

## **Evaluation of Triggering Factors of Violence-Induced Intra-Urban Residential Relocation in Jos North Local Government Area, Plateau State**

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### **ABSTRACT**

*Intra-urban residential relocation is a phenomenon that is often triggered by some pushing and pulling factors. For any specific wave of residential relocation, various triggering factors play varying roles in the wave. This study examines the factors that triggered intra-urban residential relocations of households during over two decades of violent conflicts in Jos metropolis. A survey and quantitative method were used to generate both primary and secondary data. A total of 335 questionnaires were distributed and only 258 were returned and analysed. The study made use of frequency count, percentages and analysis of variance to analyze the data obtained in order to answer the research question. The study revealed that although the factors of insecurity and high rental value constitute the major triggers for intra urban residential relocation in Jos North Local Government Area of Plateau State during the period of violence; other factors such as family ties, religion and the availability of amenities, are also significant in triggering the relocations. The study recommends non-piecemeal and proactive measures to ensure inclusive housing development and durable solutions for victims of violent conflicts.*

**Keywords:** Evaluation, Triggering factors, Violence-Induced & intra-urban migration

### **1. INTRODUCTION**

Migration is the human phenomenon that involves spatially changing one's residence from one geographical location to another (International Organization for Migration (IOM), 2011; World Economic Forum, 2017). Humans are generally mobile by nature and they spatially relocate their residence from one location to another for various economic, social, political, or environmental reasons (Kortum, Paleti, Bhat & Pendyala, 2012).

There are different types of human migration based on origin and destination, such as internal (domestic) and international migration, inter-urban and intra-urban migration, rural-urban migration, and urban-rural migration. Intra-urban migration, which is the phenomenon of interest for this study, refers to a change in normal place of residence, by moving to or from one area to another area within the same urban space or city (Cui, Geertman & Hooimeijer, 2014; Sun and Manson, 2012; Heenan, Johnson, & James, 1998; Brown & Moore, 1970). Intra-urban migration thus describes a change of residential location by moving from one location to another within the same city or urban environment.

There are several factors that trigger the movement of households within an urban space. Such triggering factors could be voluntary or involuntary (Papaelias 2013; Lee, 1966). People voluntarily relocate from their usual places of residence to another in order to meet their socio-economic desires and aspirations while others involuntarily relocate for either environmental or human induced shocks (Ikwyatum 2016). Thus, the triggering factors could be categorised as voluntary where the movement is in search of greener pastures or changes in status, and involuntary where the movement is in response to some compelling circumstances such as violent human conflict or natural disasters.

The question that this research seeks to answer is: are there other significant factors that triggered intra-urban housing relocation in Jos North Local Government Area during the recent over two decades of violent conflicts in the area? The aim of the study is to evaluate the factors triggering intra-urban migration in Jos North Local Government Area from 2001 to date. The study covers Jos North Local Government Area of Plateau State and the period from 2001, when the conflict in the area took a bloody dimension to date. Participants for the study will be those households that changed their housing locations within the Jos North Local Government Area, and not those who resettled outside the city or those coming from another location outside the Jos LGA. The city of Jos in Nigeria, particularly the Jos North Local Government Area (LGA), has witnessed a massive pattern of intra-urban movements during a period of prolonged violent conflicts among its inhabitants for about two decades in the recent past. The spontaneous residential movement of households within the metropolis has led to rapid and uncontrolled housing developments that have overstretched the existing infrastructure and given rise to emerging uncoordinated housing developments at the urban fringe areas.

Peaceful and stable environment is a precondition for the orderly provision of housing development which in turn accelerates the effective and efficient functioning of urban development agencies. This study would therefore serve as a quick reference tool for researchers, decision makers and policymakers in Nigeria in understanding the challenges faced by households owing to constant unrest and security threats to lives and property.

## **2. LITERATURE REVIEW**

Animashaun and Eni (2012) observed that the decision to move or not, is generally the result of two factors: push and pull, which act in opposite directions, but produce the same effect. Usually, the pull factor acts as a generative force, stimulating households to move to another housing that is deemed more attractive, more comfortable, and more befitting than the present one whereas the push factor operates to discourage households from continuing to reside in the present housing. Clark (2013) observed that demographic and socio-economic factors are significant push factors (i.e. predictors or drivers) of intra-urban housing relocation. But in situations of violence or disaster, such demographic and socio-economic factors are often overwhelmed or overlooked. Most studies of the violent conflicts in Jos (Best, 2007; Dung-Gwom and Rikko, 2009; Higazi, 2011; Aliyu, 2012) have concluded that the violent conflicts in Jos accounted for the mass displacement of the population as well as housing relocation in the metropolis. Thus, the situation of violent conflicts in the metropolis overshadowed other demographic and socio-economic factors that significantly contributed to triggering the wave of intra-urban migration in the metropolis during the violent period. No study has shown the respective triggering effects of other factors and this underscores the mission of this study: to evaluate the relative significance of other factors that contributed in triggering intra-urban housing relocation by households in Jos North Local Government Area during the over two decades of violent conflicts in Jos metropolis.

