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UNDERSTANDING THE DEGREE OF SOCIAL EXCLUSION IN SELECTED SLUMS IN LAGOS STATE, NIGERIA

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Abstract

Social exclusion is a key “capability failure” experienced by slum dwellers in major cities of the world. This study seeks to examine the degree of social exclusion suffered by slum dwellers in Lagos State, one of the fastest growing cities in Africa. This study adopted an analytical approach by constructing a Social Exclusion Index (SEI) for five major coastal slums (Makoko, Ilaje, Iwaya, Amukoko and Ijora-Badia) in Lagos State, Nigeria. Through the use of a structured schedule as well as interview with some of the respondents, data was elicited from 393 respondents in the selected slums. The descriptive analysis shows that majority of the respondents have large household members and earned very low income. The Social Exclusion Index shows that all the communities have very high degree of social exclusion index implying severe social exclusion. Notably, in the three dimensions analysed, Makoko had the lowest indexes in social relations and political participation while Amukoko had the lowest index in labour market participation. The study further provided a breakdown of the indicators measured under each dimension giving an insight into the factors that contribute to social exclusion across the communities. We recommend that labour laws should be favourable for artisans and small-scale businesses who largely are labour market players in the slums. This would improve their productivity and overall well-being. Also, human capital development through education, training and skill acquisition need to be intensified in order to enhance labour market inclusion of residents. This would in turn advance the standard of living of slum residents.

Keywords: Fuzzy set, deprivation, social exclusion, slums, Nigeria

JEL Classification: I3, I38, J08, L26.

Introduction

Rising urbanization have led to surge in population of major cities around the world. The aftermath of this urbanization is portrayed by substandard dwellings in tenure-loose areas in the cities (Simon, Adegoke & Akinwale, 2013). Indeed, theories on human

mobility have affirmed that slums are often occupied by people who move from rural areas into urban cities to find better opportunities (Wesolowski & Eagle, 2009). According to a projection by UN Habitat, the number of people living in slums in the world will increase to 2 billion by 2030; while the number of people living in urban cities will increase to 70% by 2050 (UN Habitat, 2019). Therefore, it is paramount to understand the degree of social exclusion, a major deprivation suffered by slum dwellers in Lagos State. The State is the second fastest growing city in Africa and seventh in the world (Kazeem, 2016; United Nations Department of Economics and Social Affairs Populations Division, 2018).

Social exclusion can be a cause and also consequence of poverty. Indeed, social exclusion has conceptual connections with the notion of poverty and other forms of deprivations in the literature (Sen, 2000). Social exclusion is also a broader concept as it transcends the deprivation within a household to consider the process of other relational issues, power, and other environmental integration (Bradshaw *et al.*, 2000; Dev & Kamar, 2018; Khan, 2012). The role of social relations in reducing poverty cannot be overemphasized and on the other hand, social relation is important and fundamental that its absence may contribute to poverty (Sen, 2000). Again, not being able to interact freely with others in the society and being excluded from the labour market can result in other forms of deprivations; thus, social exclusion results in “capability failures” (Samuel, Alkire, Zavaleta, Mills & Hammock, 2017; Wang, Kwan & Hu, 2020). Therefore, social connections in any community foster good health and general well-being, job opportunities, financial and physical security (Putnam, 2000).

Due to high rate of immigration into Lagos State and being a coastal city located between a large lagoon and open Atlantic, countless slums are seen situated along its coastlines with many of the residents of the slums making out a living from small-scale fishing and farming. They live in makeshift homes built with inferior materials such as wood and scrap and raises up these homes on stilts to guard against flooding. In the World Population Review for the year 2018 and Justice and Empowerment Initiative, Nigeria in 2018 noted that two-thirds (about 66%) of the Lagos population live in slums. Although there are contentions in the literature with respect to the definition of a slum, Justice Empowerment Initiative defined a slum as “dirty, informal overcrowded settlements in urban areas lacking social infrastructure and government services.” Millions of slum dwellers do not have access to social amenities and most of the women only engage themselves as domestic staff workers. Many of the children living in Lagos slums are not educated because of lack of access to quality education and for the lucky few who are privileged to be in a classroom, they are being taught in a school building on the water where more than one hundred pupils are inconveniently packed together to be taught by a teacher (Kellogg, 2018).

Housing in Lagos is not at its best as Lagos State already has a deficit of 2.5 million homes (Ministry of Planning and Strategy, 2017). The urban poor in coastal

communities at best create their own schools (for those who can afford it with overcrowded classrooms and a single teacher) and markets (where they buy and sell products needed for their survival). Thus, according to Samuel Akinlorabu, the Profiling Coordinator of Nigeria Slum and Informal Settlement Federation, the gap between the urban rich and urban poor in Lagos keep widening. Moreover, developmental plans in Lagos are executed in favour of the rich such that the poor keep getting poorer. Modern technologies, motorable roads and other public amenities are basically found at the centre of the city and at the expense of the slums (Akanle & Adejare, 2017).

