MOBILE COMMUNICATION, UNEMPLOYMENT AND ARMED ROBBERY IN
PORT HARCOURT: AN EMPIRICAL ANALYSIS

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DOI: https://doi.org/10.5281/zenodo.15640678

Abstract: The deregulation of the telecommunication sector in early 2000 by the government was a welcomed development to many Nigerians, because it made communication available to many Nigerians unlike the case under NITEL, and created employment opportunities for many people in both the public and private sectors of the economy. However, despite its tremendous benefits to the Nigerian economy, mobile phones have become easy tools in the hands criminal offenders to perpetrate heinous crimes. Availability of telecommunication, especially GSM and internet has made crimes such as armed robbery, kidnapping, terrorism, cyber stalking, internet fraud etc to be easier to commit. Many armed robbers and kidnappers use mobile phones to plan their operations. Also, it would have been extremely difficult for kidnappers to collect ransom from their victims' families without the aid of mobile phones. The main objective of this research is to compare the changes in armed robbery trend prior to the introduction of mobile communication in 2001. Two hypotheses were raised and tested using Chi Square(X) and contingency coefficient (c-test). Using time series data on crime and unemployment in Port Harcourt, 20002010, we found that crime rates, especially armed robbery rates increased after the introduction of mobile communication in 2001.

Keywords: Telecommunication; Mobile Phone; Armed robbery; Unemployment

1.1 Introduction

Virtually all societies in the modern world are troubled daily by criminal activities. Most of these activities are done by individuals or organized groups. While crime rates vary enormously from one country to another and from one region to another, criminal behavior remains a cause of concern amongst most members of the public. Traditional crimes are now being aided or supported through the use of mobile communication and networks, and wrongdoing previously never imagined has surfaced because of the incredible capabilities of information systems. In fact, most bank robberies in Port Harcourt are aided by mobile phones. Instances abound where customers are being trailed after financial transactions in banks. Apart from robberies and kidnapping facilitated by mobile phones, people have also become victims of cybercrime.

A remarkable behavioural change in the everyday lifestyle of Nigerians, since the advent of civilian administration in 1999 is the change from elitist telecommunication services to mass-

oriented Global Systems for Mobile Communication (GSM) which is now common place in both urban and rural areas (Obasanjo, 2013:15). On monthly intervals between September 2012 and October 2012, Nigeria's active phone lines grew from 107.3 million subscribers to 109.4 million subscribers which was an increase of 2.1 million subscribers within just one month (Adepetun, 2012:56). Also, in terms of growth of phone usage per hundred citizens which is technically called teledensity rate, less than one person per hundred was using phones in 2000 compared to more than fifty-eight persons per hundred in 2009. For cyberspace traffic levels while about

107,0   persons were using internet services in 2000, the number rose to over 10,000,000 internet users in 2008.

In the drive to make Nigeria a continental and sub-regional hub of both GSM and cyberspace traffic, there has also been a parallel expansion of internet computer services all over the country. These new trends are evident in figures recorded by the Nigerian Communications Commission (NCC) and the National Bureau of Statistics (NBS) which covers the period of our study (20002010) as shown in Table 1.1

Table 1.1 Communication Sector, 2000-2010

Description	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Mobile lines (000)	35	266	1569	3150	9174	18587	32165	48396	62988	73099	84795
% Growth	0.0	661.3	488.8	100.7	191.3	102.6	75.9	25.5	55.9	16.1	16.0
Teledensity (%)	0.49	0.72	1.89	3.36	8.5	15.7	24.18	29.98	39.09	58.23	86.76
Internet Users (000)	107	153	420	1613	1760	5214	7910	3000	10,000	15,660	24,586
% Growth	0.0	43.1	173.9	284.1	9.69	196.3	65.2	1.14	25.0	56.6	127.9

Sources: Nigerian Communications Commission (NCC), National Bureau of Statistics (NBS) Annual Abstract of Statistics (Various issues).

The data reveal that while about 35,000 mobile phone lines were available to Nigerians in 2000, over 73,099,000 mobile phone lines became available by the end of 2009. The average annual growth of mobile phone lines for the entire period was 171.8%.

In terms of telephone penetration by states Lagos state was dominant with 30.7% of total lines available,

while Port Harcourt held a lower share of 0.43% (National Bureau of Statistics, 2002).

Table 1.2 Telephone y States (2002)

State	Population	Exchang	Connected Lines	% Penetration	% of total lines
Lagos	8,002,533	36	272,081	3.40	39.7
Abuja	519,523	12	49,289	9.49	7.2
Abia	3,368,141	7	261,130	0.78	3.8
Rivers	4,357,309	12	13,985	0.43	2.9
Imo	3,474,406	5	6,986	0.20	1.0
Ekiti	2,381,005	5	3,753	0.12	0.4
Taraba	2,113,691	3	1,538	0.07	0.2
Bayelsa	1,656,585	1	979	0.06	0.1

Source: NCC, NBS Annual Abstract of Statistics, 2006:370 **Note:** Population as at December, 2002.

