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Patterns, Trends and Correlates of Ten Major Reported Crimes in Ondo State, Nigeria

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We analysed the trend, patterns, and correlates of ten major crimes among Local Government Areas (LGAs) in Ondo State. The number of reported crimes from 2007 to 2016 were used to assess the trend in crimes, while the reported number of crimes in 2007 and 2010 from the 18 LGAs were used for the analysis of the spatiotemporal distribution and pattern of crimes. The reported number of murders, rape and indecent assault, assault, pretense/cheating, breach of the public peace, kidnapping and forgery increased while burglary and armed robbery declined. Akure South, Ondo West, Akure North, and Ilaje LGAs had the highest reported crimes. Nearly all the crimes exhibited a random distributional pattern in 2007 and 2010 except assault and kidnapping. There was a significant difference between the number of reported crimes in urban and rural LGAs (F(1,358)=4.148) while the number of hotels and population density was highly correlated with some crimes. The availability of relatively long-time data provides the opportunity to understand the spatiotemporal trend, pattern and correlates of major crimes in Ondo State, Nigeria.

Keywords: Category crime incidence, spatial pattern of crime, GIS

Introduction

Crime is one of the human security challenges which has worsened considerably and its everincreasing rate has spurred public concern in recent times (Cookie *et al.*, 1981; Fajnzylber *et al.*, 2000). Crime has direct consequences on lives, livelihoods, and material properties among others and hence it is important to understand its dynamics and the factors that have sustained it. The literature on urban crime has largely focused on its socioeconomic and environmental predictors to the detriment of its spatial distribution and pattern (Luiz, 2001; Pradhan *et al.*, 2004).

Disciplinary bias exists in the choice of analytical tools employed in crime analysis and it accounts for differentials in results obtained (Luiz, 2001; Andresen *et al.*, 2017; Oteng-Ababio *et al.*, 2016). Thus, diverse statistical and econometric methods have been utilised to explore the causal relationships between crime and the identified socioeconomic variables (Luiz, 2001; Andresen *et al.*, 2017). Some of the associated economic correlates of crimes include income per capita, police officer per capita, conviction rate, political instability, poverty, inequality, shocks, internal revenue allocation and poverty rates etc., while sociological variables include ethnic and religious diversity/inequality. In Nigeria, high crime incidence has been attributed to the high rate of unemployment, poverty, corrupt and ill-equipped Police Force (Ayuba et al., 2016; Aminu et al., 2013). However, contrary to previous studies that have established a close relationship between the level of economic activity and recorded crime, Luiz (2001) found a negative relationship between income per capita and total crime. Therefore, the nature of the relationship between crime and income per capita is inconclusive and may be influenced by geography. Nevertheless, a positive relationship has been reported between crime and unemployment, inequality, natural disasters, change in sources of incomes, and clustering of ethnic groups (Pradhan et al., 2004). Oteng-Ababio et al. (2016) however, identified multiplicity of drivers of criminal behaviour and concluded that crime is not only a result of absolute inequality but a complex combination of socioeconomic and political developments and policies.

Spatial analysis of crime incidence entails the identification and analysis of trends and patterns in crime and disorder in society. Crime is location specific and locational attributes, many times predispose it to a particular type of crime compared to others (Andresen et al., 2017). Thus, the incidence of crime and violence varies widely across nations and regions due to the differential opportunities for crime offered by different places (Fajnzylber et al., 2000). Spatiotemporal variations in crime incidence can be assessed at different scales, however, the choice of the scale used is dependent on the unit at which data is available. Much of the earlier research on crime adopt multispatiotemporal scales using different subadministrative units, census block and police beat area (Luo, 2017).