All these inadequacies keep getting slum dwellers trapped in poverty. Although slum dwellers are mostly poor migrants from rural areas looking for “greener pastures”, scholars have asserted that social exclusion is a major factor contributing to the depth of poverty which many poor people experience (Berti *et al*, 2014; Fashola, Nwakeze & Ogunniyi, 2013; Holt, 2014; Haan, 2017). Many inhabitants of slums in Lagos State are excluded in the area of social relations, economic and political participation and do not own official identification cards (Birchall, 2019). This exclusion restricts their access to social protection and thus further deprive vulnerable households. Moreover, it is a known fact that in African countries, dependency ratio is high as family members support poor relatives in providing basic needs and giving moral support the latter need to survive (Akerle & Adewuyi, 2011). However, slum dwellers tend to be worse off than their relatives in the rural areas as reported in the UN Habitat report in 2007. For slum dwellers who live in the city, it would be ironical to seek support from their relatives in rural areas; and without adequate support from family members and friends, these residents are likely to further plunge into poverty.

From the foregoing, it is glaring that an all-inclusive society for improved quality of life cannot be overemphasized. Extant studies have examined the issue of social exclusion in slums in major cities of the world; however, to the best of our knowledge, none has been able to analytically examine the degree of social exclusion prevalent in major slums in Lagos State. Understanding the degree of exclusion will provide policy makers and concerned stakeholders the basic knowledge of social exclusion in the slums as well as provide a blueprint for priority areas which require urgent intervention. This would be achieved by assigning appropriate weights to various social exclusion dimensions and developing a social exclusion index. Furthermore, since the current government administration in Nigeria is keen at reducing poverty through the provision of social welfare benefits, it is important to identify gaps yet to be filled in order to foster social inclusiveness for deprived households in Lagos slums. With rapid urbanization plaguing many countries of the world currently, it is becoming increasingly important to understand urban deprivations in various dimensions so as to better manage it.

The remainder of this paper is structured as follows: section 2 presents a brief literature review; section 3 provides the theoretical framework and methodology adopted; section 4 gives the discussion of findings; while section 5 provides the conclusions and recommendations from the study.

Literature Review

Theoretical Review of Fuzzy Set

The Fuzzy Set Theory (FST) was proposed by Zadeh (1965) and Goguen (1967; 1969). The primary notion of the theory was to comprehend and make provision for the “vagueness of human thinking” in order to apply the most appropriate mathematical precision. The theory has been described as an extension of the traditional classical set theory. In the last decades, FST has been used in modeling real life situations much better than the conventional theories. This to a large extent makes empirical validation desirable (Zimmermann, 2010). Understanding well-being and other aspects of human deprivation is getting broader going beyond material wants to taking into account other capability dimensions such as freedom, capabilities, rights and opportunities as proposed by Sen (1993). Conceptually speaking, these dimensions may seem satisfactory, however, applying them when unquantifiable elements are involved may bring difficulty. Therefore, to permit for the different nature of an individual’s needs, FST proves very relevant (Martinetti, 1994; Kouassi & Seka, 2017).

The theory has become interesting to scholars who research on deprivation since the crisp-set applications that separate the deprived from the non-deprived are seen to be inadequate in capturing the diversities of deprivation (Neff, 2013). FST allows for membership degree on a scale of 0 to 1 (where 0 implies full non-membership and 1, full membership). The classical sharp set accepts values 0 and 1 implying an element either does not belong to a set or belongs to a set, respectively. However, fuzzy set is determined by a membership function making it possible to accept all intermediate values ranging between 0 and 1. Therefore, the values of a membership degree explain the extent to which an element belongs to the fuzzy set (Foody, 2003).

To fully understand social exclusion, it is essential to view deprivations simultaneously in their multi-faceted dimensions. FST will aid in classifying members of the population based on the varying degree of deprivation they experience. The theory treats deprivation as a matter of degree and not merely its presence or absence in a household (Betti, Cheli, Lemmi & Verma, 2005). Therefore, as rightly affirmed by Verma *et al.* (2015), although individuals in a society are deprived in one way or the other, it is to varying degrees. As a result of its robustness, FST on poverty, social exclusion and other well-being yardsticks is very practicable in both developing (Appiah-Kubi, Amanning-Ampomah, & Ahorator, 2007; Kouassi & Seka, 2017; Pathinathan & Kumar, 2014; Oyekale *et al.*, 2008; Oyekale & Okunmadewa, 2008) and developed countries (Betti *et al.*, 2005; Bettiet *al.*, 2017; Verma, 2015). These studies have applied FST to the analysis of the “multidimensionality” of different deprivations.

