International Journal of Human Capital in Urban Management (IJHCUM)

Homepage: http://www.ijhcum.net/

ORIGINAL RESEARCH PAPER

Locational analysis of child streetism in urban centers

D.V. Ogunkan^{1,*}, A.T. Adeboyejo²

¹Department of Urban and Regional Planning, Bells University of Technology, Ota, Nigeria

²Department of Urban and Regional Planning, Ladoke Akintola University of Technology, Ogbomoso, Nigeria

ARTICLE INFO

Article History:

Received 14 August 2020 Reviewed 20 September 2020 Revised 11 October 2020 Accepted 25 November 2020

Keywords:

Head Count Hierarchical Cluster Analysis Relative Incidence of street Children Street children

ABSTRACT

BACKGROUND AND OBJECTIVES: Against the background of the growing awareness of the need to provide empirical answers to the fundamental questions of the location of human activities, the construction of social space and the relationship between social space and physical environment, this study examines the locational implications of child streetism in selected urban centres in South-western Nigeria.

METHODS: Using simple random sampling, 45 locations were drawn from the three urban centres for the purpose of data collection. The required data was collected through the instrumentation of head count and analysed using Relative Incidence of Street Children (RISC) and Hierarchical Cluster Analysis (HCA).

FINDINGS: The results of RISC show that Oja-oba Central Mosque, Ibadan (247), Gbagi-Dugbe Market, Ibadan and Gbagi-Dugbe Motor Park, Ibadan generated highest incidence of street children. However, the results of HCA show that the problem of child streetism is most severe in Oja-oba Market (Akure); Igbona Market (Osogbo); Oja-oba Central Mosque (Ibadan).

CONCLUSION: The study concludes that incidence of street children is greatly influenced by social, economic and physical attributes of locations. The study recommends physical planning measures to combat the menace of child streetism.

DOI: 10.22034/IJHCUM.2021.02.05

©2021 IJHCUM. All rights reserved.



NUMBER OF REFERENCES

NUMBER OF FIGURES

NUMBER OF TABLES

*Corresponding Author:

Email: ogunkansvictor@yahoo.com

Phone: +8034866541

Note: Discussion period for this manuscript open until July 1, 2021 on IJHCUM website at the "Show Article.

INTRODUCTION

Child streetism, a concept that describes the desperate situations of children working, living or surviving on the street, is a complex phenomenon and certainly one of the challenges presented by urban poverty. However, its prevalence, intensity and visibility have made society to accept it as part and parcel of normal phenomenon of the world and Nigerian urban centres are not exempted from this phenomenon. In recent years, the number of street children on Nigerian streets has grown exponentially (Oloko, 1993; Okpukpara and Odurukwe, 2006; Fakoya, 2009). Although, there are no accurate statistical evidences to support this claim, it has been reported that over 7.3 million Nigerian children of school age were not in school (UNICEF, 2005, Faloore, 2009; Fakoya, 2009). Most of these children were probably on the street. Attempts at understanding the fundamentals of child streetism have often been preserved as exclusive rights of social science disciplines such as Sociology, Anthropology, Economics, Political Science and Psychology to mention but a few. In the aforementioned disciplines, emphasis have always been placed on the sociological, demographic, economic and psychological analyses of social phenomenon (Oloko, 1993; Heinonen, 2000; Kangsangbata, 2008; Faloore, 2009; Fawole et al, 2010; Etuk et al., 2012). However, in recent times, there have been a growing recognition by spatial analysts that understanding the spatial context of social issues is key to understanding how the problem can be controlled and prevented (Goodchild and Janelle 2004; Voss, 2007; Shammai et al, 2013). This raises fundamental questions about the location of human activities, the construction of social space, and the relationship between social and physical space. As a response to the growing awareness of the need to provide empirical answers to the fundamental questions about the location of human activities, the construction of social space and the relationship between social space and physical environment, begging, crime, sexuality among other social issues have been confirmed to have spatial implications (Adedibu, 1989; Adeboyejo and Onyeonoru, 2008; Onyeonoru and Adeboyejo, 2007; Jelili, 2009; Ogunkan and Jelili, 2010; Fawole, Ogunkan and Adetunji, 2010; Adigun, 2012). Nevertheless, attention to the spatial dimensions of street children phenomena is still much less apparent. Even at that,

the sparse literature on spatial analysis of street children has almost exclusively focused only on the intra-urban variation of the phenomenon (Ogunkan and Adeboyejo, 2013; Ogunkan, 2014; Ogunkan and Adeboyejo, 2014). These studies situate their spatial analysis within a confinement of a single city. However, the emanating recommendations may not be useful to solve similar problem in other urban centres because such spatial pattern may vary from city to city given the varying levels of urbanisation of the urban centres. There is, therefore, an obvious need to give more attention to comparative research on social phenomenon within a geo-political zone in order to compare the same social phenomenon in similar areal level. In the light of this, this study is designed to bridge this gap by focussing on the locational variations of street children in Ibadan, Akure and Osogbo in Southwestern Geo-political Zone (SWGPZ) of Nigeria.