It has been observed that variations exist in the numbers of reported crimes across different landuse types, housing densities and rural-urban divides (Fajnzylber et al., 2000; Fafchamps and Moser, 2003; Adigun, 2013; Badiora et al., 2016; Andresen et al., 2017; Abbas, 2018). For example, crime has been found to significantly increase with distance from the urban centres and with few exceptions decrease with population density while isolated rural settlements experience high crime rate compared to non-isolated urban settlements (Fafchamps and Moser, 2003; Adigun, 2013). Studies on the spatiotemporal changes in crimes revealed that while they are generally higher in cities than in municipalities or provincial capitals, no significant temporal variations exist in their incidence across years (Capuno, 2017). Furthermore, households with high and medium residential densities have higher average residential crime than those obtained in other residential density types (Adigun, 2013). Based on this assertion, Badiora et al. (2016) showed that about 50% of the crime against individuals occurred in the core area of the city while the remaining occurred between the transition areas and the suburban area while 50% of crime against property occurred in the suburban areas. Greenburg and Rohe (1984) affirmed that certain environmental factors such as the physical layout of an area, proximity to various services and land use mixes influence criminal behaviour and are fundamental to the explanation of criminal activities in a spatial context. The issue of access, exposure, opportunity and the availability of targets are also important in explaining crime

from an environmental perspective (Cohen and Felson, 1979; Brantingham and Brantingham, 1981). Fafchamps and Moser (2003) indicated among other things that the presence of law enforcement personnel fails to reduce feelings of insecurity in the population while Adigun (2013) noted the highest level of fear of crime in a lowdensity residential neighbourhood.

Till date, the empirical literature on spatiotemporal trend in crime in a developing country is limited due to the constraints imposed by data accessibility and availability. This becomes particularly challenging in countries like Nigeria where crime record keeping is poor and most of the available ones do not contain locational specific information about crime locations. Hence, the absence of crime data over a long period of time at a lower geographic scale has hampered detailed spatiotemporal analysis of crime (LaFree, 1999; Pradhan et al., 2004). Empirical literature identified trend, pattern and predictors of different types of crimes, however, the absence of longitudinal crime data over a fairly long period of time in Nigeria has limited our understanding of its spatiotemporal dynamics (LaFree, 1999). Also, much of the earlier empirical research has focused on the point pattern analysis of the locations where the crime took place (Craglia et al., 2000; de Melo et al., 2015), however, available data from government sources in Nigeria are often aggregated, necessitating a different approach in analyzing such data. This study was designed to analyse the spatiotemporal trend in ten different types of crime and their relationship with the number of hotels, police stations, LGA Internally Generated Revenue (IGR), revenue allocation to LGAs and LGA headquarters distance from the state capital.

Study area

Ondo state ranked 6th in both the gross and per capita crime incidences in Nigeria in 2016 (Nigeria's National Bureau of Statistics, 2016; Oguntade *et al.*, 2018). The State is bounded on the north by Ekiti and Kogi States, Edo State to the east, Delta State to the southeast, Ogun State to the southwest, and Osun State to the northwest. The state contains eighteen LGAs. The people of the State are mostly Yoruba, although other Nigerians and foreign nationals coexist peacefully in the state. Ondo State is primarily an agricultural state and therefore has many rural centres.