### **2.1. Theoretical Framework**

When it comes to the theoretical framework of any human migration study or, by extension, residential relocation study, the first point of reference is acknowledging the seminal contribution of Ravenstein (1885). One of the laws of migration identified by Ravenstein (1885) is that economic factors constitute the major causes of human migration. However, recent studies have shown that there are plethora of factors influencing the decision to relocate. It is therefore becoming increasingly challenging to tie the decision to migrate or relocate down to a singular factor, particularly in times of protracted crisis situations (Crawley and Skleparis, 2018; Zetter, 2015). Lee (1966) proposed the ‘push’ and ‘pull’ theory of human migration

which helps to explain that there are multitudes of interdependent factors that trigger migration or residential relocation although certain situations may exert greater influence than others. Lee's (1966) theory of migration conceptualises the triggering factors along with the process of the movement into four categories: (i) triggering factors associated with the area of origin and acting as motivators for moving out i.e., the push factors; (ii) triggering factors associated with the area of destination that attract the relocatees i.e., the pull factors; (iii) intervening obstacles that have to be overcome before the actual relocation; and (iv) personal factors i.e. individual perception of the areas of origin and destinations, which could influence the actual act of relocating.

The theory recognises that in each area or location, there are numerous triggering factors that act to drive away the relocatees from the area, hold them in the area or attract them to the area. There are also significant differences between the triggering factors associated with the area of origin and those associated with the area of destination. In times of conflict, there is a tendency to conclude that the exhibited violence is the only triggering factor for the relocation of households (William, 2015; Zimmermann, 2011). However, it has been argued that the decision to relocate is often dependent on factors such as age, property ownership, health, or access to income, while relocatees also undergo a waiting period before deciding to leave their homes (Adhikari, 2013; Zimmermann, 2011). Besides, relatively new emerging factors, such as climate change and resource scarcity also add to the complexity of triggering factors. As a result, this study uses Lee's (1966) migration theory to explain that there are other, equally important triggering factors that account for the relocation of households in Jos North Local Government Area during the protracted violent conflicts that plagued the area in recent decades.

### **3. METHODOLOGY**

#### **3.1. Study Area**

The study area is Jos North Local Government Area of Plateau State (Figure 1) as created in 1991. The area is one of the seventeen Local Government Areas in Plateau State, geographically located between longitudes 8° 58' 57" E – 8° 48' 53" E and latitudes 10° 2' 19" N - 9° 53' 00" N. It shares boundaries with Bassa Local Government Area to the West, with Toro Local Government Area of Bauchi State to the North, with Jos East Local Government Area to the East and Jos South Local Government Area to the south. Jos North Local Government Area has a total land area of about 291km<sup>2</sup> situated at an altitude of 1,217 m (3,993 ft.) above sea level and enjoys a more temperate climate than much of the rest of Nigeria. Politically, the local government has been divided into twenty (20) state electoral wards by the Plateau State Independent Electoral Commission (PLAISEC, 2002). The major indigenous ethnic groups that populate the state are the Afizere, Anaguta and the Beroms. However, the study area is now a cosmopolitan urban settlement. Thus, apart from the indigenous ethnic groups, the Hausa/Fulani, Igbos, Yoruba and many other ethnic groups within and outside the country had migrated into Jos for the supply of labour and other services in the area having been attracted by the existing tin mining activities (Best, 2007).