Empirical Review

Samuel, *et al* (2017) attempted relating social exclusion to multidimensional poverty in South Africa and Mozambique. Participants opined that their relationship with other people is one of the five things that matter in their lives, while the other four indicators are shelter, food, work and education. The study further revealed that social isolation can be the cause and effect of poverty. The study thus recommended the need to include “social connectedness” when measuring multidimensional poverty and also recommended policies to address social exclusion amongst marginalized communities. However, the study only focused on social isolation as an indicator of social exclusion which is a limited measure of social exclusion. On another hand, Bradshaw *et al.* (2000) placed emphasis on labour market exclusion, social services and social relations as the key determinants of social exclusion. Their empirical analysis showed that females were most likely to be excluded from the labour market compared to males. Also, non-white households in Britain also had higher likelihood of being excluded from social services. Although the study revealed some interesting findings on the impact of social exclusion on the living standard of the respondents, however, the degree of deprivation in each indicator was not analysed. Again, the political exclusion aspect was not considered. Homelessness was adjudged to be the inhibiting factor to social inclusion by Pauly (2013). Based on the reviewed literature, it was discovered that homelessness is a consequence of poverty, implying that social exclusion is as a result of poverty. However, Pauly’s (2013) view is one sided as many other factors contribute to social exclusion and homelessness alone may not be the consequence of poverty. Although the study pointed out that homeless people suffer other forms of exclusion from economic, social, political and cultural resources; however, much focus was not given to these areas. Labour market outcomes was examined by Bangwayo-Skeete & Zikhali (2011) as the leading fall-out of social exclusion. The study asserted that access to good jobs and improved labour market outcomes was difficult for excluded people and these further impacted their well-being. Although the study recommended a holistic approach to tackling social exclusion, it did not give a holistic analysis of social exclusion.

Zahra, Ashraf, Zafar & Yaseen (2017) in another view opined that marginality cannot be separated from social exclusion because people who experience social exclusion are often marginalized people. Unfortunately, if these issues are not properly addressed, they can threaten urban sustainability. The study is one of the scanty studies to measure marginality by generating a marginality index and social exclusion index. The marginality index measured the weighted average of residential instability, material deprivation, dependency and ethnic considerations while the social exclusion index further examined the social and economic dimensions. Although findings showed varying and high marginality index and social exclusion index across Pakistan, the use of equal weighting for the different indicators may be misleading. Other aspects of social exclusion relating to political participation and labour market exclusion were not included as variables. Myck, Najsztub & Oczkowska (2015) asserted that there is no common measure of social exclusion, and focus should be on broader aspects of

welfare. This, the poverty measurement failed to consider. Myck *et al.* (2015) thus considered constructing a “social deprivation index” among those age 50 years and above in Europe. The study found that social and material deprivation are strongly related but older persons are more severe in social deprivation with material deprivation falling as people grew older. This is not surprising as older persons have access to higher incomes and better jobs as pointed out by Bastos & Machado (2018). The political participation dimension to social exclusion was however not considered by the study.

In Nigeria, Agboti & Nnam (2015) considered the symbiotic relationship between crime and social exclusion in Nigeria. Adopting a qualitative technique, the study asserted that the relationship between crime and social exclusion is bi-directional in Nigeria. This implies that crime can lead to social exclusion and vice versa. Indeed, crime has been reported as a major social vice committed in slums. The study recommended the need to subsidize essential goods for the benefit of those who are socially excluded. However, the study did not carry out any empirical analysis to ascertain the level of social exclusion. A different approach to measuring social exclusion was seen in the study carried out by Fashola *et al.* (2013). Fashola *et al.* (2013) analysed the interactive effect between unemployment and social exclusion on poverty (measured as poverty headcount ratio). The causality and Vector Autoregressive Model was used and the study found that social exclusion further increased the level of poverty and unemployment. From the financial aspect, the study found out that financial exclusion further incapacitated growing businesses which made business owners poorer. The study was however carried out as a macro research without thorough attention on household units, the direct victims of social exclusion and poverty.