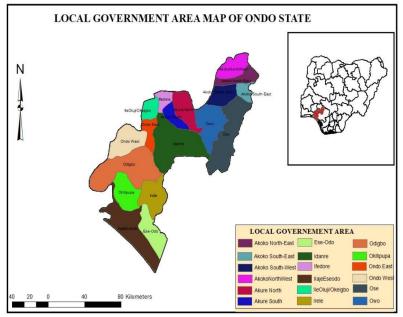


Figure 1: Map of Ondo State, Nigeria

Methodology

Data used in the spatiotemporal analysis of crime types in Ondo state between 2007 and 2016 were obtained from the Zonal command of the Ondo State Police Divisional Head Quarters, Akure. The number of reported crime types between 2007 and 2016 for the entire Ondo State was obtained and also, the reported crime types in each of the 18 LGAs for the years 2007 and 2010 were also obtained. The aggregated number of reported crimes by types in the State was used to explore the temporal trend in the reported crimes over a period of ten years (2007-2016), while the disaggregated reported crimes by LGAs in 2007 and 2010 were used to explore the spatial patterns of crime types. Disaggregated crime data by types across LGAs for other years were not available. Temporal crime trend was explored using simple percentages and trendlines while Moran's I-statistic was used to explore the spatial pattern of crime type to ascertain the degree of randomness or otherwise of the different types of crime. Furthermore, demographic data from the National Population Commission (NPC) provided information on the population of LGAs as well as the population density of each LGA. The population density data were used to partition the State into urban and rural. LGAs with a population density above the average were classified as urban while those with figures below

the average were classified as rural. The average population density figure used was 314.62sq/km. Thus, Akure South, Akoko South West, Akoko North East, Akoko North West, Ilaje and Okitipupa were the only urban LGAs recognised by this categorisation while other LGAs in the state were classified as rural LGAs. Furthermore, LGA based data such as distance from the state capital, amount of internally generated revenue and revenue allocation from the federation account were obtained from the Digest of Local Government Statistics (2009) available at (http://www.ondo statistics.org/ondoprofile.php). The data was used to explore the relationship between the number of reported crimes and these economic indicators.

Temporal trend in the ten reported crime Cases in Ondo state

Ten types of crimes assessed include rape and indecent assault, assault, theft, burglary, false pretence/cheating, breach of the public peace, armed robbery, kidnapping, and forgery. In the period under consideration, the most frequently reported crime types were theft (6239), assault (4679), breach of public peace (3045) and false pretence/cheating (3042) while the least reported crimes were forgery (46) and kidnapping (104). The number of reported murder cases has been on the increase most especially since 2008 (Figure 2). On

average, about 51±20.04 cases of murder are annually. Although, reported considerable variations exist in the number of reported murder cases most especially between the numbers reported before 2012 and those reported after 2012. Rape and indecent assaults have also been on the increase since 2007 with the highest reported case in 2015. On average, about 31±14.39 rape and indecent assault cases were reported annually. An increased number of rape and indecent assault were reported from 2013 upward. Generally, the pattern of rape and indecent assault reporting can be described as oscillating. Assault declined from 2007 to 2011 and increased thereafter. About 468±197 assault cases were reported annually (Figure 3). There are considerable variations in the number of reported assaults between 2007 and 2016. Generally, theft has increased over the years,

although it declined from 2007 to 2011, and thereafter increased through to 2016. The average annual reported number of theft cases was about 624 ± 202 . Burglary declined from 2007 through 2012 and thereafter increased in 2012 and declined again until 2016. The average reported number of burglaries in Ondo state between 2007 and 2017 was 74.10 \pm 31.07. The lowest reported burglary cases were between 2009 to 2016 with the exception of 2013. False pretence/cheating and breach of public peace have been increasing since 2012. The reported number of armed robberies has been characterised by an oscillating pattern but it is generally declining. Kidnapping is also increasing and the highest reported case was in 2015.

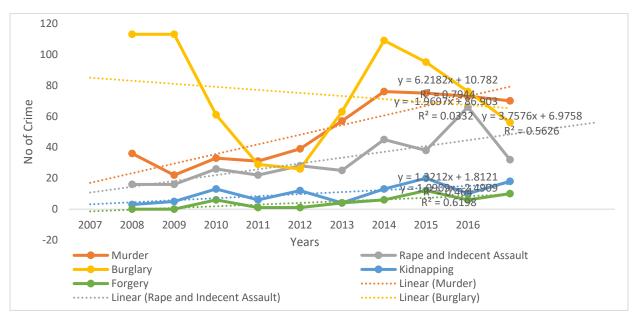
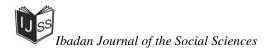


Figure 2: Trend in the Number of Reported Cases of Murder, Burglary, Forgery Rape and Indecent Assaults and Kidnapping in Ondo State from 2007 to 2016



