 12 p.m. to 5:59 p.m. (14) were the highest and 6 a.m. to 11:59 a.m. (11) were the lowest time of the day in the United States of America (FBI.gov, 2022). Serbia experienced a mass shooting and murder in May 2023, with 9 dead; Another mass shooting in the same week resulted in 8 persons dying and 14 left wounded (Reuters, 2023). Thailand experienced its worst day of violent crime on a Thursday when a former police officer opened fire and killed 37 children at a nursery (The Guardian, 2022). Rotterdam, a Dutch city, experienced one of the worst days of violent crimes on a Thursday after an offender shot three people, resulting in their death (Goillandeau & Gretener, 2023). Also, September 2023 has been one of Sweden's most horrific months since 2016, with two cases on a Wednesday resulting in 11 confirmed deaths (The Guardian, 2023).

Major crimes are not linked to only parishes along the coast or major cities; they are also widespread in rural communities. The literature has yet to generate any information on the correlation between the time of day, day of the week, and month of the year in Jamaica. However, there is a desire for this information to be available for the Jamaica Constabulary Force and the Jamaica Defense Force to implement new crime prevention measures in the form of policies, procedures and practices that will nip the major crime pandemic in the bud. Therefore, this study, utilizing secondary data, seeks to determine the main times of the day, days of the week, and months of the year when robberies, shootings, and murders are reported to be reported. This research evaluates the data collected on major crimes by the Jamaica Constabulary from 2010 to 2022.

Methods and materials

The Jamaica Constabulary Force (JCF) provided this study's data. The period for this work is from 2010 to 2022. The data was recorded, stored and retrieved using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 28.0, and Microsoft Excel. The significance level used to determine statistical significance was less than 5% (0.05) at the 2-tailed significance level. The data were analyzed using percentages, probability, annual percentage change, cross-tabulations, and analysis of variance.

Data validity

The Jamaica Constabulary Force (JCF) has instituted a robust surveillance system that tracks, monitors, records and validates major crimes committed and arrests made in Jamaica. The surveillance system is constantly assessed and updated daily to ensure that major crimes are accurately recorded and accounted for. The purpose of this dataset is for national planning and record-keeping in an attempt to monitor this phenomenon.

Definition of terms

Murder/Intentional Homicide: Murder or intentional homicide in Jamaican law is defined as the unlawful killing of a person with intent or malice aforethought. This means that the perpetrator had the specific intent to cause the victim's death or acted with reckless disregard for human life.

Robbery: Robbery in Jamaican law is the unlawful taking of property from another person by force or threat of force.

Shooting: Shooting in Jamaican law is the act of discharging a firearm intending to harm another person or property. Shooting may be charged as an offence under various Jamaican statutes such as the Firearms Act or the Offences Against the Person Act.

Violent/Major Crime: Violent/major crime in Jamaican law refers to criminal offences that involve physical harm or threat of harm to a person or property. This includes offences such as murder, robbery, rape, assault, and battery. These crimes are considered serious offences in Jamaica and carry significant penalties.

Police Area Division: Jamaica is classified into five police areas. These are as follows:

Area 1: (Trelawny, St James, Hanover, Westmoreland)
Area 2: (St Ann, St Mary, Portland)
Area 3: (St Elizabeth, Manchester, Clarendon)
Area 4: (Kingston East, Kingston Central, Kingston West, St Andrew South, St Andrew Central)
Area 5: (St Andrew North, St Catherine South, St Catherine North, St Thomas)

Findings

For the studied period (2010 to 2022), the Jamaican Police arrested some 56,456 people for murders, robberies, and shootings (Table 1). The majority of the arrests were conducted in St. Andrew (23.3%) followed by St. Catherine (18.8%), with most of the cases being from St. Catherine North Police Division (10.1%) followed by St. Andrew South Police Division (9.7%).

Table 1: Parishes in which selected violent crimes were committed in Jamaica for 2010-2022, n=56,456

Details	% (n)
Kingston: Kingston Central - 3.3 (1883) Kingston East - 4.3 (2430) Kingston West - 4.6 (2588)	12.2 (6,901)
St. Andrew: St Andrew Central - 8.5 (4817) St Andrew North - 5.1 (2857) St Andrew South - 9.7 (5495)	23.3 (13,169)
St Thomas	1.8 (1,043)
Portland	0.9 (503)
St Mary	1.9 (1,091)
St Ann	4.4 (2,492)
Trelawny	1.7 (932)
St James	10.8 (6,102)
Hanover	2.2 (1,243)
Westmoreland	6.5 (3,688)
St Elizabeth	2.9 (1,614)
Manchester	5.2 (2,962)
Clarendon	7.3 (4,101)
St. Catherine: St Catherine North -10.1 (5703) St Catherine South - 8.7 (4912)	18.8 (10,615)

Table 2 presents a disaggregation of selected major crimes (murder, robberies, and shootings) in Jamaica based on the Police Division. Jamaica is classified into five police divisions, and each Area consists of selected parishes). The findings revealed that Area 4 Police Division had the most murders, robberies, and shootings between 2009 and 2023 (i.e., 30.5%, n=17,213 people).

Table 2: Jamaica Constabulary Force (JCF) Policing Divisions in Jamaica

Details	% (n)
Area 1: (Trelawny, St James, Hanover, Westmoreland)	21.2 (11,965)
Area 2: (St Ann, St Mary, Portland)	7.2 (4,086)
Area 3: (St Elizabeth, Manchester, Clarendon)	15.4 (8,677)
Area 4: (Kingston East, Kingston Central, Kingston West, St Andrew South, St Andrew Central)	30.5 (17,213)
Area 5: (St Andrew North, St Catherine South, St Catherine North, St Thomas)	25.7 (14,515)
Total	56,456