In understanding the relationship between poverty and social exclusion, Geo-Jaja (2010) further considered the impact of educational inequality. The study focused on Niger Delta, in Nigeria and observed that educational standard in the Niger Delta was considerably low to reduce poverty and social exclusion. Education was therefore studied in isolation and not as an indicator of poverty or social exclusion. The focus on educational attainment as a key contributor to poverty and social exclusion is however too narrow. The dynamics of social exclusion and poverty amongst children was also explored by Bastos & Machado (2018). Their study found that the worst trajectories of poverty and social exclusion were common amongst children. In fact, households with two or more children experienced higher degrees of poverty and exclusion and the youngest children are more vulnerable. Unfortunately, the risk of falling into poverty and social exclusion is even higher for children in households headed by single parents. This complements findings by Bradshaw *et al.* (2000). In another research line, Dev & Kamal (2018) researched on women poverty and social exclusion indices in three major slums in India. The study attempted examining various variables that contributed to social exclusion but failed to delineate the major dimensions the study covered. However, majority of respondents asserted that unequal employment opportunity was a major contributing factor to the social exclusion experienced. Also, dichotomy

(Yes/No) questions were asked and this would be inefficient in understanding to what degree respondents are deprived in the deprivations measured.

The empirical review reveals some gaps in the literature. The emphasis on one form of social exclusion dimension or another provides a limited understanding of the degree of social exclusion. Again, many studies only examined the effect of social exclusion without measuring the degree of this deprivation. The current study thus seeks to examine broadly the key dimensions of social exclusion through social, political and labour market inclusion with focus on various indicators that contribute to social exclusion. Thereafter, a social exclusion index is measured to understand the degree of exclusion across the indicators and dimensions.

Methodology

Theoretical Framework

The Fuzzy Set theory provides the theoretical framework for this study because it offers strict mathematical framework in a situation where the vague conceptual phenomenon for making decisions can be studied vigorously (Dmitry & Badenko, 2000). In the traditional classical set theory, the membership of a set is defined as either true or false, that is, 1 or 0; however, fuzzy set membership is expressed on a continuous scale from 0 (implying full non-membership) to 1 (implying full membership).

In defining the fuzzy set, let Y be a set (universe) and A , the fuzzy subset of Y , if A is a set of ordered pairs:

$$A = \{(Y, \mu_A(Y)), y \in Y\} \quad (1)$$

Where $\mu_A(Y)$ is the grade of membership of Y in A

$\mu_A(Y)$ takes its values in the closed interval of $[0, 1]$. The closer the value of $\mu_A(Y)$ is to 1, the more Y belongs to A ; and vice versa. Therefore, if $[0, 1]$ is replaced by two elements $\{0, 1\}$, then A can be seen as a subset of Y .

Again, the level of fuzzy set subset A is the set of those elements that have at least one X such that $\mu_{n^*}(X) = 1$. A fuzzy subset n^* of the set of real numbers is called convex if for each real number $(X, Y) U \in [0, 1]$, we have:

$$\mu_{n^*}(\lambda Y + (1 - \lambda)X) \geq \min(\mu_{n^*}(Y), \mu_{n^*}(X)) \quad (2)$$

A fuzzy subset n^* is referred to as a fuzzy number, if n^* is a normal convex fuzzy subset of the real numbers. A fuzzy set B is therefore convex if:

$$\mu_{\lambda} = (\lambda Y_1 + (1 - \lambda)Y_2) \geq \min\{\mu_A(Y_1), \mu_A(Y_2)\} Y_1, Y_2 \in Y, \lambda \in [0, 1] \quad (3)$$

Membership function of the intersection of two fuzzy sets A and B is given as:

$$\mu_{A \cap B}(Y) = \min(\mu_A(Y), \mu_B(Y)) \forall x \in Y \quad (4)$$

This principle was later extended by Zadeh (1973) and Dubois & Prade (1982) to become:

$$\tilde{B} = \{Z, \mu_{\tilde{B}}(Z)\} / Z = f(Y_1, \dots, Y_n), (Y_1, \dots, Y_n) \in Y \quad (5)$$

$$\text{Where } \mu_{\tilde{B}} = \begin{cases} \sup_{(Y_1, \dots, Y_n) \in f^{-1}(z)} \min\{\mu_{\tilde{B}}(Y_1), \dots, \mu_{\tilde{B}}(Y_n)\} & \text{if } f^{-1}(z) \neq \emptyset \\ 0 & \text{if otherwise} \end{cases} \quad (6)$$

In constructing the Social Exclusion Index (SEI), the fuzzy set approach as proposed by Betti *et al.*, (2015) in calculating multidimensional poverty was adopted. Again, Alkire & Santos (2013) affirmed that the general framework for measuring the multidimensional poverty is suitable for measuring other life occurrences. Thus, we have the following steps:

Step 1: Identification of items that were included in the analysis.