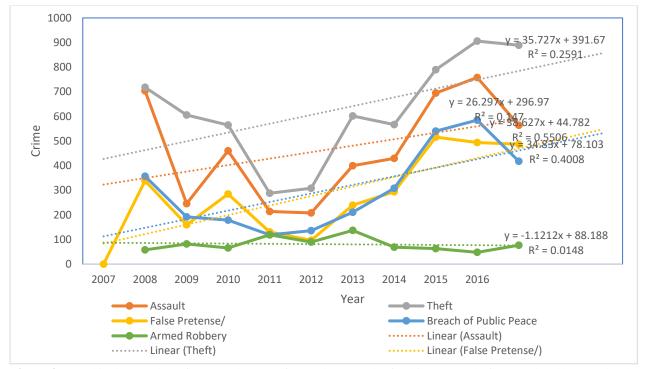


Figure 3: Trend in the Number of Reported Cases of Assaults, Breach of Pubic Peace, Theft, Armed Robbery and False Pretence in Ondo State from 2007 to 2016

Spatial distribution and change in crime types between 2007 and 2010

Akure South has the highest reported crime in Ondo State, while Akoko North West had the lowest reported number. Indeed Akure South, Ondo West, Akure North and Ilaje LGAs accounted for 63.10% of all the reported crimes in 2007 and 2010. The Akoko LGAs (Akoko North East, Akoko South, Akoko South West and Akoko North West) accounted for the lowest reported crimes.

There was a 70.0% reduction in the reported murder cases in Akure South LGA between 2007 and 2010, and a 50.0% reduction in Akure North, Ilaje, and Ondo East LGAs. Rape and indecent assault declined by 50.0% between 2007 and 2010 in Akure South, Ilaje, Ondo West, Ondo East, and Idanre however, it increased by 100% in Owo LGA. (Table 1). Assaults reduced by 91.67% between 2007 and 2010 in Akure South and by 90.0% in Ondo West and by 76.92 in Akure North LGAs, while it increased by 233.33%, 150.00% and 100.00% and 66.67% in Ese Odo, Ifedore, Idanre and Ose LGAs respectively between 2007 and 2010. In Akure South, reported thefts reduced by 88.72% between 2007 and 2010. Also, Idanre, Ondo West, Akure North, Odigbo and Ilaje had 86.67%, 75.00%, 76.92%, 61.54% and 60.00% reduction in the reported theft cases between 2007 and 2010. The highest increase in the reported theft cases was noted in Ose (566.67%), Akoko North West (233.33%), Akoko South (150.00%), Akoko North East (150.00%) and Ese Odo (100.00%). Reported burglary case reduced by 95.24%, 93.88%, 90.00% and 87.50% in Irele, Akure South, Ondo West, and Odigbo LGAs respectively, between 2007 and 2010. It was only Ese Odo that had a 100% increase in burglary case. The highest reduction in false pretence occurred in Ondo West (87.01%), Akure (86.11%) and Akure North (71.43%) while the highest increase was noted in Ose (900.0%), Ese Odo (400.0%), Akoko South West (400), and Akoko South (400.0%). The highest reduction in the breach of peace between 2007 and 2010 was in Akure South (88.10%), followed by 83.33%, 75.74%, 75.00%, 74.36% and 47.37% in Akoko North West, Ondo West, Odigbo, Akure North and Okitipupa LGAs respectively. The highest increase in the reported breach of public peace of 200.00% was reported in Ose and Akoko North East, while Ondo East and Ifedore LGAs had 150.00% increase in the reported breach of peace. The highest increase was noted in Ilaje

(500.00%), Owo (450.00%), Ose (350.00%), and Ese Odo (300.00%). There was a 66.67% reduction in kidnappings in Akure South between 2007 and 2010. There was no reported case of forgery in 2007 in Ondo State but in 2010, there was one reported case of forgery in Ondo West LGA.