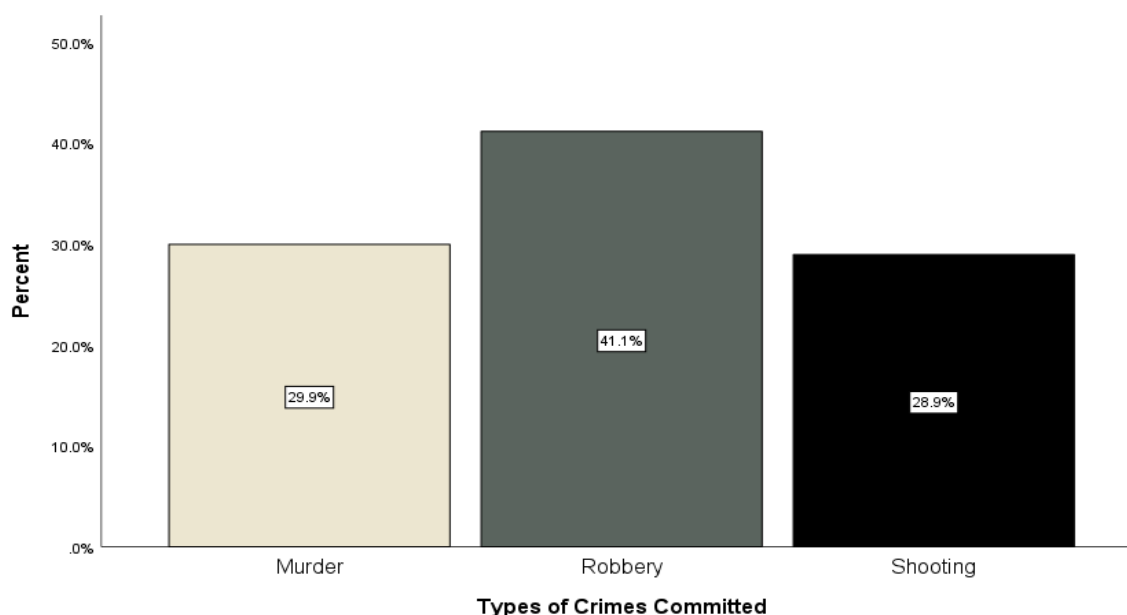


Figure 1: Types of Selected Violent Crimes Committed in Jamaica from 2010-2022

For the studied period (2010-2022), 56,456 people were arrested for murders, robberies, and shootings in Jamaica. The findings revealed that 41.1% of the arrests were for robberies, followed by murders (29.9%) and lasting shootings (28.9%).

Using the chi-square analytic technique, a significant statistical association emerged between the Police Divisions (i.e., Area) and selected major crimes committed by people in Jamaica ($\chi^2(8) = 1,638.988, P < 0.001$; Table 3). Table 3 presents that the majority of murders, robberies, and shootings committed in Area 4 Police Division from 2010 to 2022 were mostly shootings (32.6%) compared to robberies (31.0%) and murders (27.8%). However, only in Area 1 Police Division were there most murders (26.8%) compared to shootings (25.9%) and robberies (13.8%).

Table 3: Cross-tabulation between types of selected major crimes committed in Jamaica and Police classification of the country

Details	selected major crimes committed			Total
	Murder	Robbery	Shooting	
Police classification:	% (n)	% (n)	% (n)	% (n)
Area 1 (Trelawny, St. James, Hanover, & Westmoreland)	26.8 (4,528)	13.8 (3,202)	25.9 (4,235)	21.2 (11,965)
Area 2 (St. Ann, St. Mary, & Portland)	6.9 (1,162)	9.0 (2,099)	5.1 (825)	7.2 (4,086)
Area 3 (St. Elizabeth, Manchester, & Clarendon)	14.0 (2,360)	18.6 (4,316)	12.3 (2,001)	15.4 (8,677)
Area 4 (Kingston & St. Andrew (Except St. Andrew North)	27.8 (4,693)	31.0 (7,202)	32.6 (5,318)	30.5 (17,213)
Area 5 (St. Catherine, St. Thomas, & St. Andrew North)	24.6 (4,163)	27.6 (6,399)	24.2 (3,953)	25.7 (14,515)
Total	16,906	23,218	16,332	56,456

Table 4 presents the percentage of particular weapons used and mode of travel in committing selected violent crimes (murder, robbery, and shooting) in Jamaica from 2010 to 2022. The findings revealed that guns were the most frequently used weapon of choice by perpetrators of murders, robberies, and shootings in Jamaica (81.1%, n=44,971), followed by knives (9.7%, n=5,366). Eight-two and six-tenths per cent of the 54,639 selected violent crimes (i.e., 96.8% of the 56,456) were committed by people on foot, followed by cars (9.8%, n=5,359).

Table 4: Weapons used and mode of travel to commit selected violent crimes in Jamaica

Details	% (n)	Details	% (n)
Weapons used:		Mode of Travel:	
Bottle	0.001803 (1)	Foot	82.6 (45,146)
Concrete	0.001803 (1)		
Gun	81.07558 (44,971)	Car	9.8 (5,359)
Ice Pick	0.057691 (32)		
Knife	9.674046 (5,366)	Van/Truck	0.1 (47)
Machete	1.355737 (752)		
Others	7.168097 (3,976)	Bus	0.2 (112)
Personal	0.007211 (4)		
Scissors	0.043268 (24)	Motorcycle	2.6 (1,411)
Stone	0.046874 (26)		
Unarmed	0.200115 (111)	Bicycle	0.6 (341)
Unknown	0.36778 (204)	Unknown	4.1 (2,223)
Total	55,468	Total	54,639

Table 5 presents per cent of day, month and year-selected violent crimes that were committed in Jamaica from 2010 to 2022. The findings revealed that most murders, robberies, and shootings occur on Fridays (9.1%, n=9,102), Saturdays (16.1%, n=9,100), October (8.9%, n=5,011), January (8.8%, n=4,973), and in 2020 (10.3%). In 2010, there were 5,830 murders, robberies, and shootings that occurred in Jamaica, and this has declined by 43.7% (n=2,545). Furthermore, in 2010, 16 people were victims of murder, shooting, and robbery daily, which declined to 9 daily in 2022.

Table 5: Day, Month, and Year selected violent crimes were committed in Jamaica

Details		Details		Details		
Day:	% (n)	Month:	% (n)	Year	% (n)	Daily
Sunday	12.1 (6,820)	January	8.8 (4,973)	2010	10.3 (5,830)	16
Monday	13.8 (7,802)	February	8.0 (4,542)	2011	9.9 (5,584)	15
Tuesday	13.8 (7,798)	March	8.7 (4,915)	2012	9.1 (5,122)	14
Wednesday	14.0 (7,894)	April	8.0 (4,512)	2013	9.1 (5,120)	14
Thursday	14.1(7,940)	May	8.6 (4,858)	2014	7.8 (4,378)	12
Friday	16.1 (9,102)	June	8.2 (4,617)	2015	7.4 (4,203)	12
Saturday	16.1 (9,100)	July	8.0 (4,515)	2016	7.1 (4,012)	11
		August	8.3 (4,688)	2017	7.8 (4,407)	12