Child streetism and street children: conceptual clarification

It is conventional in studies on streetism to use the concepts of "child streetism" and "street synonymously (Kangsangbata, 2008; Tettegah, 2012). While acknowledging the fact that the interchangeable usage of these concepts has not generated heat or intellectual argument, it is essential to make clarification on these concepts so as to clear any mix up that may emanate from their usage. Both concepts – child streetism and street children - can be used to mean the same thing when the latter is used to refer to the phenomenon of street children rather than street children as individuals. In this case, both concepts refer to the situation in which children find their means of survival and or refuge on streets. The concepts describe the activities of the under aged who are on the street without the supervision of a responsible adult. Almost all street activities are directed towards earning income (Mercer, 2009), and nearly all are considered, in one-way or another, illegal, particularly by law enforcers (Beers, 1996). While the streets present opportunities for work and freedom, they also violate a child's dignity and adversely affect their physical, mental, emotional, moral and overall well-being (Kaime-Atterhog, 2012), especially those ones that involve children living permanently on the street as they bring great difficulties, including unemployment, poverty, hunger and lack of shelter on those children. On this premise "child streetism" becomes more appropriate to describe the precarious situation of children on the street. It also describes the strengthening of harmful habits, such as smoking, drug use, gambling, sniffing glue and prostitution among street children Kaime-Atterhog, 2012). From the foregoing, it can be deduced that while both concepts are referring to the same activities, child streetism is more encompassing as it has deeper meaning than street children. Having established that street children phenomenon describes the activities of the under aged who are on the street without the supervision of a responsible adult, the literature equivocates over the definition of the concept of street children as individuals i.e. who should be classified as street children (Aptekar, 1988; Panter-Brick, 2002). The concept has brought about a repetitive debate regardless of being a focus of attention for international organisations of all types since the United Nations International Year of the Child in 1979 (Ennew, 2003). The debate stems from the fact that street children lacks universally adopted definition However, many practitioners, scholars and policy makers have adopted the Inter-Non-governmental Organisations (NGO, 1995) definition of street children as any girl or boy who has not reached adulthood, for whom the street (in the broadest sense of the word, including unoccupied dwellings, wasteland etc.) has become her or his habitual abode and/or sources of livelihood, and who is inadequately protected, supervised or directed by responsible adults. The above definitions of street children have been functional and useful, but are fraught with many problems. For instance, (Muchini (2001) argues that placing many children under this all-encompassing label of street children seems to obliterate any differences that may exist between them and their grounds for being in the street. To address this flaw, (UNICEF (1998) grouped these children into "children on the street," and "children of the street." "Children on the street" or street working children are children who work in the street, and sleep at home; while, "children of the street" or street living children are children who work and sleep on the street. Nonetheless, street children shall be conceptualised in this study as children living and/

or working on the streets who are not under the supervision of responsible adults. Therefore, while the concept of child streetism denotes the action and ways of life of street children, street children are the actors whose ways of life is known as child streetism. For the reason that child streetism and street children phenomenon have the same contextual meaning, both concepts are used interchangeably in this study. However, in the appropriate sections, street children are also used to refer to children as individual street occupiers. The study was conducted to examine inter and intra urban pattern of incidence of street children in the South-West Geo-Political Zone (SWGPZ) of Nigeria. This is with a view to analysing the influence of locational attributes on child streetism. The study was conducted in the last quarter of 2019 in Ibadan, Akure and Osogbo, the administrative headquarters of Oyo, Ondo and Osogbo respectively.

MATERIALS AND METHODS

The Study Setting

The setting for this study is the South Western Geopolitical Zone (SWGP) of Nigeria. The zone contains some of the leading urban centres with the greatest concentration of human agglomeration in the country. However, three urban centres were selected to represent the zone. These uran centres are Ibadan, Akure and Osogbo. The three urban centres are the administrative headquarters of Oyo, Ondo and Osun states respectively.

Sampling Procedure

In the previous studies (Beauchemin, 1999; Jelili, 2009; Faloore, 2009), several locations have been identified as street child prone areas. Within these locations, street children are observed to be more concentrated in markets, mosques, churches, motor parks and road junctions (Jelili, 2009; Ogunkan and Adeboyejo, 2013; Ogunkan, 2014) and thus can be regarded as street child "hot spots". It is therefore, convenient to use those locations as Data Delineated Areas (DDAs). However, for objective comparison among the selected urban centres and to ensure that the rules of 'representativeness' and 'equal chance', which are essential features of probability sampling methods (Asika, 1991), are not violated, the DDAs were selected, using simple random sampling. From

Locational Analysis of Child Streetism

Table 1: Data Delineated Areas in the three urban centers

Urban Centres	Mosques	Churches	Markets	Junctions	Motor parks
Ibadan	Oja Oba	Oke Padre	Gbagi-Dugbe	Dugbe junction; Iwo	Gbagi –Ogunpa-
	Central Mosque; Alhaji	Catholic Church; Orita	Market; Agodi –	Road Round about;	Dugbe Motor Park; Iwo
	Arisekola Mosque;	Mefa Baptist Church;	Gate Market; Bodija	Sango/Poly junction	Road Motor Park; Sango
	Bodija Community	Living Spring Church	Market		Motor Park
	Mosque				
Akure	Akure Central Mosque;	Cathedral	Oja Oba Market;	Post Office Junction;	Old Garage Motor Park;
	Oke Aro Community	Catholic Church; St	Isinkan Market;	High Court Junction;	Ondo Garage Motor Park;
	Mosque; Ijoka Central	David Anglican church;	NEPA Market	Road Block Junction	Benin Garage Motor Park
	Mosque	Winners Chapel			
Osogbo	Oja Oba	All saint cathedral,	Oja Oba Market;	Ola-iya Junction;	Ogbomoso Garage Motor
_	Central Mosque;	Balogun Agoro; Grace	Igbona Market;	Stadium Junction;	Park; Offa garage Motor
	Ansarudeen Central	Baptist Church; RCCG,	LAMECO	NUT Round about	Park;
	Mosque; Ajisebiyawo	Zion Mega Parish			Iyana Offa Motor Park
	Mosque, Service	-			•

the foregoing, fifteen (15) locations (DDAs) in each city (45 for the three urban centres) were recognised and selected for the purpose of data collection. The locations are as shown in Table 1