There was a significant difference in the number of reported crime by types in 2007 and 2010 in Ondo State ($F_{(9,350)}$ = 6.249). The breakdown showed that the reported murder was significantly lower than that of assault and theft. Likewise, the reported rape and indecent assault were significantly lower than that of assault, theft, and false pretence. Assault was significantly higher than burglary, false pretence, breach of the public

peace, armed robbery, kidnapping, and forgery. Theft was significantly higher than burglary, false pretence, breach of public peace, armed robbery, kidnapping, and forgery. False pretence was significantly higher than kidnapping and forgery. There was a significant difference not only between the number of reported crime in 2007 and 2010 ($F_{(1,358)}$ = 7.588) but also in the number of reported crime across the LGAs in Ondo State ($F_{(17,342)}$ = 4.939). The reported crime in Akure South was significantly higher than the average reported crime in all the other LGAs in Ondo State. Although, there was a 58.66% reduction in reported crime between 2007 and 2010 (Table 1).

 Table 1: Number of reported crimes in the Eighteen local government areas of Ondo state

LGA	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B	6A	6B	7A	7B	8A	8B	9A	9B	10A	10B
Akure South	10	3	4	2	300	25	266	30	49	3	108	15	126	15	39	14	3	1	0	0
Ondo West	8	3	4	2	150	15	100	25	20	2	77	10	53	13	11	12	0	1	0	1
Akure North	4	2	1	1	65	15	86	25	12	2	35	10	39	10	6	11	0	2	0	0
Ilaje	4	2	2	1	56	15	50	20	6	2	28	10	5	10	2	12	0	0	0	0
Okitipupa	3	3	0	2	34	20	45	20	9	2	26	10	19	10	7	9	0	0	0	0
Owo	3	2	1	2	19	20	14	30	2	2	8	10	6	10	2	11	0	1	0	0
Odigbo	0	1	1	1	12	5	39	15	8	1	12	4	4	1	1	2	0	0	0	0
Irele	1	1	0	1	12	10	16	15	21	1	3	5	4	4	1	3	0	0	0	0
Ondo East	2	1	2	1	11	10	23	10	2	1	7	5	2	5	2	6	0	0	0	0
Ile Oluji	0	1	0	1	10	5	12	10	1	1	7	5	3	4	0	4	0	0	0	0
Ose	3	3	0	1	9	15	3	20	5	2	1	10	3	9	2	9	0	1	0	0
Akoko North East	0	1	1	1	7	5	4	10	0	1	0	6	0	2	0	3	0	0	0	0
Akoko South East	0	1	0	1	7	5	4	10	0	1	1	5	2	1	0	2	0	0	0	0
Ese Odo	3	3	0	1	6	20	10	20	1	2	2	10	4	8	2	8	0	1	0	0
Idanre	1	1	2	1	5	10	30	4	1	1	4	6	6	5	2	4	0	0	0	0
Ifedore	0	1	1	1	4	10	10	10	0	1	3	4	2	5	0	4	0	0	0	0
Akoko South West	0	1	0	1	4	5	3	4	0	1	1	5	2	6	0	5	0	0	0	0
Akoko North West	1	1	1	1	0	4	3	10	0	1	4	1	6	1	0	1	0	0	0	0

1A= 2007 Murder; 1B= 2010 Murder; 2A =2007 Rape and Indecent Assaults; 2B =2010 Rape and Indecent Assaults, 3A = 2007 Assaults, 3B = 2010 Assaults, 4A = 2007 Theft, 4B = 2010 Theft; 5A = 2007 Burglary, 5B = 2010 Burglary; 6A = 2007 False Pretence, 6B = 2010 False Pretence; 7A = 2007 Breach of Public Peace, 7B = 2010 Breach of Public Peace; 8A = 2007, Armed robbery, 8B = 2010 Armed robbery; 9A = 2007 Kidnapping, 9B = 2010 Kidnapping; 10A = 2007 Forgery, 10B = 2010 Forgery