		September	8.2 (4,657)	2018	6.3 (3,549)	10
		October	8.9 (5,011)	2019	6.7 (3,780)	10
		November	8.7 (4,918)	2020	6.5 (3,676)	10
		December	7.5 (4,250)	2021	6.2 (3,510)	10
				2022	5.8 (3,285)	9
Total	56,456		56,456		56,456	

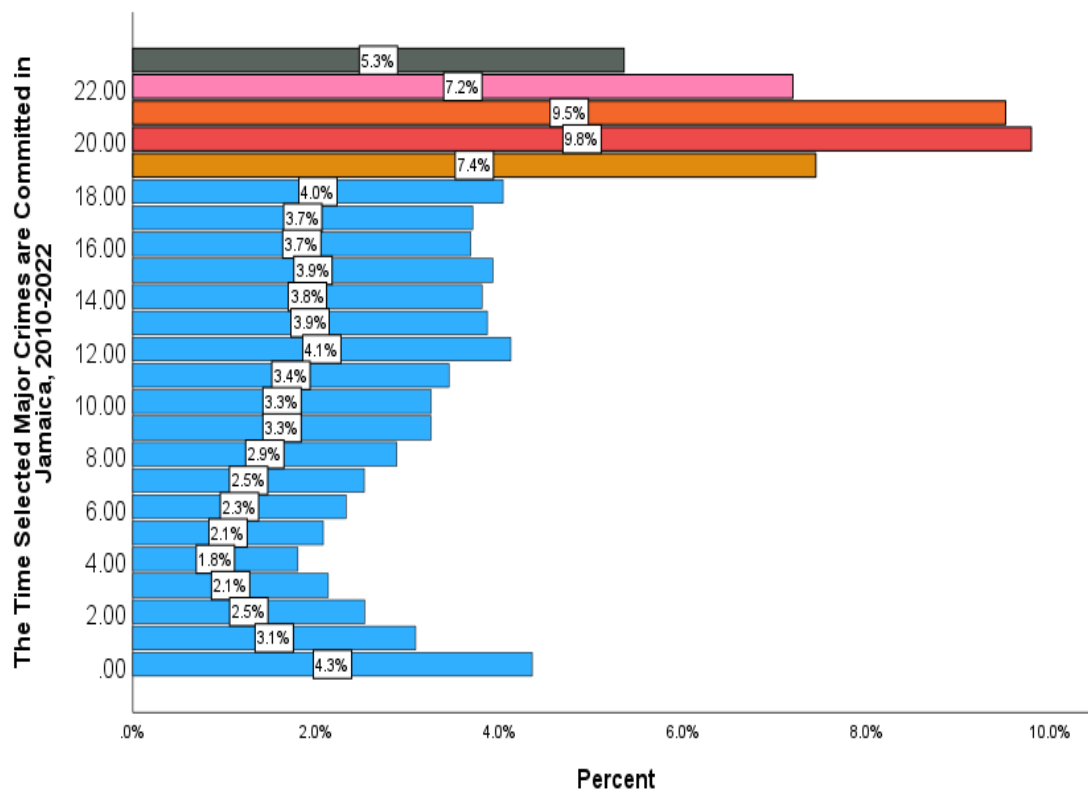


Figure 2: Time of Day/Night Selected Major Crime Committed

Figure 2 depicts the time of day/night the selected major crimes were committed in Jamaica. The findings revealed that most murders, robberies and shootings occurred at 8 p.m. (or 20:00 hours) in Jamaica, followed by 21:00 hours (9.5%) and 19:00 hours (7.4%). Major crimes begin to increase from 6:00 p.m. and reach their zenith at 8:00 p.m., with the least number of cases occurring at 4:00 a.m. (1.8%).

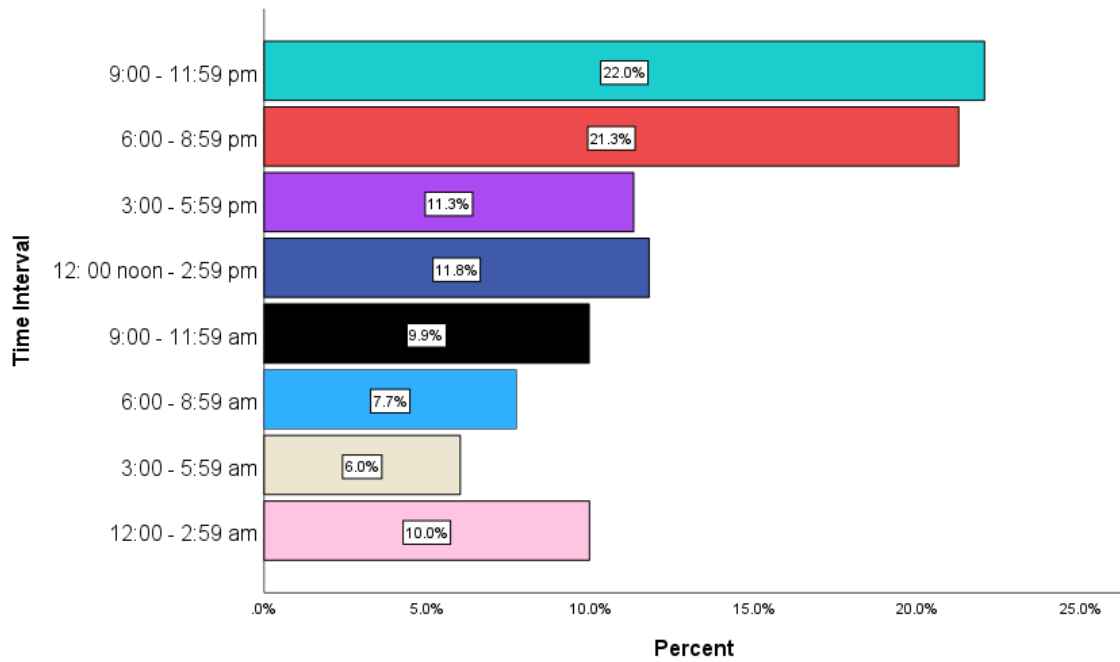


Figure 3: 3-hour Time Interval Selected Major Crimes Committed

Figure 3 shows the 3-hour time interval that murders, robberies, and shootings happened in Jamaica from 2010 to 2022. Marginally more murders, robberies, and shootings occurred from 9:00 to 11:59 p.m. (22%) than from 6:00 to 8:59 p.m. (21.3%).