In selecting the dimensions and indicators used, previous studies (Bradshaw *et al.* 2000; Dev & Kamar, 2018) described various dimensions of social exclusion that individuals experience. Khan (2012) opined that social exclusion is multidimensional covering the social, political, economic and cultural dimensions of individuals; however, Myck *et al.*, (2015) rightly opined that there is no consensus in the literature as to indicators to be included as measures of social exclusion, studies should therefore adopt variables that best examine social exclusion in the context of study. We thus focus on these basic dimensions of social relations, political participation and labour market exclusion as peculiar to the slums under study. These dimensions are examined holistically with adjustments made to fit the context of our study.

Table 1: SEI Dimensions and Indicators

Dimension	Indicator (Weight)	Household Deprivation Description
Social Relations (SR)	Insufficient support from family members and friends (1/6)	No form of support from family members, relatives and friends in the three months; do not frequently communicate/relate with family members and friends
	Single Parenting (1/6)	The responsibility of taking care of the child(ren) and wards rest largely on a parent; parent/guardian feel extremely lonely
	Confinement as a result of poor health or insecurity (1/6)	Frequent occurrence of chaos; not being able mingle in the society due to poor health/insecurity

	Support and care from Non-Governmental Organisations (1/6)	No form of support from NGOs; living standard of household members not impacted by NGOs' support
Political Participation (PP)	Right to vote (1/24)	Do not have the Permanent Voter's Card (PVC) which will qualify adults for participating in elections; possess PVCs but do not exercise voting right
	Right to participate in political party activities (1/12)	Do not have the right/being denied right to contest for a political position
	Support from grassroots' politicians (1/24)	No form of support and care from community leaders, local and state governments
Labour Market Exclusion (LME)	Non-participation/Limited participation in the labour market (1/12)	Restricted access to the formal labour market due to inadequate skill/stigmatization; skill of household member not developed; existence of labour law that restricts productivity
	Monthly income less than N30,000 (1/12)	Current monthly income less than N30,000; no savings made; income inadequate to meet household needs

Source: Authors' compilation

Step 2: Transformation of the items into [0, 1] interval

Step 3: Identification of deprivation dimensions through exploratory and confirmatory factor analysis

Step 4: Calculation of individual items' weights of deprivation in each identified dimension

Step 5: Estimation of the scores for each dimension

Step 6: Calculation of an overall score:

$$SEI = \frac{\sum_{j=1}^m U_a(Y_j)W_j}{\sum_{j=1}^m W_j} \quad (7)$$

Where:

U_a is the weighted average of the social exclusion ratio of the i^{th} household

W is the weight

i and j represents the indicator and dimension respectively

m is the number of dimensions

Y_j represents the set of dimensions

The Area of Study

Lagos State is one of the thirty-six states of the Nigerian Federation and was created on May 27, 1967. A large part of the State (39%) is wetland and it is located in the coastland of South Western Nigeria, on longitude between 2°42'E and 3°42'E and

between latitude 6°22'N and 6°52'N. Lagos is bounded by Ogun state in the North and East and also shares international boundary with the Republic of Benin in the West. The Atlantic Ocean is situated to its southern side where it has a 180 km stretch waterfront. Although the smallest state in Nigeria in terms of land mass occupying an area of 3,577 km², Lagos State is the centre for all ethnic nationalities in the country with an annual population growth rate of 3.4% (Lagos Bureau of Statistics, 2014; United Nations Department of Economics and Social Affairs Populations Division, 2018). The state is infamously referred to as “the megacity of slums” (IRIN, 2006). This study focuses on some selected slums in Lagos State: Makoko, Ijora Badia, Iwaya, Ilaje and Amukoko. These areas are included in the nine largest Lagos slums recognized by World Bank (2005) and they are located around coastal areas. These areas are still largely occupied as slums, thus their relevance to this study.

Research Design and Data Collection

The study adopted a quantitative and qualitative method through the use of structured schedule and interviews. The researchers contacted the community heads in person of the Baale (community chief), Local Government Chairman and Landlord Association Leader of the respective communities to get approval to carry out the field survey. These leaders were also instrumental in informing the researchers about congested communities of the slums. Random sampling was used in each congested community and the following are the sample from each community: fifty (50) from Makoko; eighty-eight (88) from Ilaje; eighty-five (85) from Iwaya; eighty-six (86) from Ijora-Badia; and ninety-one (91) from Amukoko. In total, four hundred (400) household heads were engaged in the survey, however only three hundred and ninety three (393) valid and appropriately filled questionnaires were used for this research. Further interview was granted to selected household heads that cared to give the researchers detailed information with respect to questions asked. The interview was granted in a local dialect and in rare cases, English language. Permission was obtained to have all participants take part in the survey willingly. For some respondents who asked to be induced with monetary gains before participating in the survey, they were politely declined from participating in the survey.

Estimation Techniques

Descriptive statistics and fuzzy analytical technique are used in understanding the various socio-economic characteristics of the respondents and the degree of social exclusion respectively.