Method of Data Collection

Having determined the spatial framework for this study, data on incidence of different categories of street children were collected through the method of head count. This was done with the help of trained field assistants. The head count was conducted in each DDA between 10 am and 11 am on different days of the week (Monday to Sunday). It was recognised from the onset that street children would inevitably move between DDAs – perhaps carrying a moveable business. Therefore, to avoid the problem of double counting, the head count was conducted simultaneously in the same city. The children who were merely passing by or who were accompanied by adults were not included in the count

Method of Data Analysis

The incidence of street children which defines the magnitude or extent of the problem in the selected DDAs of the urban centres was measured in ratio scale through a surrogate or index "Relative Incidence of Street Children" (RISC). The RISC is defined as the total number of street children identifiable in each DDAs for seven days divided by seven. The RISC was normalised by population density of each city. The output was subjected to Hierarchical cluster analysis. Hierarchical cluster analysis is an algorithm that

groups similar objects into groups called clusters. The method was used to group street children locations into distinct clusters such that locations within each cluster are broadly similar to each other.

RESULTS AND DISCUSSION

Inter-Urban Locational Analysis of Incidence of Street Children

A comparison of RISC 45 selected locations across the three urban centers shows differences of several orders of magnitude to reflect the spatial, social and economic attributes of each location (Fig. 1).

It is evident that the descriptive locational analysis as depicted by Fig 1 shows a remarkable order of magnitude of child streetism in each location of the urban centers. However, to show locational variations along high and low concentrations, the raw distributions of street children in all locations were transformed into standard score. The standard score is the number of standard deviations by which the value of a raw score is above or below the mean value of what is being observed or measured. Raw scores above the mean have positive standard scores, while those below the mean have negative standard scores. According to Adana (1996) Standard scores otherwise known as z-scores can be used to compare two distributions (in this case, high and low concentration of child streetism) with different units (selected locations across the urban centers). The results of z-scores are as contained in Table 2

It follows from Table 2 that relative to other locations, Oja-oba central mosque (Ibadan), Gbagi

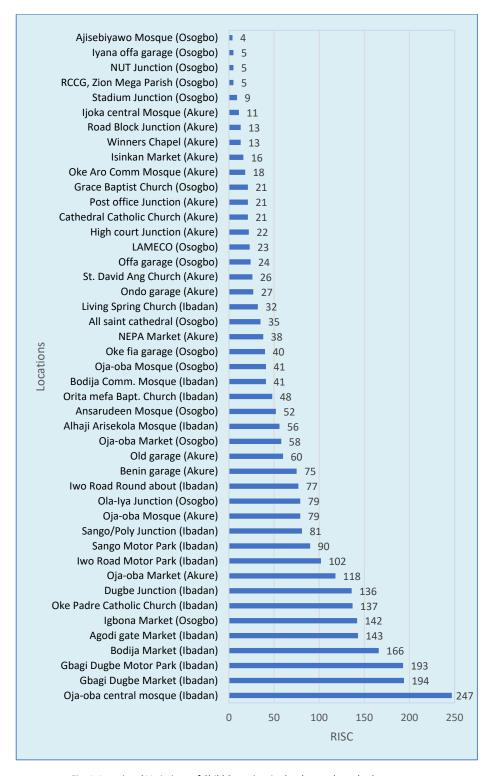


Fig. 1: Locational Variations of Child Streetism in the three selected urban centres

D.V. Ogunkan and A.T. Adeboyejo

Table 2: Locational Distributions of Street Children in Urban centres: Standard Scores