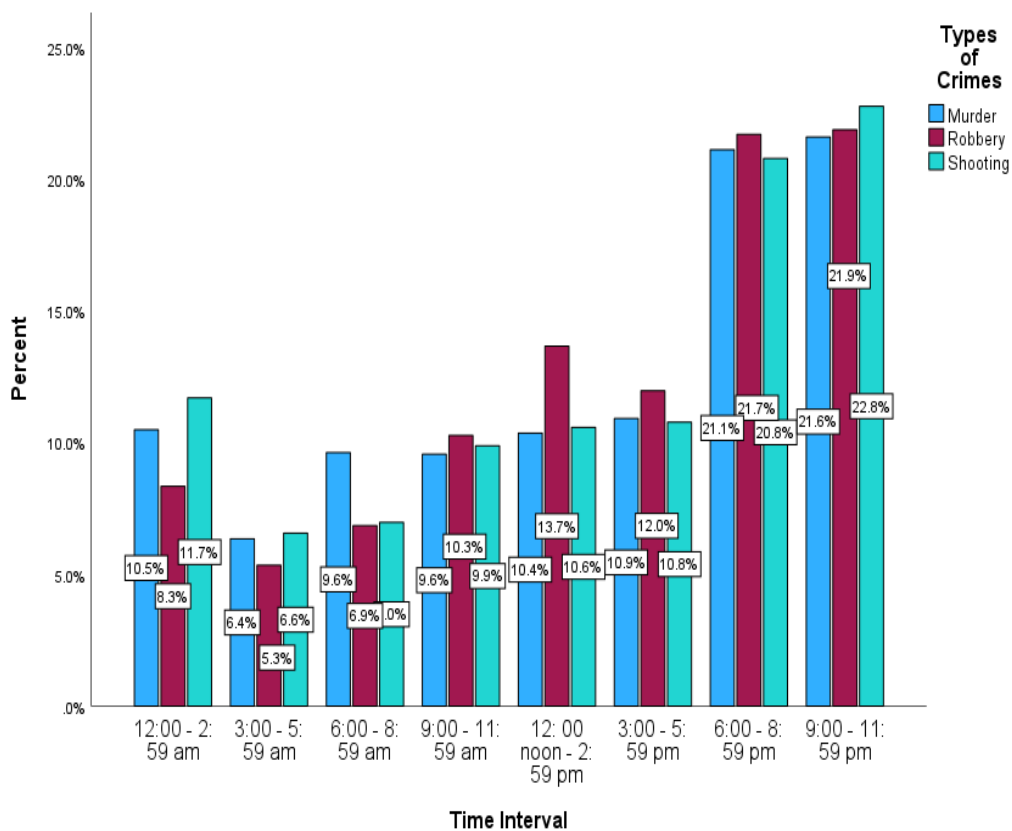


Figure 3: 3-hour Time Interval Murders, Robberies, and Shootings Occurred in Jamaica

Figure 3 shows the cross-tabulation between the 3-hour time interval and the selected type of major crimes committed in Jamaica from 2010 to 2022. Using the chi-square statistical technique, a significant relationship emerged between the aforementioned variables ($\chi^2(df=14) = 405.957$, $p\text{-value} < 0.001$, with the association being a very weak one (contingency coefficient = 0.06). Twenty-two and eight-tenths per cent of the shootings that occurred over the period happened from 9:00 p.m. to 11:59 p.m. compared to 21.9% of robberies and 21.8% of murders.

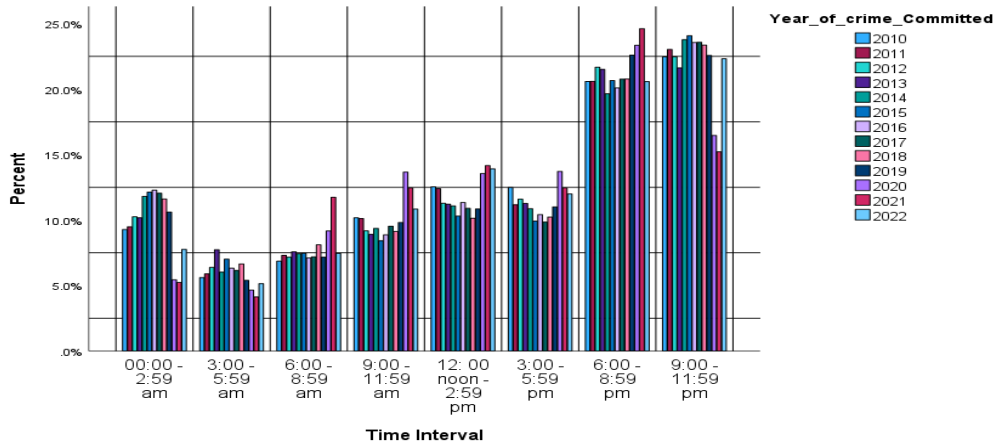


Figure 4: 3-hour time interval by year crimes were committed

Figure 4 shows a cross-tabulation between a 3-hour time interval and year murders, robberies, and shootings committed in Jamaica from 2010 to 2022. Using the chi-square statistical technique, a significant relationship emerged between the aforementioned variables ($\chi^2(df=84) = 866.113$, $p\text{-value} < 0.001$, with the association being a very weak one (contingency coefficient = 0.123). Based on the findings, from 2010 to 2022, most of the murders, robberies, and shootings occurred from 6:00 p.m. to 8:59 p.m. and from 9:00 p.m. to 11:59 p.m. However, in 2021, the least number of murders, robberies, and shootings occurred from 9:00 p.m. to 11:59 p.m.