Fig 1.1 Pie Chart of telephone Penetration by States

States

- Abuja
- Lagos
- Abia
- Rivers
- Imo
- Ekiti
- Taraba
- Bayelsa
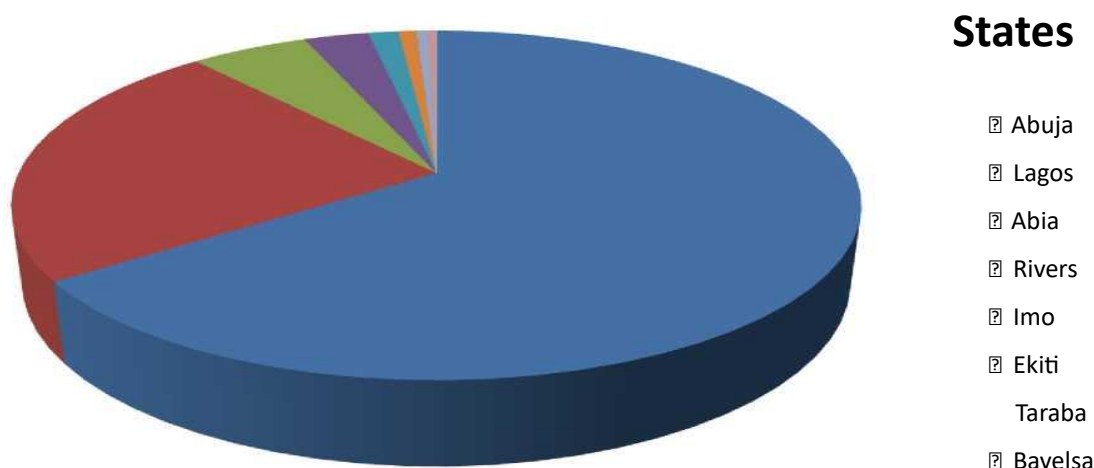
1.2   Statement of the Problem

What are the underlying causes of crime in Nigeria, especially Port Harcourt City and what are the dominant characteristics of criminal offenders? The search for objective answers to these twin questions has generated several research ideas to establish empirical links between variables like annual crime rates, composite unemployment rates, census figures, real Gross Domestic Product, frequency of drug use biogenetic temperament, residential location and patterns of peer association etc (Engls, 1935; Park, 1967, Harvey, 2009). In the choice of methodology, many studies have combined the use of official crime and employment statistics with survey data drawn from primary sources like questionnaire or interviews with crime suspects and crime convicts (Ogionwo, 1979, Iwarimie- Jaja,

1993).

Scholars have identified the limited uses of participant observation techniques which place such studies at great risks especially when the researchers themselves are striving to unravel the internal operational secrets of criminal gangs (Cruz, 1972; Ramanathan, 2006; Fernandes, 2007). The tools employed to interpret and analyze the results of such studies have ranged from percentage calculations of changes in annual crime and unemployment rates to tests of association, correlation and significance of relationships between variables (Iwarimie-Jaja, 1993). However, there have been very few attempts in Nigeria to derive single index numbers which can summarize entire time series data on crime and unemployment using specific base periods. This study attempts to bridge this methodological gap by progressing beyond the annual rates of growth and to generate an Unemployment-Weighted Robbery Index (UWRI) for Port Harcourt in the period under study, 2000-2010.

The uniqueness of the present study, unlike previous studies (Kpae and Adishi, 2017; Cantor, and Land, 1985; Melick, 2003) is that it introduced a new set of variable, mobile communication, in understanding the relationship between unemployment and crime particularly armed robbery. This variable has been lacking in previous researches that tries to explain the correlation between unemployment and deviant behavior.

1.3 Objectives of the Study

The primary objective of the study is to compare the levels of recorded unemployment and armed robbery in Port Harcourt using index numbers which are tied to changes in communication between 2000-2010. Specifically, this study intends to:

• Compare changes in unemployment and armed robbery trends since the introduction of mobile communication 2001

• Establish a common measure of changes in both unemployment and armed robbery using a weighted index number called Unemployment Weighted Robbery Index (UWRI).

1.4 Hypotheses of the Study

The following sets of testable assumptions are made to guide our analysis of empirical data.