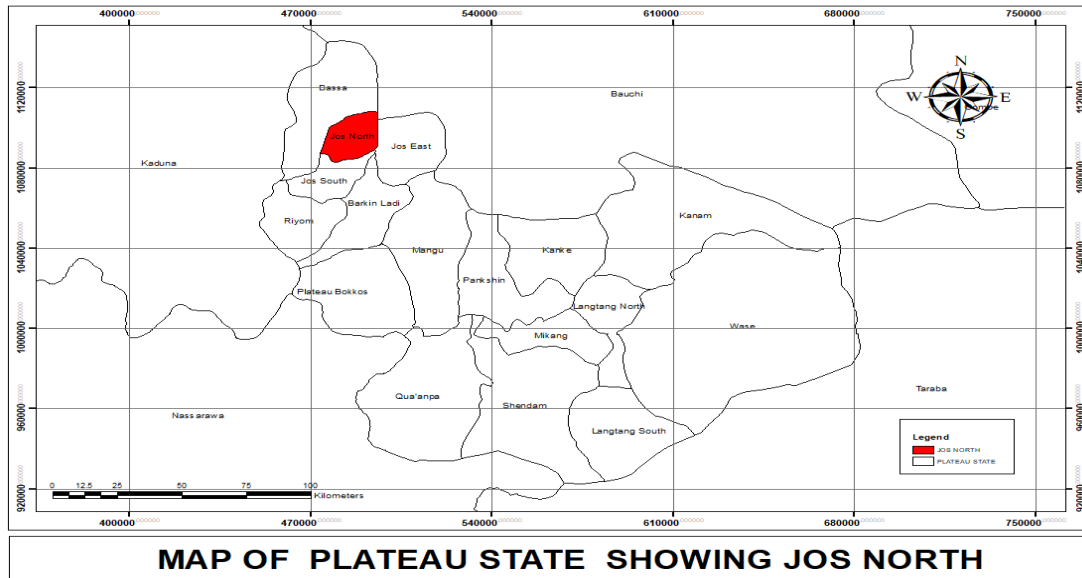


Figure 1: Map of Plateau State Showing Jos North LGA.

### 3.2. Data Sample

The data used for this study were derived from both primary and secondary sources. The primary data was obtained through the survey and quantitative methods, while the secondary data was derived from observations, the review of literature and archival records. The primary instrument for data collection was a structured questionnaire.

The data obtained were from the ten (10) selected State Independent Electoral (SIE) wards of Jos North Local Government Area (LGA) in Plateau State. These ten electoral wards were purposively selected based on survey that shows rapid emerging housing development and social factors such as status and religion, which has polarized the LGA along ethno-religious divides since 2001 Krejcie and Morgan's table was adopted to determine the sample size from the 66,604 household heads identified in the ten electoral wards as obtained from the House-to-House Immunization Record in Jos North LGA (NPHCDA, 2019).

Table 1: Table for Determining Sample Size from a given Population

S/N	Electoral Wards	No. of Households Identified, 2019	Sample Size at 0.5% Confidence
1	Naraguta A	4,844	24
2	Naraguta B	10,465	53
3	Tudun Wada	7,083	36
4	Abba na Shehu	2,515	13
5	Gangare	2,977	15
6	Jos Jarawa	2,270	12
7	AngwanRogo/Rimi	7,849	39
8	Jenta Apata	9,737	49
9	Sarkin Arab	3,778	19
10	Kabong	15,086	75
<b>Total</b>		<b>66,604</b>	<b>335</b>

Source: NPHCDA, Jos North, (2019)

A total of 335 household heads constituted the sampled population size used for the research. Accordingly, 335 structured copies of questionnaire were administered to the participating household heads from the 10 selected wards but only 258 (or 77.01%) were

retrieved and used for the analyses. Out of the remaining 77 (22.99%) unretrieved questionnaires, 27 were not returned, 15 were wrongly filled, 12 were destroyed beyond redemption (soaked in rain) and the remaining 23 were returned empty. The retrieved questionnaire was coded and analysed using the SPSS 23 software. The data obtained were analysed using a simple descriptive table and analysis of variance (ANOVA). Tables and charts were used to present the results of the analysis.

#### 4. RESULTS AND DISCUSSION

This subsection, presents the results of investigations on factors that triggered intra urban migration in Jos North LGA, drawn from the questionnaire administered. These are:

- a) Reasons for changing residences;
- b) Propensity to return to former locations;
- c) House-Ownership status of the former residence;
- d) House ownership title of former residence; and
- e) Special factors.

**Decision rule for discussion:** the decision rule was used to decide the implication of the data analysed based on the value for P-value (Patel, 2015). That is,

- If the P-value is less than or equal to the F-value calculated, then there is at least a significant difference between two of the group means; and
- If the P-value is greater than the F-value calculated (that is, the F-value critical is greater than F-value calculated), then it is concluded that there are no significant differences between the groups of means.

##### 4.1. Reasons for Changing Residences

Table 2 shows the various reasons given by respondents for the decision to change their residence within Jos North LGA. The table reveals that security (28.6%) actually constituted the dominant factor that triggered the intra-urban residential relocation in the study area. However, the triggering factor of high rental value (25.2%) also has a significant effect on triggering the intra-urban residential relocation. The twin factors of insecurity and high rental value are intertwined since the violent conflict is said to account for the drastic increase in rental values as rental houses were in great demand (Dung-Gwom and Rikko, 2009).