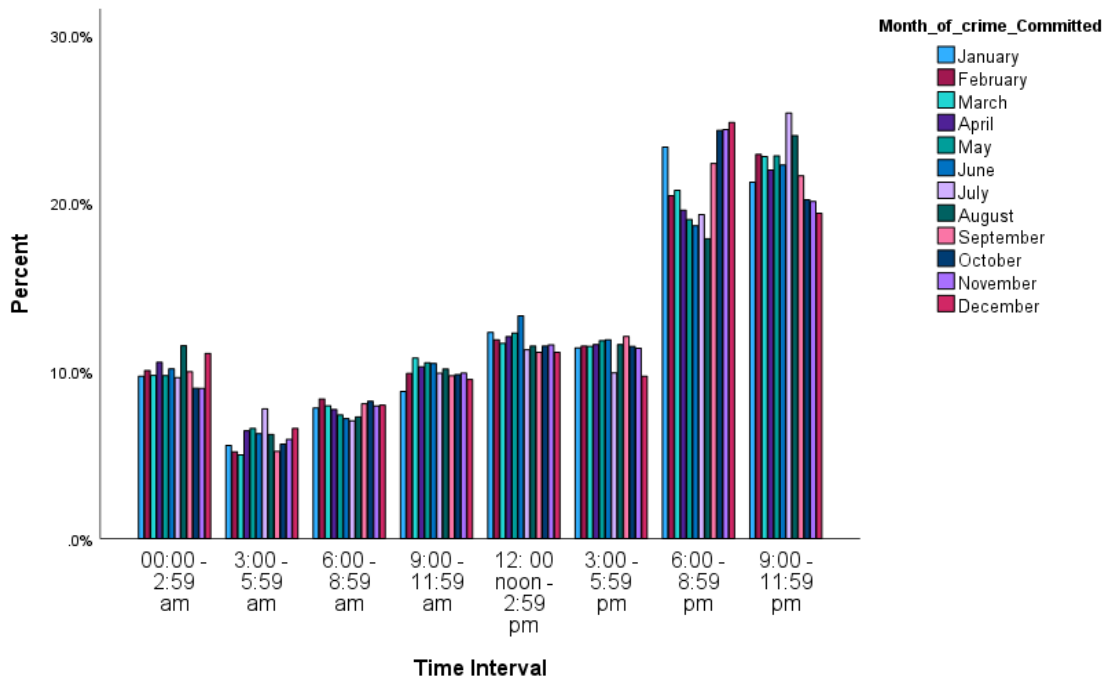


Figure 5: 3-hour time interval by month crimes were committed

Figure 5 shows a cross-tabulation between 3-hour time intervals and months of crimes committed in Jamaica from 2010 to 2022. Using the chi-square statistical technique, a significant relationship emerged between the aforementioned variables ($\chi^2(df=77) = 363.787$, $p\text{-value} < 0.001$, with the association being a very weak one (contingency coefficient = 0.080). Based on the findings, most of the murders, robberies, and shootings occurred from September to December as well as January from 6:00 p.m. to 8:59 p.m. and February to August from 9:00 p.m. to 11:59 p.m.

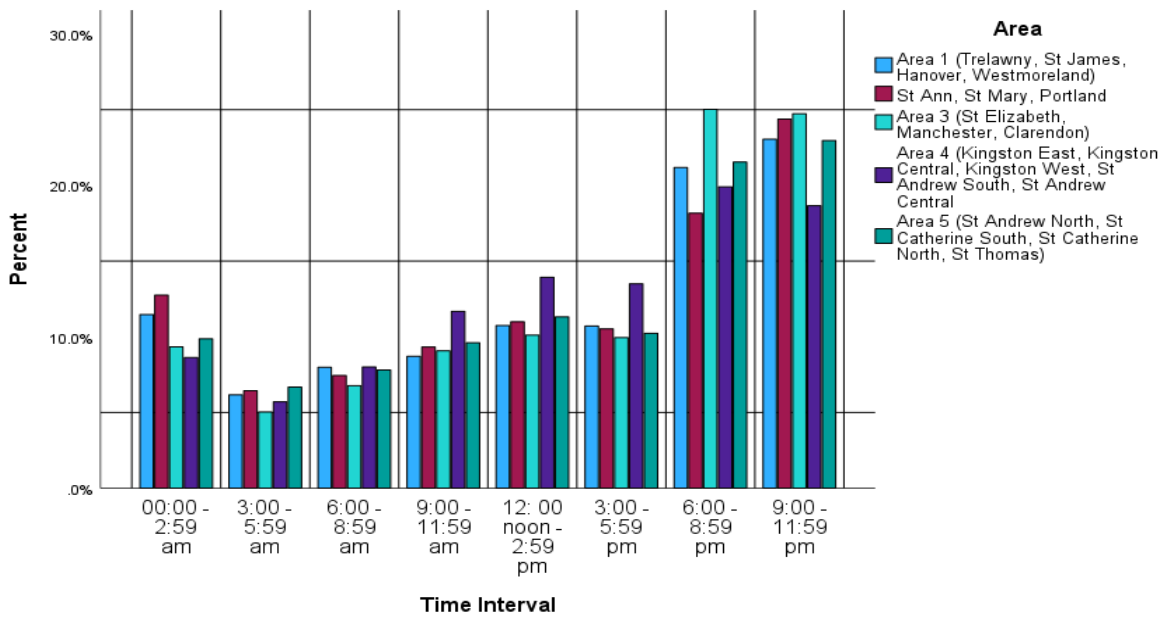


Figure 6: 3-hour time interval by Police Area Division Crimes Committed In

Figure 6 shows a cross-tabulation between 3-hour time intervals and Police Area division crimes committed in Jamaica from 2010 to 2022. Using the chi-square statistical technique, a significant relationship emerged between the aforementioned variables ($\chi^2(df=28) = 659.772$, $p\text{-value} < 0.001$, with the association being a very weak one (contingency coefficient = 0.107). Based on the findings, most of the murders, robberies, and shootings occurred in Area 3 Police Division (24.7%) from 6:00 p.m. to 8:59 p.m. compared to other Area Police Divisions.