Spatial pattern of crime in Ondo state in 2007 and 2010

The distributional pattern of reported crimes among LGAs in Ondo State in 2007 and 2010 was random

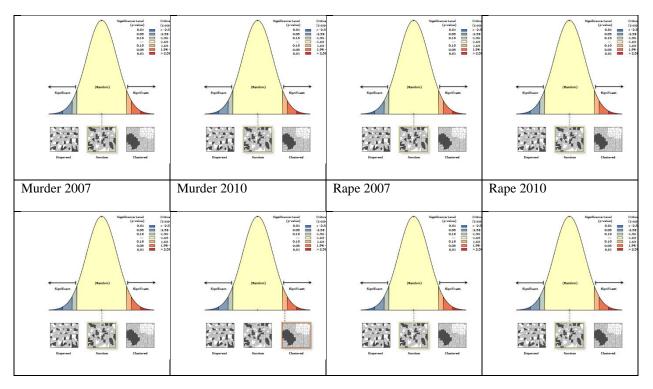
given the corresponding Z-scores of the different crimes studied which do not appear to be significantly different than random. The only exception was assault which despite being random



in 2007 changed significantly to a clustered pattern in 2010. This is because, given the z-score of 1.8222, there was a less than 10% likelihood that this clustered pattern could be the result of random chance. Also, kidnapping which became an emerging criminal issue in the State in 2007 exhibited a regular/dispersed distributional pattern because given the z-score of 1.8557, there was a less than 10% likelihood that this dispersed pattern could be the result of random chance, although, in 2010, the pattern did not appear to be significantly different than random given the z-score of 1.5319. Therefore, with the exception of the reported assault cases in 2010 and kidnapping cases in 2007, all other reported crime types exhibited a random distributional pattern in Ondo State (Table 2 and Figure 4). Thus, none of the crimes studied is localized and they can happen anywhere in the State. Hence, government and security agents would have to evolve a comprehensive and holistic approach aimed at addressing increasing crimes in the state.

Table 2: Distributional pattern of reported crimes across all the LGAs in Ondo state in 2007 and2010

Statistics	Murder	Rape	Assault	Theft	Burglary	False Pretence	Public Peace	Armed	Kidnapping	Forgery
	2007	2007	2007	2007	2007	2007	2007	Robbery	2007	2007
								2007		
Z-Score	0.2161	0.6319	0.1265	1.3739	0.2614	0.3585	0.7880	0.2531	1.8556	
P-value	0.8288	0.5273	0.8992	0.1694	0.7937	0.7199	0.4306	0.8001	0.0635	
Variance	0.0392	0.0420	0.0230	0.0210	0.0273	0.0329	0.0214	0.0129	0.0033	
Moran's Index	0.0159	0.0707	0.0780	0.1404	0.0155	0.0062	0.0565	0.0876	0.1663	
Pattern	Random	Random	Random	Random	Random	Random	Random	Random	Regular	
Statistics	Murder	Rape	Assault	Theft	Burglary	False Pretence	Public Peace	Armed	Kidnapping	Forgery
	2010	2010	2010	2010	2010	2010	2010	Robbery	2010	2010
								2010		
Z-Score	0.4184	0.9788	1.8221	1.4676	0.9005	0.8805	1.3246	1.3944	1.5318	0.5437
P-value	0.6756	0.3276	0.0684	0.1422	0.3678	0.3786	0.1853	0.1632	0.1256	0.5866
Variance	0.0481	0.0443	0.0467	0.0468	0.0449	0.0449	0.0464	0.0478	0.0421	0.0034
Moran's Index	0.0330	0.2650	0.3353	0.2587	0.1320	0.1279	0.2267	0.2459	0.2555	0.0273
Pattern	Random	Random	Clustered	Random	Random	Random	Random	Random	Random	Random