1. There is significant difference in the unemployment index before and after the introduction of mobile communication.

2 There is significant difference in the armed robbery index before and after the introduction of mobile communication.

2.0 Theoretical Framework and Literature Review

2.1 Theoretical Review

This study is situated Robert Merton's Strain Theory. Merton (1957) argues that society's structure encourages deviance and criminal behavior. Merton believes that socially acc epted goals put pressure on people to conform. People are compelled to either work within the system or become members of a subculture to achieve the desired goal. Merton contends that strain occurs when there is a gap between individual goal and their current status. He believes people adapt to strain in various ways. He argues that by innovation people are using unconventional means to obtain culturally approved goals.

Nigerian society puts pressure on individuals' especially young people to succeed. There is so much

emphasis on material prosperity. This cultural goal of material prosperity makes many people to deviate from cultural goals. Since the opportunity for people to succeed in a legitimate way is limited, many people resort to illegitimate means to achieve cultural goals. Armed robbery, oil theft, burglary, kidnapping etc are various unconventional means through which people try to obtain culturally approved goals. Mobile communication provides easy means for people to commit criminal offenses particularly property crimes.

2.2 Empirical Review of Unemployment and Armed Robbery 2.2. 1 Unemployment Statistics

Table 1.3: Unemployment data for Port Harcourt (2000-2010)

Year	(A) Registered Applicants (stream)	(B) Applicants Employed (Filter)	(C) Applicants unemployed (Residue)	(D) Rate (C/A) %	(E) Annual Change in Rate %
2000	514	16	498	96.89	-
2001	480	25	455	94.79	-2.17
2002	444	28	416	93.69	-1.16
2003	390	30	360	92.31	-1.47
2004	392	35	357	91.07	-1.34
2005	310	43	267	86.13	-5.42
2006	330	36	294	89.09	+3.44
2007	251	34	217	86.45	-2.96
2008	218	49	169	77.52	-10.33
2009	279	43	236	84.59	+9.12
2010	275	71	204	74.18	-12.31

Source: Federal Ministry of Employment Labour and Productivity, Port Harcourt.

From table 1.6, the highest or modal decrease in unemployment occurred in 2010 with an annual change of -12.31% while the highest or modal increase occurred in 2009 with annual change of 9.12%. For the entire period of 2000-2010, we can find the range of annual changes in unemployment rates by:
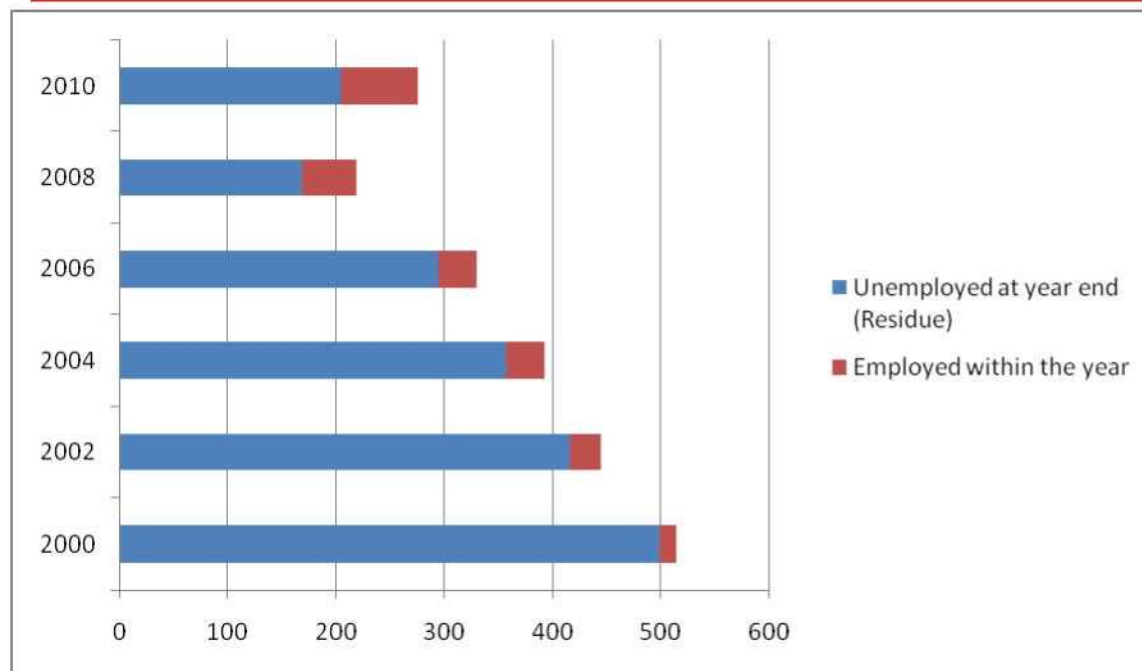
Range = highest rate of change - lowest rate of change.