The Fuzzy Analytical Technique has been algebraically illustrated in equation (7).

Results and Discussion
Demographic Information

Table 2: Demographic Information Distribution by Community

Demographic Features	Categories	Community				
		Makoko	Iwaya	Ilaje	Amukoko	Ijora-Badia
Gender	Male	34	34	39	33	39
	Female	16	48	47	51	52
Age	25 and below	26	21	13	8	5
	26-35	19	27	24	28	22
	36-45	4	18	21	25	28
	46-55	1	7	15	12	18
	56-65	0	6	6	6	14
	above 65	0	3	7	5	4
Household Size	4 and below	16	26	24	32	43
	5-7	25	45	46	42	41
	7-10	4	7	13	9	4
	Above 10	5	4	3	1	3
Employment Status	Salaried	0	4	3	11	9
	Self-Employed	49	72	73	64	76
	Retired	0	3	6	5	2
	Unemployed	1	3	4	4	4
Years of formal education	none	29	45	25	27	11
	1-6	14	13	10	15	20
	7-9	5	5	9	4	3
	10-12	2	16	27	26	48
	13-16	0	2	9	9	9
	above 16	0	1	6	3	0
Nationality	Nigerian	49	78	85	84	91
	Non-Nigerian	1	4	1	0	0
Years spent living in community	5 and below	2	23	19	16	14
	6-10	8	13	19	15	22
	11-15	16	21	12	15	24

	16-20	16	10	15	17	8
	Above 20 years	8	15	21	21	23
Daily income	N1000 and below	24	20	35	32	30
	N1001-N2000	12	31	28	31	19
	N2001-N3000	4	21	12	12	14
	Above N3000	10	10	11	9	28

Source: Authors' Computation

Table 2 presents the demographic information of respondents in the respective locations sampled. At Makoko, there were more male respondents compared to other locations where more females took part in the survey. Majority of the respondents at Makoko are of age 35 and below while at Iwaya, majority fell between the age bracket of 45 and below. More elderly respondents took part in the survey at Ijora Badia and Amukoko. A good number of respondents aged 25 and below at Makoko and Iwaya. Some of these respondents are singles and have their siblings living with them and thus responsible for their well-being, they therefore qualify for household heads in this study. A similar trend with respect to household size was observed across majority of the communities. More households had five to seven members (with the exception of Amukoko); while very few had more than 10 household members. Interestingly, Makoko had the highest frequency of households with more than 10 members despite their sample size being the least compared to other locations. Aside the nuclear family members, many of the households had extended family members living with them. This is not surprising as it is a common practice in Africa to have extended family members living together.

Majority of respondents in all locations were self-employed revealing that respondents largely manage their own businesses. Remarkably, very few of the respondents in all the communities were unemployed. In all the communities, with the exception of Amukoko, Ilaje and Ijora Badia, most respondents had no formal education. However, majority of respondents at Ijora Badia had ten to twelve years of formal education implying they possess the secondary school leaving certificate. Very few had tertiary education and interestingly, a good number of respondents at Ilaje possessed postgraduate education. Contrary to popular belief that slum dwellers in Lagos State are often times not nationals (Olowojolu, Ojo & Oshewolo, 2016), the study shows that majority of respondents were Nigerians with only very few being non-Nigerians. Further interrogation revealed that many of those who were non-Nigerians migrated from the Republic of Benin. Across all the communities, majority of respondents had lived more than ten years in the slum and this would have impacted their quality of life over the years. The daily income of respondents shows very poor economic standard. A significant number of respondents earned less than N1000 (about \$2.6) per day which is barely not enough to sustain an individual much less a household. However, a good

proportion of respondents at Ijora Badia however earned above N3000 (about \$8) per day.

Table 3: Communal Decomposition of Social Exclusion by Indicator

Indicator	Fuzzy Analysis					Total Score
	Makoko	Iwaya	Ilaje	Ijora Badia	Amukoko	
Support from family members and friends	0.0774	0.1079	0.1103	0.1025	0.0952	0.1667
Single Parenting	0.0776	0.0841	0.0755	0.0791	0.0778	0.1667
Confinement due to security issues	0.0493	0.0788	0.0654	0.0751	0.0692	0.1667
Support from NGOs	0.1086	0.1146	0.1448	0.1476	0.1493	0.1667
Right to vote	0.0220	0.0275	0.0244	0.0224	0.0241	0.0417
Right to actively participate in a political party	0.0482	0.0557	0.0499	0.0510	0.0557	0.0833
Support from grassroots politicians	0.0300	0.0360	0.0354	0.0363	0.0345	0.0417
Restricted Participation in the formal/organised labour market	0.0429	0.0473	0.0428	0.0468	0.0456	0.0833
Economic Standards	0.0508	0.0523	0.0520	0.0527	0.0440	0.0833