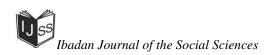


Assault 2007	Assault 2010	Theft 2007	Theft 2010
Syntham Barrel Barre	Surfluer Experied Experi	Sufficient and Suffic	Pagentine strend Section Sec
Burglary 2007	Burglary 2010	False Pretence 2007	False Pretence 2010
by the second se	Breach of Public Peace	Armed Robbery 2007	Armed Robbery 2010
		Armed Robbery 2007	
Support and Decision of the support	Suffrat Burgersen Burgerse		Sufficient and a set of the set o
Kidnapping 2007	Kidnapping 2010	Forgery 2007	Forgery 2010

Figure 4: Distributional Patterns of Ten Crime Types Between 2007 and 2010 in Ondo State

Rural-Urban differentials in the number of reported crime

It has been established that there are more crimes in big compared to small cities, and within cities, crime is highly concentrated in a limited number of places (Glaeser and Sacerdote, 1999; Zenou, 2003). The classic argument is that high density offers opportunities for property crimes, given that it is a surrogate for the distribution of private property, much of which offers attractive targets to thieves (Harries, 2006). The average number of crimes reported in urban LGAs was 13.09 ± 39.69 while that of rural LGAs was 7.13 ± 15.57 . Considerable variations exist in the number of reported crimes in urban and rural LGAs, although greater variations were noticed in the number of reported crimes across urban LGAs compared to rural LGAs. There was a significant difference between the number of reported crimes in urban and rural LGAs in Ondo State ($F_{(1.358)}$ = 4.148).



Correlates of different types of crimes in Ondo state

LGAs that reported higher crime values in 2007 also reported higher crime values in 2010 (r =0.695), despite that the total number of crimes reported in 2010 by some LGAs were lower than in 2007. There appeared to be a proportional reduction in the number of reported crime across all the LGAs in the State. The reduction could have been due to improved security in the state. Neither the number of reported crimes in 2007 nor 2010 is related with the number of hotels, number of police stations, percentage of the population living within the 1.0km distance of existing police stations, distance to state capital, amount of internally generated revenue, population density, allocation from federal government to each local government area in Ondo State (Table 3). The number of police stations, distance from state capital, the percentage of the population of the LGA living within 1.0km corridor of the existing police station/post, LGA internally generated revenue, and financial allocation from

the federal government to LGA appeared not to have any influence on the number of each type of crime reported across the LGAs. However, there was significant positive relationships between the number of hotels and the number of reported assaults (r= 0.538, p =0.011), theft (r= 0.535, p =0.011), burglary (r= 0.494, p =0.019), breach of public peace (r= 0.535, p =0.011), armed robbery (r= 0.496, p =0.018) and kidnapping (r= 0.480, p =0.022). Other types of crime were not related to the number of hotels in each LGAs. There were positive relationships between population density and the number of reported murder (r= 0.444, p =0.032), rape and indecent assaults (r= 0.507, p =0.016), assaults (r= 0.705, p =0.001), theft (r= 0.668, p =0.001), burglary (r= 0.614, p =0.003), false pretence and cheating (r= 0.628, p =0.003), breach of public peace (r= 0.696, p = 0.001), armed robbery (r= 0.679, p =0.001), and kidnapping (r= 0.557, p =0.008).