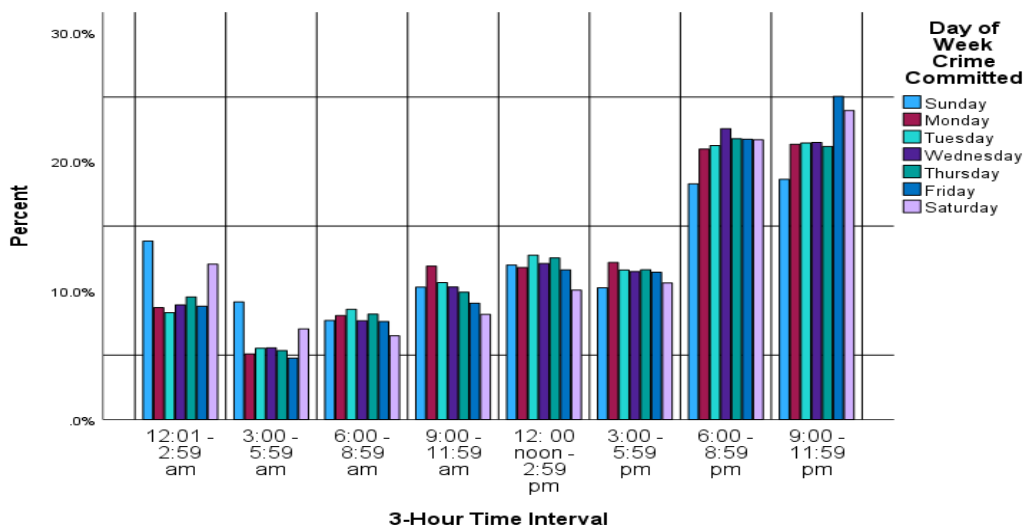


Figure 7: 3-hour time interval by Day of Week Crimes Committed

Figure 7 depicts a cross-tabulation between 3-hour time intervals and Day of the Week Crimes committed in Jamaica from 2010 to 2022. Using the chi-square statistical technique, a significant relationship emerged between the variables mentioned above ($\chi^2(df=28) = 659.171$, $p\text{-value} < 0.001$, with the association being a very weak one (contingency coefficient = 0.107). Based on the findings, most of the murders, robberies, and shootings occurred on a Friday (25.1%) from 9:00 p.m. to 11:59 p.m. compared to a Saturday (24.0%) and other weekdays. However, on a Wednesday, most murders, robberies, and shootings occurred from 6:00 p.m. to 8:59 p.m. (22.5%) compared to a Thursday (21.8%) and a Friday and a Saturday (21.7%, respectively).

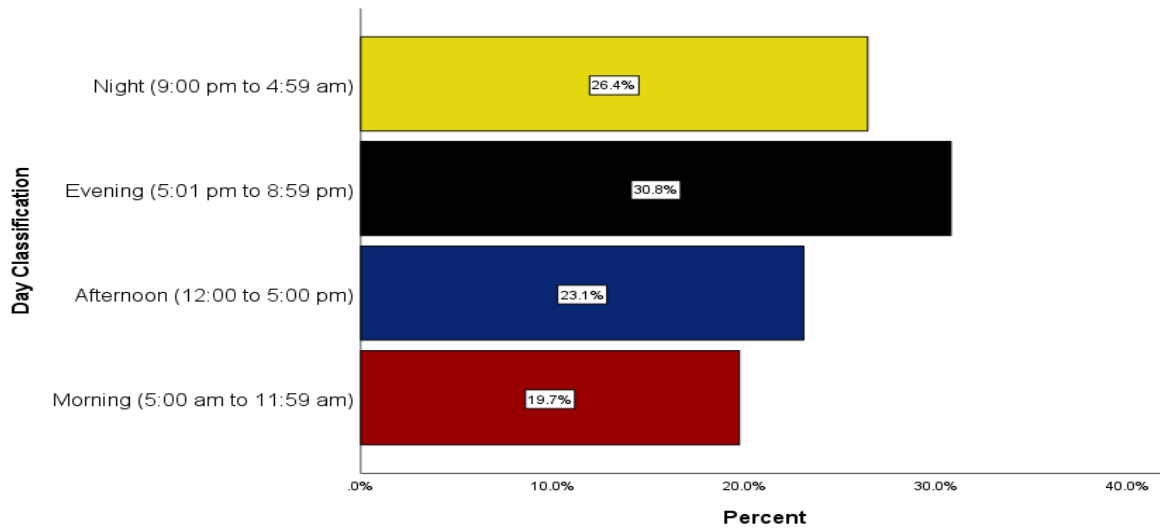


Figure 8: Day Classification of Crimes Committed

Figure 8 depicts the percentage of murders, shootings, and robberies committed at certain times of the day in Jamaica from 2010 to 2022. The probability of murders, shootings, and robberies is greatest in the evening (i.e., 0.308 or 30.8%, $n=17,365$ cases) compared to in the night (0.264 or 26.4%, $n=14,916$), afternoon (0.231 or 23.1%, $n=13,033$), and morning (0.197 or 19.7%, $n=11,142$).

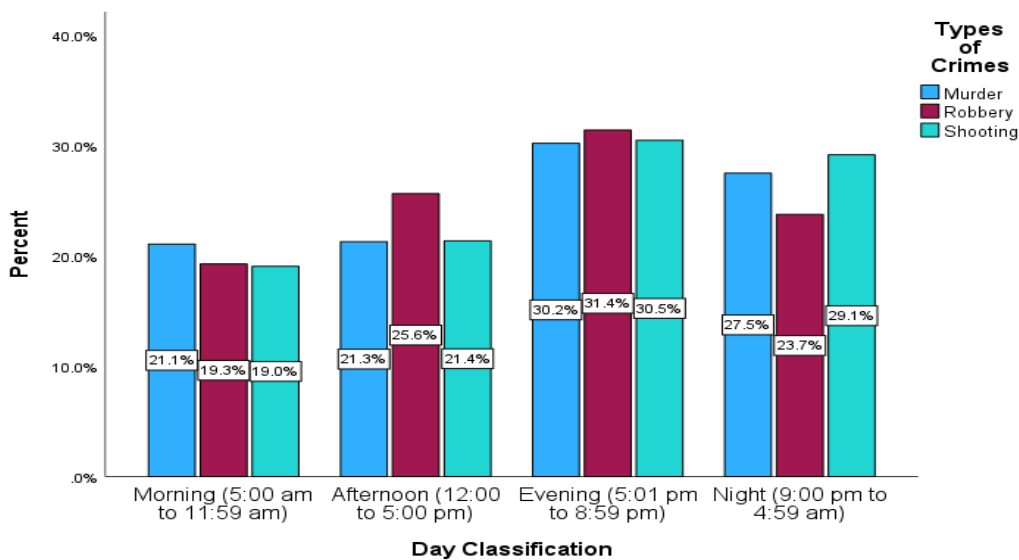


Figure 9: Types of Crimes and Day Classification Crimes Committed

Figure 9 depicts the percentage of murders, shootings, and robberies committed at certain times of the day in Jamaica from 2010 to 2022. Using the Chi-square analytic technique, a significant statistical association emerged between the two previously mentioned variables ($\chi^2(df=6) = 252.666$, $p\text{-value} < 0.001$). Based on the findings, most of the major crimes (i.e., murders, robberies, and shootings) occurred in the evening in Jamaica (30.8%), with the dark following in a close second (26.4%). Furthermore, 30.2% of the murders were committed in the evening compared to 31.4% of the robberies and 30.5% of the shootings. Marginally fewer shootings occurred in the night (29.1%) compared to during the evening (30.2%).

Table 6 presents a cross-tabulation of the day classification by Police Area of Jamaica. Using the chi-square technique, a significant statistical association emerged between the previously mentioned variables ($\chi^2(df=12) = 644.767$, $p\text{-value} < 0.001$). The findings revealed that 31.7% of all murders, shootings, and robberies that occurred in Area 5 Police Division occurred in the evening compared to 36.7% in Area 3, 30.2% in Area 1, 28.4% in Area 4, and 27.5% in Area 2. Furthermore, most of the murders, shootings, and robberies from 2010 to 2022 occurred in Areas 1, 3, and 5 during the evening and in Area 2 during the night.