= +9.125 - 12.3%

= - 3.19%

The range is an average measure of annual changes in unemployment rates. So, on the average, unemployment rates fell by 3.19% per annum between 2000 and 2010.

Fig. 1.1: Histogram of registered unemployment in Port Harcourt (2000-2010)

Source: Table 1.3 (Biennial data).

A cursory glance at the histogram shows that only a negligible fraction of registered applicants eventually filtered through the job market by securing employment within each given year. Moreover, the biennial trend reveals that after 2008 when commercial motorcycles were banned, the number of registered unemployed persons started increasing rather than decreasing as in previous two-year intervals.

These are data collected and analyzed to show unemployment trends at National, State or Municipal levels over a given time period. Some examples of unemployment statistics are now simply displayed.

The National or Composite Unemployment rate generally reduced except for 2003 and 2005 when there were increases of 2.6% and 0.1% respectively over the preceding years. The urban rate of joblessness followed the declining national trend with only 2003 as the exception when 7.6% increases occurred but fell sharply again in 2004 to 11.0%. The rural rates were higher than both urban and national rates except in 2003 when the 13.8% rural rate was lower than urban (17.1%) and national (14.8%). (NBS, 2004: 3).

For the same period of 2001-2005, unemployment rates were broken into distinct categories or cohorts of educational level, age and sex of unemployed persons. The National Bureau of Statistics (NBS) used the loss of at least 39 hours of work per week to include persons in its survey of the unemployed unlike the International Labour Organisation (ILO) which uses the loss of one hour of work per week as a strict indicator of unemployment (NBS, 2004: 5).

The data reveal that composite unemployment rates increased slightly in 2005 at 11.9% compared with 2004 at 11.8% on the national level. However, in the geographical distribution, the urban unemployment rate declined in total by 0.9% from 11% in 2004 to 10.1% in 2005. Conversely, the rural unemployment rate for all groups rose from 12.1% in 2004 to 12.6% in 2005. A prior expectation from these trends would favour a greater manifestation of the vices resulting from the condition of unemployment among secondary school, aged between 15 and 24 years, male and with a migration history from rural to urban locations.

In this research, we are, therefore, looking at unemployment rates from the standpoint of simply the number of people who become unemployed within a period of time using the register of unemployed persons from the Federal Ministry of Employment, Labour, and productivity, Port Harcourt. This figure is taken without bias to the city population or estimates of labour force rather than the residence of registered applicants who remain unemployed at the end of each year as related to the initial stream of registered applicants at the beginning of the year. Thus, the applicants who secured jobs within the year are discounted before obtaining a residual rate.

In this research, trends of unemployment are juxtaposed with records of armed robbery incidence to construct weighted index numbers.

Armed Robbery Statistics

Usually, armed robbery is included among the cases of crime reported to the various state and Federal Police Commands in Nigeria every year.

The UNDP report shows the total number of reported cases of crime by type of crime and year in Rivers State. It is clear from the report that armed robbery is a separate category from related offences like burglary, stealing, murder rape, indecent assault, grievous bodily harm and wounding etc. (UNDP, 2009:93).

According to the report, 840 cases of armed robbery were reported in Rivers State between 2001 and 2009 and this made up 2.76% of crimes reported in this extract from UNDP crime data. It is worrisome that the incidence of armed robbery over the period measured in percentage terms exceeded the recorded cases of burglary, breaking, murder, rape and indecent assault respectively. Only petty stealing and simple assault cases exceeded the performance of armed robbery (UNDP, 2009: 94).

Crime rate is computed from the number of crimes against property or persons within or over a period of time, usually one year. For instance, if the 1970 crimes against property were 5386 while the 1974 number of such crimes was 3602, then the average yearly rate of crime for the period is 6.62%.

When we narrow our view from broad crime cohorts to specific armed robbery data between 2000 and 2010, the trend of annual changes in the number of armed robbery cases shows that robbery cases increased in 2001 and 2002 with the advent of mobile communication. The highest annual frequencies of armed robbery were recorded in 2004 and 2005 followed by a period of robbery decline until 2008.

Table 1.4: Armed Robbery Statistics 20 0-2010

Year	No. of Cases	Suspects Male Female		Victims Killed	GBH	Value of Property Stolen (F)	Annual Change in Cases
	(A1	JB)	(Q	(D!	(El		JG.
2000	24	**64**	**16**	8	12	61,101,205	
2001	31	82	12	6	14	49,216,119	+29.17
2002	48	108	7	11	22	72,120,408	+54.84
2003	39	92	18	7	11	29,138,204	+18.75
2004	123	128	72	24	69	25,841,135	+215.38
2005	134	99	48	13	9	61,189,128	+8.94
2006	72	80	13	2	6	15,709,050	-46.27
2007	21	29	5	8	16	19,600,000	-70.83
2008	32	61	4	9	5	23,232,614	+52.38
2009	19	32	6	14	18	28,114,215	-40.63
2010	39	45	18	8	16	32,208,616	+105.26

Source: Office of the Deputy Commissioner of Police, Nigeria Police Force, State CID, Port Harcourt, Rivers State

The trend of annual changes in the number of armed robbery cases shows that robbery cases increased in 2001 and 2002 with the advent of mobile communication. The highest annual frequencies of armed robbery were recorded in 2004 and 2005 followed by a period of robbery decline until 2008 when there was a renewed increase in armed robbery. Armed robbery incidents declined in 2009, but picked again in 2010.