S/N	LGA	2007 Crime	2010 Crime	Total Crime	No of Hotels	Police Post/ Station	Distance to Capital	1Km Police	IGR	FGN Revenue
1	Akoko North East	20	36	56	11	6	96	33.3	23.43	11633.22
2	Akoko North West	905	108	1013	11	9	121	45.3	135.10	6478.45
3	Akoko South East	33	31	64	65	0	0	62.9	0.00	0.00
4	Akoko South West	153	72	225	13	7	102	28.9	60.00	9300.00
5	Akure North	12	29	41	10	6	18	2.3	49.48	8056.83
6	Akure South	143	76	219	65	0	0	13.8	0.00	0.00
7	Ese Odo	248	78	326	1		168	65.7	0.00	0.00
8	Idanre	423	84	507	16	5	16	44.3	35.38	6941.32
9	Ifedore	51	39	90	5	7	20	2.3	59.32	20.40
10	Ilaje	28	73	101	7	7	152	1.7	27.96	4375.03
11	Ile Oluji	26	70	96	8	0	54	0.6	0.00	0.00
12	Irele	15	20	35	6	3	134	51.6	39.61	5107.44
13	Odigbo	14	26	40	19	0	83	1	1001.14	8437.38
14	Okitipupa	10	28	38	18	7	126	51.7	88.82	10340.85
15	Ondo East	58	40	98	5	2	31	45.2	79.11	9859.98
16	Ondo West	77	30	107	13	5	46	98.2	129.90	10953.98
17	Ose	55	88	143	12	8	92	44.7	81.79	9713.44
18	Owo	51	32	83	16	0	48	96.6	0.00	0.00

 Table 3: Comparative analysis of crime distribution in 2007 and 2010 in Ondo state

Discussions and conclusion

There is no consistent temporal trend in the distribution of the ten reported crimes in Ondo State between 2007 and 2016. Within the time frame under consideration, theft, assault, and breach of public peace were the most frequently reported to the Nigeria Police Force. While the reported number of some crimes increased, others experienced reduction. It is worthy to note that crimes such as rape and indecent assault exhibited an obvious cyclical trend. Generally, with the exception of burglary and armed robbery, all other crime types exhibited an increasingly positive trend indicating that the numbers of reported cases are on the increase. The marginal reduction in the number of reported burglary and armed robbery could be because of the emphasis of the state police command to reduce to the barest minimum the incidence of armed robbery and burglary in the state.

The number of reported murders decreased in all the LGAs between 2007 and 2010. In Owo LGA, the number of reported rape and indecent assault also reduced in all the LGAs between 2007 and 2010 except in Owo LGA where there was a 100% increase. Assault reduced in all the LGAs with the exception of Ifedore, Idanre, Owo and Ose LGAs. Similarly, theft reduced in all the LGAs except in Owo, Ose, Akoko South, Akoko South West, Akoko North East, Akoko North West and Ese Odo LGAs. The number of reported burglaries reduced in all the LGAs. Except in Irele, Ifedore, Idanre, Owo, Ose, Akoko South, Akoko South West, and Ese Odo, all other LGAs experienced a reduction in the reported number of false pretences. Breach of public peace was reduced in all the LGAs except in Ilaje, Ile Oluji, Ondo East, Ifedore, Owo, Ose, Akoko South West, and Ese Odo. Some of these can be attributed to the presence of oil facilities in the area. Increasing agitations for resource control as well as perceived environmental injustice have fueled community agitations in oilproducing areas in Nigeria. Except for Akure South, the reported armed robbery increased between 2007 and 2010. Kidnapping has also been reduced in the LGAs.

The reported crime in Akure South is significantly higher than the average reported crime in all the other LGAs in Ondo State. Although, there was a 58.66% reduction in reported crime between 2007 and 2010. There was a significant

difference in the number of reported crimes by type in 2007 and 2010. Incidentally, LGAs with the highest reported crimes do not necessarily coincide with those with the highest population. Furthermore, no relationship was observed between the number of reported crimes across LGAs and number of hotels, police stations, distance from State headquarters, Internally generated revenue, population and population density of each LGA. Thus, it is challenging to predict not only the cause but also the pattern of occurrence of crimes in Ondo State. The observed random pattern of occurrence of these reported crimes except for assault in 2010 confirmed the difficulty in ascertaining the factors that can influence the distribution of crimes in Ondo State. There is a significant difference between the number of reported crimes in urban and rural LGAs in Ondo State. This is in tandem with an earlier study that has observed rural-urban differentials between urban and rural areas (Zenou, 2003; Harries, 2006). Majority of the localities experiencing high incidence of crime are in urban LGAs due to industrialization and anonymity of people.

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