It is also worthy of note that other factors such as family ties (17.1%), religion (15.5%) and social amenities (13.6) have also contributed in triggering the intra-urban residential relocation in the study area and cannot be ignored. Thus, although it can be said that the factors of insecurity dominated the triggering effect for the intra-urban relocation in the area, it is not the only factor at play. The increased rental value, family ties, religion and availability of social amenities also significantly contributed in triggering the residential relocation process.

Table 2: Reasons for Changing Residence

S/N	Reasons for Changing Residence	Frequency	%
1	Social Amenities	35	13.6
2	Security	74	28.6
3	Family Ties	44	17.1
4	High Rental Value	65	25.2
5	Religion	40	15.5
<b>Total</b>		<b>258</b>	<b>100</b>

Source: Authors' field work, 2022

Based on the decision rule stated, the result shows that the F-value calculated (27.9) was greater than both the P-value (3.2) and the F-critical (2.4) for factors observed as the main triggers for intra urban residential relocation within Jos North LGA. That is, there are significant differences between the group means. This implied that the factors identified are significant variables that induce intra urban residential relocation within Jos North LGA which corroborated Dung-Gwom and Oladosu (2004); Dung-Gwom & Rikko (2009) and Lohor et al (2015).

Table 3: ANOVA Result Test of Factors Triggering Intra Urban Migration

Source of Variation	Sum of Squares	Df	Mean Square	F	P-value	F crit
Between Groups	191.617054	4	47.90426	<b>27.86796</b>	3.2E-22	<b>2.378854</b>
Within Groups	2208.87984	1285	1.718973			
Total	2400.4969	1289				

Source: Authors' Field work, 2022

Even though, in most literature (Best, 2007; Dung-Gwom & Rikko, 2009; Higazi, 2011; & Aliyu, 2012) the findings have shown that the violent crisis in Jos led to mass displacement of the population as well as housing relocation. The result of this research equally agrees with Clark (2013) that demographic and socioeconomic factors such as the high rental value, which has to do with income, marital status, and education among others, are major predictors (drivers) of intra urban housing relocation. Thus, intra urban migration in Jos North LGA for the last twenty years is not only tied to insecurity and ethno-religious divides as cited in previous studies but also to a complex of factors such as high rental values, family ties, religion and the availability of social amenities among others. With or without conflict, people were and still are changing their residences based on life cycle events and socio demographic factors. However, the last two decades recorded large scale of relocation owing to insecurity within the Jos North LGA.

#### 4.2. Propensity to return to Residence in Former locations

The study inquired on whether respondents are willing to relocate or return to their former residences. Responses received as factors for not returning to former place of residence are shown in figure 2. It is revealed that the propensity for not returning was tied to the factor of security (insecurity and religious intolerance) as it played a significant role in for not wanting to return to former place of residence. The factor of high rental value is also a significant consideration in deciding whether to return to a former residence.

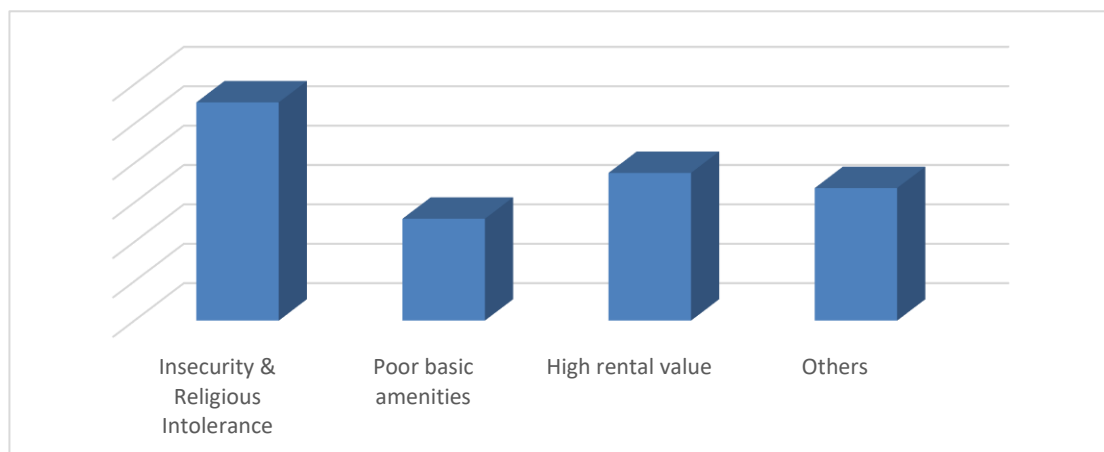


Figure 2: Propensity for Not-Returning to former place of residence

Source: Authors' Field work, 2020



In Table 4 the result of the analysis shows that the F value (22.0) calculated was greater than the F critical (2.4). The implication is that there is a significant difference and that the identified responses for not returning to their former place of residence were indeed tied largely to insecurity and high rental value. This explains what Mallo and Anigbogu (2009) opined that gentrification processes affect the low-income group significantly. Theoretically, Wolpert's stress-threshold model (1965) supported the findings that individual threshold levels of utility to aspire and by comparing places in order to decide whether to migrate are often based on prevailing circumstances.