Locations	Urban centres	z-score	Remarks
Oja-oba central mosque	Ibadan	3.108	High
Gbagi Dugbe Market	Ibadan	2.212	High
Gbagi Dugbe Motor Park	Ibadan	2.195	High
Bodija Market	Ibadan	1.738	High
Agodi gate Market	Ibadan	1.349	High
Igbona Market	Osogbo	1.332	High
Oke Padre Catholic Church	Ibadan	1.248	High
Dugbe Junction	Ibadan	1.231	High
Oja-oba Market	Akure	0.927	High
Iwo Road Motor Park	Ibadan	0.656	High
Sango Motor Park	Ibadan	0.453	High
Sango/Poly Junction	Ibadan	0.301	High
Oja-oba Mosque	Akure	0.267	High
Ola-Iya Junction	Osogbo	0.267	High
Iwo Road Round about	Ibadan	0.233	High
Benin garage	Akure	0.2	High
Old garage	Akure	-0.054	Low
Oja-oba Market	Osogbo	-0.088	Low
Alhaji Arisekola Mosque	Ibadan	-0.122	Low
Ansarudeen Mosque	Osogbo	-0.189	Low
Orita mefa Bapt. Church	Ibadan	-0.257	Low
Bodija Comm. Mosque	Ibadan	-0.375	Low
Oja-oba Mosque	Osogbo	-0.375	Low
Oke fia garage	Osogbo	-0.392	Low
NEPA Market	Akure	-0.426	Low
All saint cathedral	Osogbo	-0.477	Low
Living Spring Church	Ibadan	-0.528	Low
Ondo garage	Akure	-0.612	Low
St. David Ang Church	Akure	-0.629	Low
Offa garage	Osogbo	-0.663	Low
LAMECO	Osogbo	-0.68	Low
High court Junction	Akure	-0.697	Low
Cathedral Catholic Church	Akure	-0.714	Low
Post office Junction	Akure	-0.714	Low
Grace Baptist Church	Osogbo	-0.714	Low
Oke Aro Comm Mosque	Akure	-0.764	Low
Isinkan Market	Akure	-0.798	Low
Winners Chapel	Akure	-0.849	Low
Road Block Junction	Akure	-0.849	Low
Ijoka central Mosque	Akure	-0.883	Low
Stadium Junction	Osogbo	-0.916	Low
RCCG, Zion Mega Par	Osogbo	-0.984	Low
NUT Junction	Osogbo	-0.984	Low
Iyana offa garage	Osogbo	-0.984	Low
Ajisebiyawo Mosque	Osogbo	-1.001	Low

Table 3: Hierarchical Clusters of Child Streetism Locations

Cluster	Locations	Remark	
1	Ajisebiyawo Mosque (Osogbo); RCCG, Zion Parish (Osogbo); NUT Junction(Osogbo); Iyana offa garage(Osogbo); Stadium junction(Osogbo);	Very Low	
2	LAMECO (Osogbo); Oja-oba Mosque (Osogbo) Ijoka Central Mosque (Akure); Winners Chapel (Akure); Road Block Junction (Akure); Isinkan Market (Akure); Oke Aro Community Mosque (Akure); Cathedra Catholic Church (Akure); Post office Junction (Akure); Grace Baptist Church (Osogbo); High court Junction (Akure); Offa garage Motor Park (Osogbo); St. David Anglican Church (Akure); Ondo garage Motor Park (Akure); Living Spring Church (Ibadan); All saint Cathedral (Osogbo); Oke-fia garage Motor Park (Osogbo); Bodija Community Mosque (Ibadan); Oja-oba Mosque; Orita-meffa Baptist Church (Ibadan); Alhaji Arisekola Mosque (Ibadan)	Low	
3	NEPA Market (Akure); Ansarudeen Central Mosque (Osogbo); Oja-oba Market (Osogbo); Iwo Road Round about (Ibadan); Sango/Poly Junction (Ibadan); Sango Motor Park (Ibadan); Iwo Road Motor Park (Ibadan)	Very Moderate	
4	Old garage Motor Park (Akure); Ola-Iya Junction(Osogbo); Dugbe Junction (Ibadan); Oke Padre Catholic Church (Ibadan); Agodi-Gate Market (Ibadan)	Moderate	
5	Oja-Oba Market (Ibadan) Benin garage Motor Park (Akure); Oja-Oba central Mosque (Akure); Bodija Market (Ibadan); Gbagi Dugbe Market (Ibadan)	High	
6	Oja-oba Market (Akure); Igbona Marke(Osogbo); Oja-oba Central Mosque (Ibadan)	Very High	

Dugbe Market (Ibadan), Gbagi Dugbe Motor Park (Ibadan), Bodija Market (Ibadan), Agodi gate Market (Ibadan), Igbona Market (Osogbo), Oke Padre Catholic Church (Ibadan). Dugbe Junction (Ibadan). Oja-oba Market (Akure), Iwo Road Motor Park (Ibadan), Sango Motor Park (Ibadan), Sango/Poly Junction (Ibadan), Oja-oba Mosque (Akure), Ola-Iya Junction (Osogbo), Iwo Road Round about (Ibadan) and Benin garage (Akure) are locations with high incidence of street children. What can be observed in this pattern is that the incidence of street children is a function of locational attributes in terms of social, economic and physical characteristics. For a finer locational analysis of child streetism and to reveal different levels of spatial distribution of child streetism in the urban centers, the Hierarchical Cluster Analysis was used to order by classes relatively homogenous locations in terms of street children distributions. For an objective grouping of locations in the three urban centers, RISC was normalized by the density of each city. The results were employed as input data for the Hierarchical Cluster Analysis. The Centroid Clustering Method was employed to ensure that the dissimilarity between one cluster and another cluster is represented by the distance between the centroid for the cases in the first cluster and the centroid for the cases in the second cluster. For the purpose that Centroid Method was specified, the Squared Euclidean Distance as a

measure of interval was assigned as an appropriate measure of interval. The squared Euclidean Distance shows a dissimilarity matric that attenuates the differences between clusters of similar cases thereby making cluster boundaries more obvious. The result of the Hierarchical cluster Analysis shows 6 distinct clusters (Table 3). Locations in each cluster, irrespective of their urban centers, depict level of magnitude of child streetism.