Source: Authors' Computation

The trend in social exclusion shows some interesting findings. First, the findings on support from family members and friends showed that in order of severity, Iwaya scored 0.108; Ilaje, 0.110; Ijora Badia, 0.103; Amukoko, 0.095; and Makoko, 0.077. This shows that with the exception of Makoko, all other locations were severely deprived in the area of getting financial and material support from family members and friends. The study also found that there was also little or no possibility of getting help when there is crisis at all the locations with the exception of Makoko. A resident at Amukoko affirmed that it was difficult getting support from family members and relatives as there is a belief that by virtue of the former living in Lagos State (an urban city), he should be the person sending financial and material support to other family members living outside Lagos. The implication of financial exclusion can be contrasted with the study by Fashola *et al.* (2013).

Analysing the burden of taking care of children measured by single parenting, Iwaya scored the highest with a score of 0.084; while the scores of other communities showed that to a large extent, parents jointly pool funds together in taking care of the household. This accounted for scores lower than a 50 percent cut-off for that indicator. This finding in line with that of Bastos & Machado (2018) suggested that in Iwaya slum children might suffer more from social exclusion and poverty. The single parenting deprivation measured the extent to which the burden of caring for the family rests largely on one parent. Since slums are generally associated with social vices and chaos, this study also

examined restriction to movement in the communities as a result of insecurity. The community with the worst security index was Iwaya with a score of 0.079 while Makoko had the least score of 0.049. This implies that Iwaya had the worst level of insecurity compared to other locations. In accordance with the findings of Agboti & Nnam (2015) and Bastos & Machado (2018), increased crime rate in Iwaya slum might be due to high level of social exclusion. However, the deprivation is not severe as all the communities had scores lower than the threshold for that indicator. This implies that although there are frequent occurrence of chaos by hoodlums, it is not so severe as to impact their daily activities. In fact, a resident at Iwaya mentioned that “policemen often come around to dispel the hoodlums when they start the chaos.”

The indicator measuring the support from NGOs showed that Amukoko community had the highest deprivation score of 0.149 with all the other communities also scoring very high score revealing severe deprivation. This indicator did not just measure the level of support gotten but also examined its impact on the quality of living of residents. Many residents opined that support from non-governmental organizations (NGOs) are often irregular and when they render support, only a few people in the community benefit. Some residents opined that support from NGOs are gotten annually during the Christmas period with NGOs sharing food items, clothing and other relief materials. However, all these packages do not to a large extent improve the standard of living of the residents. In fact, a resident at Ilaje mentioned that “some of the clothing and relief materials we get are household items which we already have.” Again, periodically, free health care services are given to residents of Iwaya and Makoko. However, only selected few (such as aged people) benefit. As such, the scores for Makoko and Iwaya for the NGOs’ support indicator is lower compared to other communities. In line with the study by Fashola *et al.* (2013), such support deficiency would not have improved the welfare of the people.

In measuring the ownership of PVCs and exercising of voter’s right, Iwaya residents were more politically excluded with a deprivation score of 0.028; while Amukoko, Ilaje, Makoko and Ijora Badia respectively scored 0.024, 0.024, 0.022 and 0.022. All these scores also show severe deprivation. Some respondents opined that although they possess the PVCs, however, they are not motivated to vote based on the ill-treatment they get from the government. On the political participation of respondents, a similar trend as seen in the voting right was observed. All the communities scored very high scores implying that most of the respondents are not as such freely allowed to participate in political party activities. Some residents also opined that although they attend political meetings to err their opinion, however, their opinion hardly counts. In understanding the level of support residents get from grassroots politicians, the study also found severe deprivation. All the communities had scores very close to the weight for that indicator. The scores also show higher deprivation in this indicator compared to the right to vote indicator. This shows that there is little or no form of support from

politicians at local and state government levels. This again has led to residents not having trust in the government.

Residents of Iwaya and Ijora Badia had the highest deprivation score in the labour market participation indicator with a score of 0.047; Amukoko scored 0.046 and Makoko and Ilaje both got a score of 0.043. Although all these scores also depict severe deprivation, Iwaya is the worse-off community. Again, the economic standard indicator showed that all the communities suffer severe economic standard deprivation. However, it is interesting to note that Amukoko had the least index for this indicator. The limited participation in the labour market stems from low skills possessed by majority of respondents and their unwillingness to learn new and relevant skills. Again, very poor educational standard to a large extent limit their participation in the labour market. These findings are in consonance with those of Bradshaw *et al.* (2000) and Bangwayo-Skeete & Zikhali (2011).