The armed robbery trend in the data from the State Criminal Investigation Department in Port Harcourt is of central importance to the subsequent direction of this research. It shows that 2004 is not only the midpoint of our time series data, but it is also the peak of armed robbery incidence between 2000 and 2010. Therefore, 2004 lends itself as a very attractive base year for index number construction as follows:

i) Year 2000 is the base year for pre-GSM trends while 2004 is the base year for post-GSM trends.

The Concept of Unemployment

The International Labour Organization (ILO) and the World Bank (IBRD) defined unemployment as: "Numbers of the economically active population who are without work but available for and seeking work including people who have lost their jobs and those who have voluntarily left work" (World Bank ,1998:2).

Harmonizing these different levels of unemployment, Obadan and Odusola (2012:1) cited

unemployment as one of the serious impediments of social progress. "Apart from representing a colossal waste of a country's manpower resources, it generates a welfare loss in terms of lower output, thereby leading to lower income and well-being" (see also Akinboyo, 1987:36; Raheem, 1993:25; Vandemoortele, 1991:88; Rama, 1998:151; Oladeji, 1994:39; and Umo 1996:59).As Obadan and Odusola (2012:1) explained, most published unemployment rates are open unemployment alone. Moreover, there is a problem with the concept of labour force. "In Nigeria, people below 15 years and people above 55 years who are actively involved in economic activities are usually excluded from labour statistical surveys" (Okigbo, 1986:134).

This results in underestimation of unemployment and makes international comparisons more difficult. The preponderance of full time housewives (who are willing to be engaged in paid jobs) and unpaid family workers also contribute significantly to the under estimation of unemployment figures (Obadan and Odusola, 2012:1).

In the 1997 Review of the Nigerian Economy by the Federal Office of Statistics (FOS), it was also noted that:

Continued self employment of youths in several informal activities like refuse dump scavenging, and street trading (we add phone booth operations and commercial motorcycles) helped to dampen the real effect of unemployment, but boosted underemployment in both rural and urban sectors... There is evidence that revealed some relaxation in government and private sector interventionist policies and programmes. More efforts should be made to resuscitate these programmes and sustain the gains of the previous of years when NALDA, DFRRI, NDE, Better Life for Rural Dwellers etc. were vigorously pursued... This will save the nation from the social consequences manifest in armed robbery, banditry, prostitution, fraud, and hired assassination of defenseless "citizens" (FOS, 1997:3334).

The prevalence of unemployment is usually measured by the unemployment rate, which is defined as the percentage of those in the labour force who are unemployed. The unemployment rate is also used in economic studies as a measure of macroeconomics (Vienneau, 2012: 612619; Wikipedia, 2010:1). Further, the International Labor Organization (ILO) defines the unemployed as numbers of the economically active population who are without work but available for and seeking work, including people who have lost their jobs and those who have voluntarily left work (World Bank, 1998:63).

Several factors are responsible for the unemployment situation in Nigeria. One fundamental factor is poor economic growth that has characterized the system over the years. Definitely, there are many determinants of unemployment, but the most critical of them all is the weak economic growth. The overall situation of the country for the most part of the eighties, nineties, and the present decade has been very hostile to economic growth and development. The high rate of corruption, mismanagement of public funds, inconsistent economic policies, and the insecurity of the Nigerian environment, coupled with long-term dictatorship military rule, among other factors, have dampened the spirit of economic growth in the country. Thus, the poor state of economic growth in the face of the growing population accounts for the worsening situation of unemployment over the years in the country (Bello, 2003: 11).

Effect of Unemployment

The effect of unemployment on society is tremendous. According to Adrain Sinfield (1981) cited in

Haralambos and Heald, (1982: 330), unemployment devalues or debases the standard or quality of life in society. This happens in several ways. First, those remaining in work feel less secure and may have their standard of living threatened. This is partly because of short-time working and reductions in the amount of overtime, and partly due to the reduced bargaining power of workers which leads to downward pressure on wages. Second, the workforce becomes less willing to leave an unsatisfactory job because of the fear that they will be unable to find new employment. It becomes less mobile and the number of frustrated and alienated workers increases. Third, divisions within society are likely to increase, because the unemployed and those working in unsatisfying job may blame weak groups in society for their problems. Fourth, Sinfield believes that high unemployment reduces the chance and equality of opportunity being achieved in society. With surplus of labour, employers may make less effort in recruiting women, ethnic minority groups, the young, the old, and the disabled.