The first cluster is saturated with locations that are relatively very low in the incidence of street children. This comprises of Ajisebiyawo Mosque, RCCG Zion Parish, NUT Junction, Iyana Offa garage and Stadium Junction all in Osogbo. Cluster 2 has locations with low incidence of street children. In this cluster, there are LAMECO (Osogbo); Oja-oba Mosque (Osogbo) Ijoka Central Mosque (Akure); Winners Chapel (Akure); Road Block Junction (Akure); Isinkan Market (Akure); Oke Aro Community Mosque (Akure); Cathedra Catholic Church (Akure); Post office Junction (Akure); Grace Baptist Church (Osogbo); High court Junction (Akure); Offa garage Motor Park (Osogbo); St. David Anglican Church (Akure); Ondo garage Motor Park (Akure); Living Spring Church (Ibadan); All saint Cathedral (Osogbo); Oke-fia garage Motor Park (Osogbo); Bodija Community Mosque (Ibadan); Ojaoba Mosque; Orita-meffa Baptist Church (Ibadan); Alhaji Arisekola Mosque (Ibadan). The third cluster

has NEPA Market (Akure); Ansarudeen Central Mosque (Osogbo); Oja-oba Market (Osogbo); Iwo Road Round about (Ibadan); Sango/Poly Junction (Ibadan); Sango Motor Park (Ibadan); Iwo Road Motor Park (Ibadan). The locations in the fourth cluster have relatively moderate incidence of child streetism. These include Old garage Motor Park (Akure); Ola-Iya Junction (Osogbo); Dugbe Junction (Ibadan); Oke Padre Catholic Church (Ibadan); Agodi-Gate Market (Ibadan). The fifth cluster comprises of Oja-Oba Market (Ibadan) Benin garage Motor Park (Akure); Oja-Oba central Mosque (Akure); Bodija Market (Ibadan); Gbagi Dugbe Market (Ibadan). The last cluster are made of three locations - Oja-oba Market (Akure); Igbona Marke(Osogbo); Oja-oba Central Mosque (Ibadan). These locations have very high incidence of street children. Of all the DDAs in the three urban centres, child streetism is most pronounced in Oja-ba Central Mosque (Ibadan), Igbona Market (Osogbo) and Oja-oba Market (Akure) in that order while the street children are least visible in Stadium Junction, Iyana Offa garage, NUT junction, RCCG Zion Parish, and Ajisebiyawo Mosque (all in Osogbo) in descending order.

Intra-Urban Locational Analysis of Street Children

For intra-urban analysis, the distributions of child streetism were mapped to show the intra-urban spatial variations of child streetism in each city. The data input for the mapping were generated from the Hierarchical Clusters Analysis of Child Streetism as shown on Table 3. It follows, therefore, that Ojaoba Central Mosque is the location with the highest incidence of child streetism in Ibadan (Fig. 2), followed by Gbagi- Dugbe Motor Park, Gbagi- Dugbe Market and Bodija Market in descending order.

The exceptionally high incidence of street children observed in Oja-oba Central Mosque may not be unconnected with the fact that the location is a juxtaposition of the religious land use and market land use. Therefore, it enjoys both economic and social benefits to attract quite a number of street children. While, Oja-oba Central Mosque generate quite a number of street children for alms begging, the influence of Oja-oba as traditional Central Business District (CBD) attracts a significant proportion of child hawkers and child traders for

commercial activities. The high incidence in Gbagi-Dugbe Market and Gbagi-Dugbe Motor Park may be attributed to the fact that both are located inside Ibadan central districts. Moreover while Gbagi-Dugbe Market is the nerve center of Ibadan trading network, Gbagi-Dugbe Motor Park is an important transport center in Ibadan. Therefore, both locations enjoy "economies of location" to attract a significant number of street children. Bodija Market is a mixture of open space trading and concrete and wooden stalls but due to lack of patronage, most of the traders send their children to hawk around the market or stay at the adjacent roads to sell to passers-by. This increases child streetism activities in and around the market. The relatively low incidence of street children observed in Bodija Community Mosque is attributed to the less concentration of economic activities in the area. Moreover, the Mosque is an architectural grandeur located at the choicest area in a well-planned Bodija estate. Other locations with low concentration of child streetism such as Ojaoba Mosque, Orita meffa Baptist Church and Alhaji Arisekola Mosque also have less economic activities and may have social and physical attributes that are "unattractive" to street children. Fig. 3 shows the locational distributions of street children in Akure. It revealed that street children are most visible in Ojaoba Market.

Oja-oba Market is highly "favoured" as a concentrate of street children because of its locational attributes. Located at the heart of CBD in Akure,Oja-oba is the nerve centre of Akure's transport and trading network, attracting street children from every part of the city for commercial and other activities. Located adjacent to the market is Akure Central Mosque which is also concentrated with street children. The locational attributes of Ojaoba Market can also be deployed to explain high incidence of child streetism around Akure Central mosque. Benin Garage is one of, if not the busiest Motor Park in Akure. It is a major transit point from Akure to major towns and urban centres in Eastern and Northern Nigeria. Therefore, it is a beehive of economic activities. As a result, it attracts a significant number of street children for a number of economic activities such as selling of packaged pure water, selling of recharge cards and in some cases