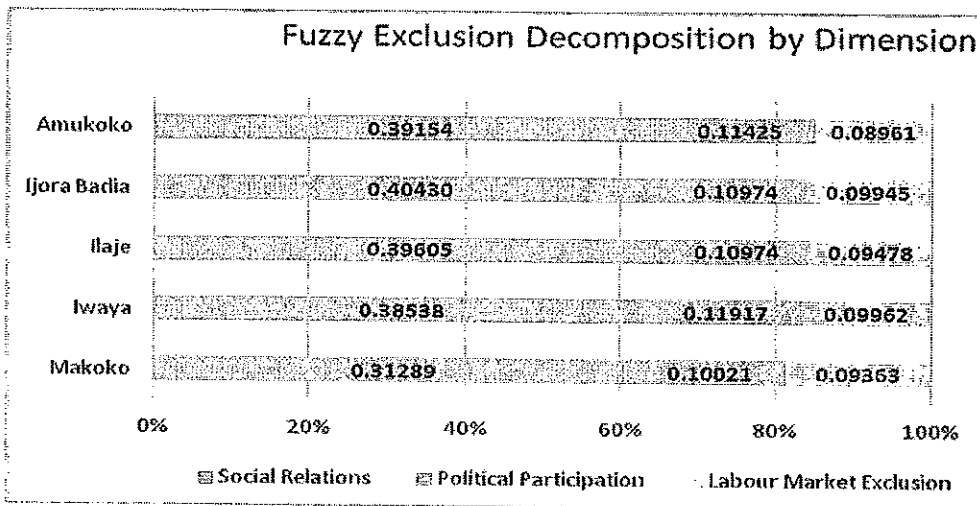


Fig 1: Composition of Fuzzy Social Exclusion by Dimension
Source: Authors Calculations

The communal deprivation by dimension is displayed in figure 1. Again, looking through the deprivation by dimension, we see that although Makoko fared best in the social relations and political participation dimensions, Amukoko fared best in the labour market exclusion dimension. This implies that Amukoko community had better labour market inclusion compared to other communities. The dimension of social exclusion was very poor at Ijora Badia while Iwaya had the worst political participation exclusion. The findings show that the degree of deprivations across the communities differ from each other and it is therefore important to understand what constitutes these deprivations so as to better resolve the underlying challenges. Thus, the reason for the decomposition of deprivation by indicators.

Conclusion and Recommendations

This study focused on five coastal slums in Lagos State, Nigeria (Makoko, Ilaje, Iwaya, Amukoko and Ijora-Badia) in order to analyse the degree of social exclusion experienced by the residents. Remarkably, this is one of the earliest studies to examine the issue of social exclusion in slums in Lagos State from an analytical approach.

The study found that similar to previous studies, majority of households had large number of family members with Makoko having the highest frequency. The low income status of the respondents across the communities also showed very poor economic standards. A very interesting finding is that while Makoko had the lowest index in the social relations and political participation exclusion, it had the highest in the labour market exclusion. Specifically, the study revealed minimal support from family members and friends; and Non-Governmental Organisations (NGOs). In fact, the study confirmed that the support that NGOs often give are not what residents are in dire need of. The security concerns around the slums also showed varying degree. Unusually, the security issues are not so severe to impair daily activities as law enforcement agencies always quell the chaos.

Again, this study found out that the residents are politically excluded as many are restricted from being politically active in the communities. On the other hand, grassroots politicians do not have a strong relationship with the slum dwellers thus creating a gap between the grassroots politicians and the people. To a large extent and as expected, this has impacted the trust that residents have in the government. Also, most of the residents at Amukoko are more included in the area of wage earnings and labour market participation unlike the other communities.

From the findings of this study, the following recommendations are made:

- The dynamics of social exclusion in the slums should be well understood before interventions are made. This is necessary because findings from the study revealed that there are different degrees of social exclusion deprivation across the slums.
- In providing welfare support to slums, NGOs should endeavour to comprehend the basic needs of the communities to avoid misplaced interventions.
- Family members and friends are great support systems and should be more involved in providing financial, moral and social support to each other.
- Grassroots politicians need to get involved at the community level so as to bridge the gap between the government and the people. This to a great extent will improve the trust of the people in government.
- Labour market exclusion impacts standard of living of people. Human capital development through education, training and skill acquisition is therefore encouraged to improve labour market inclusion of residents. This will in turn advance the standard of living of slum residents.

Labour laws should be favourable for artisans and small-scale businesses who largely are labour market players in the slums. This will enhance their productivity and improve their overall well-being.

If all these measures are put in place, more slum residents will be socially included and this will improve the overall wellbeing of the slum dwellers.

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