The effect of unemployment on the Nigerian economy is both macro and micro, the micro effect seems to have the most devastating impact on the people, because many families do not have a source of livelihood. This drives people into engaging in anti-social behaviours, and causes adolescents to engage in all sorts of social vices such as prostitution, drug, cultism, kidnapping, gambling, oil bunkering, terrorism and armed robbery as a way of venting their anger on the society. When unemployment is high, as is the case in Nigeria today, illegal activities, such as property crimes are bound to be on the increase.

Unemployment leads to homelessness due to the inability of the unemployed to repay home loans or pay house rents. Another major consequence is anxiety in the minds of the victims. Unemployed individuals become pessimistic about life, and may be afflicted by psychological problems resulting from mental stress (Wikipedia, 2010: 2).

Another consequence of unemployment is abject poverty. A long period of joblessness impoverishes the individual, and disables him from meeting up his or her financial obligations. Such an individual may be driven to a life of crime if no alternative is available to meet his basic needs.

The unemployed lose more than money when they lose their job. According to Martin little (1984) cited in Haralambos and Holborn, (2005: 751), the unemployed loses a sense of identity when out of work. He argues that unemployment tends to reduce social contacts. Further, employment provides obligatory activity for the unemployed. Thus when a person is unemployed, he or she finds it difficult to occupy himself. Lastly, an unemployed person finds it difficult to structure his psychological time. This is because employment provides the person opportunity to organize his life as the days go by.

Financial effect is perhaps the most obvious effect of unemployment on the individual (Haralambos, and Holborn, 2005: 750). The severity of the financial impact of unemployment has been due to two main factors: 1) there has been an increase in the number of long-term unemployed, i.e. those who have been out of work for a year or more. 2) relative to wages, unemployment benefits have been declining. The relative poverty caused by unemployment continues to increase, despite increase in the living standard of the people.

Methodology

This study adopted a case-control method of data analysis by comparing the opinions of two distinct

groups of people, convicted armed robbers and unemployed applicants. Primary data were obtained through printed questionnaires supplemented by oral interviews of prison officials.

The test questionnaire contained both coded and open-ended items. This made for a wider coverage as the coded items elicited specific answers while the open-ended items allowed for personal options of the respondents.

A total of 400 respondents were sampled for this study drawn from a total population of 3711. Contingency tables were used to compare the responses of convicted armed robbers and unemployed persons and the differences between both groups were established using the Chi- Square (X) test of independence between variables. The results of the Chi-Square (X) test are further subjected to the contingency coefficient (c-test) as an indicator of the strength of association implied in the Chi-Square (X) analysis. For the empirical tests of hypotheses, secondary data are presented in time series and used to construct index numbers with selected base periods to compare the trends of unemployment and armed robbery in relation to changes in communication over time.

4.0 **Result and Discussion**

4.1 **Presentation of Data**

Table 4.1: Sex Distribution of Respondents frequency

Description	Robbers	Unemployed
Male	98 (93)	240 (80)
Female	2 (2)	60 (20)
Total	100	300

The distribution shows that out of four hundred three hundred (300) or 75% were unemployed persons while, one hundred (100) or 25% were armed robbers. Among the total sample, three hundred and thirty-eight (338) persons or 85% were males, with the unemployed males accounting for 80% of their category, while male robbers took up 98% of all armed robbers.

In conclusion, the data reveal male dominance in both the unemployed category and the population of armed robbers.

Description	Robbers	Unemployed
Below 30 years	54 (54)	138 (46)
30-39 years	22 (22)	96 (32)
40-49 years	18 (18)	54 (18)
50 years +	6 (6)	12 (4)
Total	100	300

Table4.2: Age Distribution of Respondents frequency

From the total sample of four hundred (400) persons, one hundred and ninety-two (192) persons or 48% were below thirty (30) years of age.

Significantly, the bulks of the armed robbers (54%) fell below the 30 years age bracket. This shows a prevalence of armed robbery among the young segments of the society. The distribution of persons falling within the combined thirty to forty-nine years categories constituted 48% of the total population out of which 40% of the robbers and 50% of the unemployed were in this age bracket only 40% of the years old and above. Hence both unemployment and armed robbery are rampant among the youths and middle-aged members of the population, pointing towards a drain of productive resources in the Nigerian economy. Implicitly there is a convergence of both unemployment and armed robbery among the youthful age groups of the society.