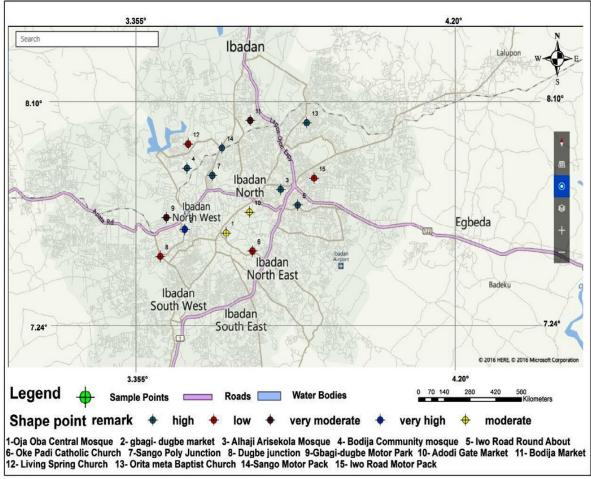


Fig. 2: Intra Urban Locational Distribution of Child Streetism in Ibadan

begging for alms. The low concentration of child streetism in such locations as Isinkan Market, Road Block Junction, Winners Chapel, Ondo Garage among others is a function of their locational characteristics. For instance, Isinkan Market is a well-planned market, fully fenced and with well organised stalls. Therefore, the Market does not give room for hawking and other activities usually engaged in by street children. The few identified street children around the market were those hawking along adjacent street. The low incidence of child streetism in Road Block Junction underscores the importance of physical attributes of location in the distribution of street children. Road Block Junction is one of the major junctions in Akure but the design is such that allows free flow of vehicular

traffic and as a result does not give room for street children to congregate for economic and other street activities. In Osogbo, Igbona Market is observed to have the highest concentration of street children (Fig. 4). There are evidences to suggest that the economic, social and physical attributes of Igbona Market came to play in the high concentration of street children in the market. Igbona is an important market in Osogbo which attracts the patronage of people from within and outside Osogbo. Therefore, the market serves as important trading centre for street children from far and near. The physical structures of the market also provide a ground for child streetism to thrive. The market comprises of shops, timber kiosks, metal containers, sheds and open space displays lined with

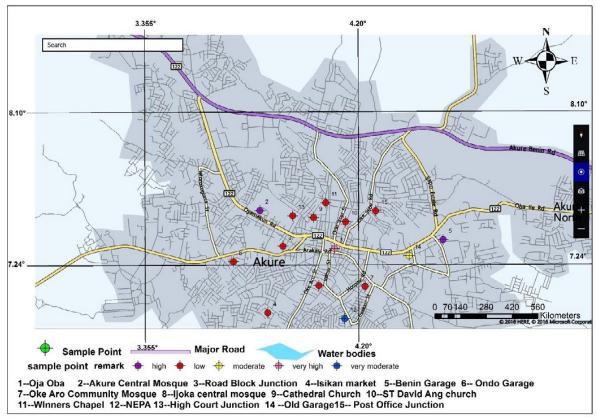


Fig. 3: Intra Urban Locational Distribution of Child Streetism in Akure

the major road.

It has been posited that a poorly managed road junction which usually results in traffic congestions, traffic jam, "go- slow" usually attracts street children and thereby generates high incidence of street children (Ogunkan, 2014). This is the situation at Ola-Iya Junction, where different categories of street children were seen either begging or selling to the motorists. The point to be stressed, therefore, is that the high concentration of street children at Ola-Iya junction is a function of its locational characteristicshigh publicity value inherent in the location. The high concentration of street children in Oja-Oba Market is a function of its economic attributes as the nucleus of the CBD in the Core Areas of the city. Its features as a street market and major transport node of the city also encourage the influx of street children. The low concentration of child streetism as witnessed in other parts of the city further reveal the influence

of economic, social and physical attributes of the location on the phenomenon of child streetism. Ajisebiyawo Mosque recorded the least incidence of street children in Osogbo. This is attributable to the fact that the Mosque is located in a well-planned environment far away from city centre. The same reason could be advanced for the low concentration of child streetism in RCCG, Zion Mega Parish, NUT Junction, Stadium Junction and Grace Baptist Church. From the foregoing analysis, it can be inferred that the potential of any spatial unit to generate high or low incidence of child streetism is dictated by its locational attributes. Evidences to support this claim are as highlighted:

 A central place (Location in the city where all forms of business enterprises are concentrated) where informal activities are located indiscriminately tends to generate high incidence of street children irrespective of where it is located. The

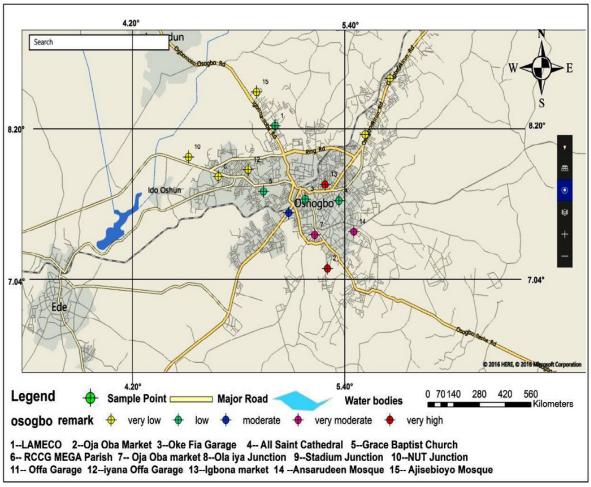


Fig. 4: Intra Urban Locational Distribution of Child Streetism in Osogbo

high incidence of street children in Gbagi - Dugbe Market, Agodi- Gate Market and Bodija (Ibadan), Oja-oba Market, Igbona Market (Osogbo), Oja-oba Market and NEPA Market (Akure) provides good examples.