Table 6: A Cross-tabulation of Day Classification by Police Area of Jamaica

Day Classification	Police Area										Total	
	Area 1		Area 2		Area 3		Area 4		Area 5		N	%
	N	%	N	%	N	%	N	%	N	%		
Morning (5:00 am to 11:59 am)	2,228	18.6	743	18.2	1,501	17.3	3,767	21.9	2,903	20.0	11,142	19.7
Afternoon (12:00 to 5:00 p.m.)	2,566	21.4	879	21.5	1,740	20.1	4,721	27.4	3,127	21.5	13,033	23.1
Evening (5:01 p.m. to 8:59 p.m.)	3,611	30.2	1125	27.5	3,137	36.2	4,887	28.4	4,605	31.7	17,365	30.8
Night (9:00 p.m. to 4:59 a.m.)	3,560	29.8	1339	32.8	2,299	26.5	3,838	22.3	3,880	26.7	14,916	26.4
Total	11,965	100.	4,086	100.	8,677	100.	17,213	100.	14,510	100.	56,456	100.

Table 7 presents a cross-tabulation between Years and Types of Crimes committed in Jamaica from 2010 to 2022. Daily 16 murders, robberies, and shootings occurred in 2010 (i.e., 4, 8, and 4, respectively), and the figures have been declining since that time ($\chi^2(df = 24) = 3344.356$, $p\text{-value} < 0.001$). This means that in 2010, 0.67 murders, robberies, and shootings occurred every hour or 2.67 every 4 hours in Jamaica. In 2017, murders peaked at 5 daily or 1 murder every 6 hours, with robberies peaking from 2010 to 2012 (i.e., 1 in every 3 hours).

Table 7: A Cross-tabulation between Year and Types of Crimes Committed in Jamaica

Year	Types of Crimes						Total	
	Murder		Robbery		Shooting			
	N	Daily	N	Daily	N	Daily	N	Daily
2010	1,446	4	2,855	8	1,528	4	5,829	16
2011	1,133	3	3,097	8	1,354	4	5,584	15
2012	1,102	3	2,773	8	1,247	3	5,122	14
2013	1,201	3	2,674	7	1,245	3	5,120	14
2014	1,005	3	2,269	6	1,104	3	4,378	12
2015	1,208	3	1,918	5	1,077	3	4,203	12
2016	1,354	4	1,432	4	1,226	3	4,012	11
2017	1,647	5	1,276	3	1,484	4	4,407	12
2018	1,287	4	1,097	3	1,165	3	3,549	10
2019	1,332	4	1,200	3	1,248	3	3,780	10
2020	1,333	4	1,026	3	1,317	4	3,676	10
2021	1,474	4	773	2	1,263	3	3,510	10
2022	1,384	4	827	2	1,074	3	3,285	9
Total	16,906	4	23,217	5	16,332	3	56,455	12

Note: The value for the daily number of crimes was based on 365 as the divisor except for 2012, 201 and 2020, in which 366 were used because they were leap years.

Table 8 presents Cross-tabulation between the day crimes are committed and the type of crimes. Using the chi-square analytic technique, a significant statistical association emerged between the previously mentioned variables ($\chi^2(df = 12) = 236.339, p\text{-value} < 0.001$). On a Saturday, the most murders occurred in Jamaica from 2010 to 2022 (16.0%), which is the same for shootings (15.7%). However, the most robberies occurred on a Friday (17.6%).

Table 8: A Cross-tabulation between Day Crimes Committed and the Type of Crimes

Details	Murder		Robbery		Shooting			
	N	%	N	%	N	%	N	%
Sunday	2,331	13.8	2,295	9.9	2,194	13.4	6,820	12.1
Monday	2,323	13.7	3,236	13.9	2,243	13.7	7,802	13.8
Tuesday	2,262	13.4	3,263	14.1	2,273	13.9	7,798	13.8
Wednesday	2,469	14.6	3,202	13.8	2,223	13.6	7,894	14.0
Thursday	2,308	13.7	3,308	14.2	2,324	14.2	7,940	14.1
Friday	2,500	14.8	4,097	17.6	2,505	15.3	9,102	16.1
Saturday	2,713	16.0	3,817	16.4	2,570	15.7	9,100	16.1
Total	16,906	100.0	23,218	100.0	16,332	100.0	56,456	100.0

Discussion

The literature has established that major crimes have reached a pandemic stage (Bourne et al., 2015) and in Jamaica, the numbers of intentional homicides, robberies, and shootings are greater than the number of people who died from diabetes, hypertension, and even COVID-19. The

current study revealed that 16,906 people have been murdered in Jamaica from January 2, 2010, to November 25, 2022, which averages $1,330 \pm 172$ people annually. Furthermore, there have been 56,456 cases of intentional homicide, robberies, and shootings, with most murders, robberies and shootings occurring: 1) at 8 p.m. (or 20:00 hours) in Jamaica followed by 21:00 hours (9.5%) and 19:00 hours (7.4%); 2) on a Friday (25.1%) from 9:00 p.m. to 11:59 p.m. compared to a Saturday (24.0%), and other weekdays. However, on a Wednesday, most murders, robberies, and shootings occurred from 6:00 p.m. to 8:59 p.m. (22.5%) compared to on a Thursday (21.8%) and a Friday and a Saturday (21.7%, respectively); 3) in Area 3 Police Division (24.7%) from 6:00 p.m. to 8:59 p.m. compared to other Area Police Divisions, and 4) from September to December as well as January from 6:00 p.m. to 8:59 p.m. and February to August from 9:00 p.m. to 11:59 p.m. There are some similarities between major crimes committed in Jamaica and the United States as a report from the *Office of Juvenile Justice & Delinquency Prevention (OJJDP)* (nd) revealed that “In general, the number of violent crimes committed by adults increases hourly from 6 a.m. through the afternoon and evening hours, peaks at 9 p.m., and then drops to a low point at 5 a.m. In contrast, violent crimes committed by youth peak in the afternoon between 3 p.m. and 4 p.m., the hour at the end of the school”.