Table 4.3: Marital Status of Respondents

Description	Frequency	
	Robbery	Unemployed
Single	71(71)	131(44)
Married	11(11)	156(52)
Others	18(18)	13(4)
Total	100	300

Of the total sample, two hundred and two persons (202) making up 51% were single while one hundred and sixty -seven (167) persons or 42% of the sample were married. The remaining thirty on (31) respondents or 7% of the sample were endowed, divorced or separated.

Interestingly, while 52% of the unemployed indicated married status, only 11% of the robbers claimed to be married while a whopping 71% of them were single.

Furthermore, 18% of the robbers fell into the other category of widowed, divorced or separated while only 4% of the unemployed were in this miscellaneous group. The data point to a higher degree of marital stability among the unemployed as against s high degree of marital instability or single status among the armed robbers.

Table 4.4: Religious Distribution of Respondents

Description	Frequency	
	Robbery	Unemployed
Christians	68(68)	224(75)
Muslims	19(19)	49(16)
Others	13(13)	27(9)
Total	100	300

Christians made up 73% of the entire sample of four hundred (400) persons while Muslims accounted for 17% of the sample, other religions took up 10% of the respondents. Both the unemployed and armed robbers displayed the same predominance of the Christian faith pointing towards the wider religious distribution of the Nigerian population on a geographical basis whereby Christianity dominates the southern states while Islam is predominant in the North.

	Frequency	
Description	**Robbery**	**Unemployed**
Primary	33(33)	8(3)
Secondary	48(48)	120(40)
Tertiary	14(14)	138(48)
Other	5(5)	34(11)
Total	**Total**	**300**

Out of the total sample, holders of secondary school qualifications made up 42%. This category of persons also constituted 48% of the armed robbers and 40% of the unemployed persons respectively. However, graduate of tertiary institutions were the bulk of the registered unemployed persons with a total share of 48%.

Primary school certificate holders or other assorted training certificate has an equal proportion of 10% of the entire sample. Majority of respondents in the entire sample had secondary school certificate and above.

Table 4.6: Whether Unemployed before Committing Armed Robbery

	Frequency
Description	**(Robbers Only)**
Yes	94 (94)
No	6(6)
Total	**100**

Only six (6) persons among the armed robbers admitted combining their regular work or business with armed robbery. The bulk of them (94%) claimed to be jobless at the time they committed robbery offences.

Table 4.7: Ownership of GS M Phones

	Frequency	
Description	**Robbery**	**Unemployed**
Yes	100(100)	253(84)
No	Nil(nil)	47(16)
Total	**100**	**300**

All the convicted armed robbers (100%) agreed to ownership of personal GSM phones while 84% of the unemployed persons also owned GSM handsets. Only 16% of the unemployed were yet to acquire GSM phones.

4.2 Data Analysis

Hypotheses Testing

(A)   Test of Hypothesis One

H_0: There is no significant difference in the unemployment index before and after the introduction of mobile communication.

H_1: There is a significant difference the unemployment index before and after the introduction of mobile communication.

Table 4.2.1: Time series data on Registered Unemployment Persons (A)

Years	No. of persons	2000 based index (A)	2002 based index (B)	Deviation = B-A	(d-d)	(d-d)2
2000	498	100	120	20	7	49
2001	455	91	109	18	5	25
2002	415	84	100	16	3	9
2003	360	72	87	15	2	4
2004	357	72	86	14	1	1
2005	267	54	64	10	-3	9
2006	294	59	71	12	-1	1
2007	217	44	52	8	-5	25
2008	169	34	41	7	-6	36
2009	236	47	57	10	-3	9
2010	204	41	49	8	-5	25
		x= 63	X = 1. ōḟ	2=138	2=-5	2=193

Source: Federal Ministry of Employment, labour and productivity, PH.

Calculated /t/ 9.85 > Table (t) 2.23, therefore the null hypothesis that there is no significant difference in the unemployment index before and after the introduction of mobile communication is rejected at 0.05 level of significance and 10 degrees of freedom. The alternative hypothesis (HA) that there is a significant difference in the unemployment index before and after the introduction of mobile communication is not rejected.

B) Test of Hypothesis Two

Ho: There is no significant difference in the armed robbery index before and after the introduction of mobile communication.

H_2:   There is a significant difference in the armed robbery index before and after the introduction of mobile communication.

Table 4.2.2: Time series data on Reported cases of Armed Robbery

Years	No. of persons	2000 based index(A)	2002 based index (B)	Deviation = B-A	(d-d)	(d-d)²
2000	24	100	50	-50	60	3600
2001	31	129	65	-64	46	2116
2002	48	200	100	-100	10	100
2003	39	163	81	-82	28	784
2004	123	513	256	-257	-147	21609
2005	134	558	279	-279	-169	28561
2006	72	300	150	-150	-40	1600
2007	21	88	44	-44	66	4356
2008	32	133	67	-66	44	1936
2009	19	79	40	-39	71	5041
2010	39	163	81	-82	28	784
		x=221	x= 110	2=1213	2=-3	2=70487

Source: Office of the DCP, Nigeria Police force, state CID, Port Harcourt.