- ii. Religious land use especially, mosques located at the core areas of urban centres usually generates high incidence of street children. The high incidence of street children in Oja-oba Central Mosque, Akure Central Mosque and Oja-oba Mosque respectively in Ibadan, Akure and Osogbo justifies this.
- iii. A well-planned area with good quality environmental services, a well-managed and well

- landscape environment tends to generate low incidence of street children. Bodija Community Mosque in Ibadan, Cathedral Catholic Church, Winners Chapel in Akure and Ajisebiyawo Mosque, RCCG Mega Parish are good examples.
- iv. A poorly managed road junction which usually results in traffic congestions, traffic jam, and "goslow" usually attracts certain categories of street children and thereby generates high incidence of street children. This is evident at Dugbe Junction and Ola-iya Junction respectively in Ibadan and Akure where considerable number of street children were identified

Based on the findings in this study, the following

recommendations are put forward

- i. Town planners should ensure proper locational planning in a way that will guide against springing up of indiscriminate location of squatterinformal-sector activities which street children of different categories mingle with. It should also be incumbent on urban planners to ensure proper planning of urban centres to discourage the convergence of street children. Such could be achieved by insisting on proper landscaping of each project environment
- ii. Urban Planners should deploy development control measures to ensure that the physical attributes of markets do not encourage hawking around the market. They can also decongest the existing markets, especially in the central areas of the urban centres through the provision of organized markets at planned alternative locations with adequate facilities in place.
- iii. Urban authorities should collaborate with urban planners to embark on redevelopment, rehabilitation or spot clearance of central places of the urban centres This is to address the indiscriminately located informal activities which attract street children to the city centres.
- iv. Physical planning attention should be directed to the core areas of the urban centres through revitalization approach to decongest or discourage the convergence of street children in this part of the urban centres.
- v. Urban authorities in conjunction with transportation planners and engineers should review the designs of the road intersections to address the narrowness of the intersecting roads. Also, road-side hawking and trading and all forms of commercial activities should be prohibited at the intersections.
- vi. In addition to iv above, Town planning control mechanism should be used to control developments around the intersections to address indiscriminate informal activities at the road intersections.
- vii. The extant planning and environmental laws on streetism should evaluated and reviewed, where necessary. The laws should also be properly implemented to discourage the child streetism in the urban centres

viii.Lastly, the government should enforce labour regulations for children street vendors and support. This should be complimented with free and compulsory basic education as it would be very difficult for any policy on street children to be effective without first making education compulsory

CONCLUSION

In recognition of the growing awareness among spatial analysts that understanding the spatial context of social issues is key to understanding how the problem can be controlled and prevented, the study examined the incidence, inter and intraurban variations of child streetism in South-western, Nigeria. The study compared the incidence of child streetism across the three cities as well as among different locations within the cities. Inter urban analysis of child streetism revealed that the degree of severity varies significantly across the cities while the intra-urban analysis showed significant variations of the phenomenon across different locations. These variations were adduced to the influence of urbanisation and locational attributes. Consequently, the findings can be articulated towards spatially oriented analysis, assessment, control and management of child streetism in Nigerian urban centres. The study, therefore, places conscientious emphasis on the centrality of space in studying child streetism and consequently serves as the key to the formulation and evaluation of physical planning initiatives in combating the menace of street children. From the foregoing, the study recommended a number of physical planning measures to control the menace of child streetism. However, it must be noted that the workability of any of these recommendations cannot evaluated in isolation of other non-physical planning measures. While it could be stated that the recommendations mentioned in this study are by no means, exhaustive, it is highly suggested that they can go a long way in addressing the problem of street children in Nigerian urban centres.

AUTHORS CONTRIBUTION

D.V. Ogunkan collected, analysed and interpreted the data, prepared the Tables and Figures, prepared the final manuscript. A.T. Adeboyejo performed the literature review, made additional Tables and edited the manuscript.

ACKNOWLEDGEMENT

The authors extend their gratitude to all the 52 field assistants who devoted long days driving and walking in each of the three cities to reach the street children.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely addressed by the authors.

ABBREVIATION

RISC Relative Incidence of Street Children

HCA Hierarchical Cluster AnalysisSWGPZ South West Geo-political Zone

DDA Data Delineated Area

REFERENCES

- Adana, B.S., (1996). Statistical methods for students: a demystifying approach, University of Ilorin: Unilorin Press.
- Adeboyejo, A.T.; Onyeonoru, I.P., (2007). A multivariate analysis of adolescent sexual behaviour in southwestern. IFE Psychologia: Int. J., 15(1): 53-76 (24 pages).
- Adeboyejo A.T.; Onyeonoru I., (2002). Urban residential density and adolescent sexuality and reproductive health in Oyo state, Nigeria. A report submitted to the Union of African Population Studies (UAPS) Dakar, Senegal.
- Adedibu, A.A., (1989). Begging and poverty in third world urban centres: a case study of Ilorin, Nigeria Ilorin J. Bus. Soc. Sc. (IJBSS) 1: 25-40 (16 pages).
- Adigun F.O., (2012). Spatio-Temporal analysis of urban crime
- in selected Nigerian urban centres" unpublished Ph.D. thesis, Department of Urban and Regional Planning, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.
- Aptekar, L., (1988). Street children of Cali. Durham, NC and London, UK: Duke University Press.
- Asika, N., (1991). Research methodology in the behavioural sciences, Lagos: Longman Nigeria Plc.
- Beauchemin, E., (1999). The exodus: The growing migration of children from Ghana's rural areas to the urban centres. CAS and UNICEF.
- Beers, H.V., (1996). A plea for a child centred approach in research with street children: Childhood. Children out of Place: Special Issue on Street and Working Children, 3(2):195-202 (7 pages).
- Ennew, J., (2003). Difficult circumstances: Some reflections on