Major crime statistics for Jamaica have revealed some dissimilarities with that in the United States. In Jamaica, in 2017, one Jamaican was murdered every 6 hours compared to 1 every 30.5 minutes in the United States (FBI (2017)). The statistics on robberies for the same period were one every 6 hours in Jamaica compared to one every 1.7 minutes in the United States. Additionally, in the United States, weekly active shootings showed that Sundays (9) have the highest and Wednesdays (4) and Thursdays (4) have the lowest days of shooting incidents. Thailand experienced its worst day of violent crime on a Thursday when a former police officer opened fire and killed 37 children at a nursery (The Guardian, 2022), murders occurred most frequently on a Saturday, robberies on a Friday and shootings on a Saturday in Jamaica, which is different from the literature. In Jamaica, the least active shootings occurred on a Sunday.

The current study adds to the literature by providing statistics on Police Divisions that the most and least major crimes were committed in Jamaica for the period 2020 to 2022. Area 4 Police Division recorded the highest number of major crimes (murders, 27.8%; robberies, 31.1%; shootings, 32.6), with the least being in the Area 2 Police Division (murders, 6.9%; robberies, 9.0%; shootings, 5.1%). Area 1 Police Division recorded the second most cases of murders (26.8%) and shootings (25.9%), with Area 5 recorded the second most cases of robberies (27.6%) in Jamaica.

A feature of importance in this study is the COVID-19 pandemic and whether it influenced major crimes in Jamaica. The current study found that during the COVID-19 pandemic in Jamaica, the number of murders was somewhat stable (i.e., 1,332 in 2019; 1,332), shootings recorded an increase from 1,105 to 1,317 in 2020 over 2019, and robberies recorded a decline (1,200 in 2019 to 1,020 in 2020). Moreau (2022) wrote that “Police-reported crime in Canada, as measured by the Crime Severity Index (CSI), remained stable, changing from 73.9 in 2020 to 73.7 in 2021. This follows a 7% drop in the CSI in 2020, the first after 5 years of increases. The stability in the overall CSI was the result of increases in violent crime and continued decreases in non-violent

crime” and “The Violent CSI rose 5% in 2021, and was higher than in 2019, before the pandemic”, which is somewhat dissimilar and similar to the Jamaican reality.

Despite the reality that most murders, robberies, and shootings occurred in the evening in Jamaica (30.8%), many cases are committed in the night (26.4%). On disaggregating the major crime statistics for Jamaica, 7 p.m. and 10 p.m. are unsafe times to be on the roads in Jamaica (7.4% at 7 p.m.; 9.8% at 8 p.m.; 9.2% at 9 p.m.; and 7.2% at 10 p.m.), which is not the case in the United States (Favre, 2019). Favre (2019) indicated that more crimes are committed during the day (55%) than at night (45%) across the major cities in the United States, and a rationale for the disparity between this and the current findings is the classification of the day and night. However, when this study classified the day (7 a.m. to 6:59 p.m.) and night (7 p.m. to 6:59 a.m.) by using Favre’s classification (2019), the figures were significantly different in values compared to those in Jamaica (day, 42.5%; night, 57.5%). However, there is a consensus between the current study and that of Favre (2019) that selected major crimes occurred more at night than during the day. Favre (2019) opined, “More serious crimes – murder, rape/sexual assault, robbery and driving while impaired – still happen more at night, from 7 p.m. to 6:59 a.m.”

Conclusion

Major crimes (murder, robbery, shooting) continue to be a challenge in Jamaica post-COVID-19, and 8:00 on Friday and Saturday appears unsafe for the public.

References

- Bernasco, W., Ruiter, S & Block, R. (2016). Do Street Robbery Location Choices Vary Over Time of Day or Day of Week? A Test in Chicago. *Journal of Research in Crime and Delinquency*. <http://dx.doi.org/10.1177/0022427816680681>.
- Bourne, P.A., Hudson-Davis, A., Sharpe-Pryce, C., Francis, C., Solan, I., & Nelson, S. (2015). Homicide, rape and carnal abuse in Jamaica, 1970-2013: The New Health Pandemics. *International Journal of Emergency Mental Health and Human Resilience*, 17(2):588-597.
- Favre, L. (2019). Study: Big City crime is more likely in the day. <https://www.usnews.com/news/cities/articles/2019-06-12/study-finds-crime-in-big-cities-is-more-likely-during-the-day>.
- FBI.gov. (2017). 2017 Crime Clock Statistics. Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017/topic-pages/crime-clock>.
- FBI.gov. (2022). Active Shooter Incidents in the United States in 2022. Retrieved from <https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2022-042623.pdf/view>.
- Glasner, P., & Leitner, M. (2016). Evaluating the Impact the Weekday Has on Near-Repeat Victimization: A Spatio-Temporal Analysis of Street Robberies in the City of Vienna, Austria. *ISPRS International Journal of Geo-Information*, 6(1), 3. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/ijgi6010003>.

- Goillandeau, M., & Gretener, J. (2023). Three dead after shootings erupt in Dutch city, police say. Retrieved from <https://edition.cnn.com/2023/09/28/europe/Rotterdam-medical-center-shooting-intl/index.html>.
- McGoey, C. (2020). Crime Facts and Statistics-Violent Crimes Against Persons. Retrieved from Robbery Facts and Statistics - Violent Crime Against Persons (crimedocor.com).
- Moreau, G. (2022). Police-reported crime statistics in Canada, 2021. Canadian Centre for Justice and Community Safety Statistics. <https://www150.statcan.gc.ca/n1/pub/85-002-x/2022001/article/00013-eng.htm>.
- Open.lib.umn.edu. (n.d.). Types of Crimes. Retrieved from <https://open.lib.umn.edu/social-problems/chapter/8-2-types-of-crime/>
- Reuters. (2023). Mass shootings in Europe over the decades. Retrieved from <https://www.reuters.com/world/europe/mass-shootings-europe-over-decades-2023-05-05>.
- Statista. (2023, June 2). Several K-12 school shootings in the United States from 1970 to June 30, 2022, by time of day. Retrieved from <https://www.statista.com/statistics/971568/number-k-12-school-shootings-us-time-day/>.
- The Guardian. (2022, October 7). Thailand in mourning after children killed in mass stabbing and shooting. Retrieved from <https://www.theguardian.com/world/2022/oct/07/thailand-in-mourning-after-children-killed-in-mass-stabbing-and-shooting>.
- The Guardian. (2023, September 28). Sweden reports a record number of monthly fatal shootings. Retrieved from <https://www.theguardian.com/world/2023/sep/28/sweden-records-record-high-number-of-shooting-deaths-in-september>.
- Moreau, G. (2022). Police-reported crime statistics in Canada, 2021. Canadian Centre for Justice and Community Safety Statistics. <https://www150.statcan.gc.ca/n1/pub/85-002-x/2022001/article/00013-eng.htm>.