Calculated /t/ 4.35 > Table ($_t$) 2.23, therefore the null hypothesis (H_o) is rejected at 0.05 level of significance and 10 degrees of freedom. The alternate hypothesis (HA) that there is a significant difference in the armed robbery index before and after the introduction of mobile communication is not rejected

C)   Test of Hypothesis Three

Ho: There is no significant difference in the Unemployment Weighted Robbery Index

(UWRI) before and after the introduction of mobile communication.

The alternate hypothesis is:

H**3**:   There is a significant difference in the Unemployment Weighted Robbery Index (UWRI)
before and after the introduction of mobile communication.

Table 4.2.3: Cases of Armed Robbery Weighted by Unemployment figures

Years	Case (Persons)	Weighted Products	2000 based Index(A)	2010 Based Index (BI	Deviation B-A	(d-d)	(d-d)²
2000	24(498)	11952	100	150	50	-20	400
2001	31(455)	14105	118	177	59	-11	121
2002	48(416)	19968	167	251	84	14	196
2003	39(360)	14040	117	176	59	-11	121
2004	123(357)	43911	367	552	185	115	13225
2005	134(267)	35778	299	450	151	81	6561
2006	72(294)	21168	177	266	89	19	361
2007	21(217)	4557	38	57	19	-51	2601
2008	32(169)	5408	45	70	25	-45	2025
2009	19(236)	4484	38	56	18	-52	2704
2010	39(204)	7956	69	100	33	-37	
			x=139	x= 210	2=772	2=-34	2=29684

For this Unemployment Weighted Robbery Index (UWRI), we have multiplied the number of reported armed robbery cases with the number of registered unemployed persons to obtain a weighted product which recognizes that several robbery cases go unreported and also several unemployed persons do not register officially. The weighted product is higher than either the report cases alone or the registered jobless persons alone. Furthermore, the period before the introduction of mobile communication is year 2000 while the terminal end of the time series in 2010 is used to capture the entire post 2001 developments in communication. The comparison therefore runs from the very beginning of the series to its very end.

The null hypothesis (H_o) is rejected at 0.05 level of significance and 10 degrees of freedom. The alternate hypothesis (HA) that there is a significant difference in the Unemployment Weighted Robbery Index (UWRI) before and after the introduction of mobile communication is not rejected.

4.3 Discussion of Findings

An analysis data from the Office of Deputy Commissioner of Police, State CID, and Port Harcourt also supports the findings of this research that crime rates increase with the increase in telephone subscription. The trend of annual changes in the number of armed robbery cases shows that robbery cases increased in 2001 and 2002 with the advent of mobile communication. The highest annual frequencies of armed robbery were recorded in 2004 and 2005.

5.0 Summary and Conclusions

5.1 Summary

This research on Unemployment, Mobile Communication and Armed Robbery in Port Harcourt City, (2000-2010) began with a background tracing the growing concern of public policy in Nigeria with the increasing rates of violent crimes such as armed robbery, rape, kidnapping and terrorism. Despite

budgetary increases to law enforcement agencies, the fight against militancy, cultism, armed robbery and insurgency remains bleak due to the swelling numbers of unemployed, demoralized and frustrated young people joining criminal groups on daily basis.

The various interventions by the Ministry of Employment, Labour and Productivity, the National Directorate of Employment (NDE), and international donor agencies like the World Bank Country Directorate for Nigeria have made only negligible impacts in reducing the recorded levels of joblessness in different states of the federation.

Is it plausible that rapid interpersonal communication used by desperate unemployed persons can facilitate the conduct of armed robbery operations? This question informed a methodological innovation, using simple index numbers to track the different levels of registered unemployed persons as well as reported armed robbery cases between 2000 and 2010. The beauty of the index number approach over mere annual unemployment and crime rates is that the base periods if the index numbers can be adjusted to capture trends before and after the changes in communication.

5.2   Conclusions

The introduction of mobile communication in 2001 has helped to create jobs in the sales, maintenance, repairs and regulation of telecommunication services throughout Nigeria. This positive influence of GSM on employment generation has been recognized by the findings of this research. Yet the magnitude of the contingency coefficient of 0.17 showed that the strength of association is relatively weak. Therefore, the recorded rates of unemployment may not decline just because of the growing usage of mobile communication systems. A multi-sectoral package of employment stimuli would be needed to reduce the unemployment rate.

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