- 'street children' in Africa. Child. Youth Environ., 13(1): Spring.
- Etuk, G.R.; Erirg S.O; Ajake, E.E., (2012). Nigeria's universal basic education (UBE) Policy: A sociological Analysis. Am. Int. J. Contemp. Res., 2(7): 179-183 (5 pages).
- Fakoya O., (2009). The Street Children of Nigeria. Faloore, O.O., (2009) Social Network & Livelihood of Street Children in Ibadan, Nigeria. Int. J. Socio. Anthropol. 1(5): 082- 089 (8 pages).
- Fawole O. A.; Ogunkan D. V.; Omoruan A., (2010). The menace of begging in Nigeria Urban centres: A sociological analysis. Int. J. Sociol. Anthropol. Vol 3(1): 9-14 (6 pages).
- Goodchild, M. F.; Janelle, D. G., (2004). Thinking spatially integrated social science. Oxford, England: Oxford University Press.
- Heinonen, P.M.L., (2000) Anthropology of street children in Addis Ababa, Ethiopia. PhD Thesis, Department of Anthropology, University of Durham.
- Inter-NGO Programme on Street Children and Street Youth, (1983).

 Summary of proceeding. Subregional seminar for the Mediterranean, Marseilles, 24th-27th October.
- Jelili, M.O., (2009) Spatio and Socio-Cultural Dimension of begging in selected Nigerian
 - Urban centres. A PhD thesis, Department of Urban and Regional Planning, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.
- Kaime-Atterhög, W., (2012). From children of the garbage bins to citizens: A reflexive ethnographic study on the care of "street children" (Doctoral dissertation, Acta Universities Upsaliensis).
- Kangsangbata C., (2008). Streetism and child labour in the WA Municipality of Ghana: A Gender analysis of drivers. Stud. Gen. Dev. Afri. 2(1): 34-57 (24 pages).
- Mercer, T., (2009). Family Voices: An ethnographic study of family characteristics and caregiver perspectives on street children in Eldoret, Kenya. Unpublished Thesis.
- Muchini, B., (2001). A Study on Street Children in Zimbabwe.
- Ogunkan, D.V., (2014). Spatial and socio- economic correlates of street children in Ibadan, Nigeria. An unpublished MTech Dissertation, Department of Urban and Regional Planning, Ladoke Akintola University of Technology, Ogbomoso. Nigeria.
- Ogunkan D.V.; Adeboyejo A.T., (2013). Gender Dimension of Street Children in Ibadan, Nigeria. SJASS. 15(2).89-101 (13 pages).
- Ogunkan D.V.; Adeboyejo A.T., (2014). Public perception of street children in Ibadan. Ife Psychologia. 22 (1), 39-49 (10 pages).
- Ogunkan D.V.; Jelili M.O., (2010). The influence of land use on spatial variation of begging in Ogbomoso, Nigeria. J. Geogr. Reg. Plann., 3(4): 73-83 (10 pages).
- Okpukpara, B.C. and Odurukwe, N., (2006). Incidence and determinants of child labor in Nigeria: Implications for poverty alleviation. AERC.
- Oloko B., (1993). Children's street work in urban Nigeria as adaptation and maladaptation to changing socioeconomic circumstances. Int. J. Behav. Dev. 16(3): 465-482 (18 pages).
- Panter-Brick, C., (2002). Street children, human rights and public health: a critique and future directions. Annu. Rev. Anthropol. 31: 147-171 (25 pages).
- Shammai A.; Ghanbari A. A.; Mirza M. A. S, (2013). Spatial Analysing of Urban Delinquency in 22 Regions of Tehran Megapolis. Sec. Soc. Ord. Strat. 6(2): 27-30 (4 pages).

Tettegah, C.A.N., (2012). Streetism' or living in the street, an emerging phenomenon as a way of life in developing countries, a case study of children living on the streets of Ghana. PhD thesis, University of Nottingham.

UNICEF, (1998). The state of the world's children 1998 report. Oxford University Press.

Voss, P.R., (2007). Demography as a spatial social science. Popul. Res. Policy Rev. 26: 457-476 (20 pages).

COPYRIGHTS

©2021 The author(s). This is an open access article distributed under the terms of the Creative Commons Attribution (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, as long as the original authors and source are cited. No permission is required from the authors or the publishers.



HOW TO CITE THIS ARTICLE

Ogunkan, D.V.; Adeboyejo, A.T., (2021). Locational analysis of child streetism in urban centers. Int. J. Hum. Capital Urban Manage., 6(2): 159-172.

DOI: 10.22034/IJHCUM.2021.02.05

url: http://www.ijhcum.net/article_46411.html