Table 4: ANOVA Result Test of Not-Returning to Former Residence

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	191.6326	4	47.90814	<b>22.04482</b>	1.28E-17	<b>2.378854</b>
Within Groups	2792.581	1285	2.173215			
Total	2984.214	1289				

Source: Authors' Field work, 2022

### 4.3. House-Ownership Status of Former Residence

Ownership of housing plays a significant role in an individual's decision to change his or her residence. In figure 3, it is revealed that the majority of the house ownership status of the former housing of the sampled respondents were largely family owned (21.6%) and employers' quarters (21.5%). This is true because Jos North LGA has the majority of employers' quarters due to the presence of federal institutions such as the University of Jos, Federal School of Forestry, the old Jos University Teaching Hospital (JUTH) and the then government quarters (TudunWada GRA, Diamond quarters) that were sold out to owners' occupier among others.

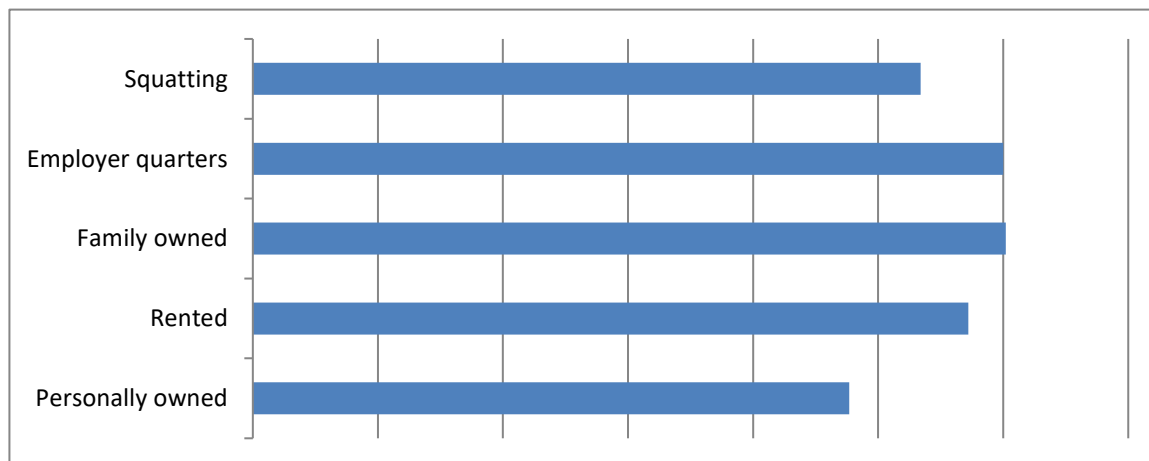


Figure 3: Responses of former Housing Ownership

Source: Author Field work, 2020.

Similarly, the result of the analysis shows a significant difference because the F-value (4.5) is greater than both the P-value (0.001) and F crit(2.4)(see Appendix 1). This explains that the listed housing ownership status was indeed statistically significant as a factor that induced intra urban housing relocation in Jos North LGA. This finding also contradicts Broulikova, Huber, Montag and Sunega (2020) studies on home ownership, mobility, unemployment and housing privatisation in Central and Eastern Europe, where it was found that homeowners are less likely to change their residence than renters and squatters. It is believed that home ownership status often restraint frequent housing mobility within cities. But, the present study in Jos North LGA is to the contrary because households with family-owned housing are more

likely to change residences, a situation driven by decades of protracted violence and concomitant unrest and insecurity.

#### 4.4. House - Ownership Title of Former Residence

The study investigates the status of titles to former residences of respondents. The findings are shown in Figure 4. It was revealed that the majority of the former houses (21.6%) owned by respondents were without statutory titles. This explains the reason for the proliferation of haphazard and illegal housing developments in Jos metropolis (see plate 1) as found in earlier studies by Dung-Gwom and Oladosu (2004); and Wapwera, Ayambimpe and Egbu (2015).

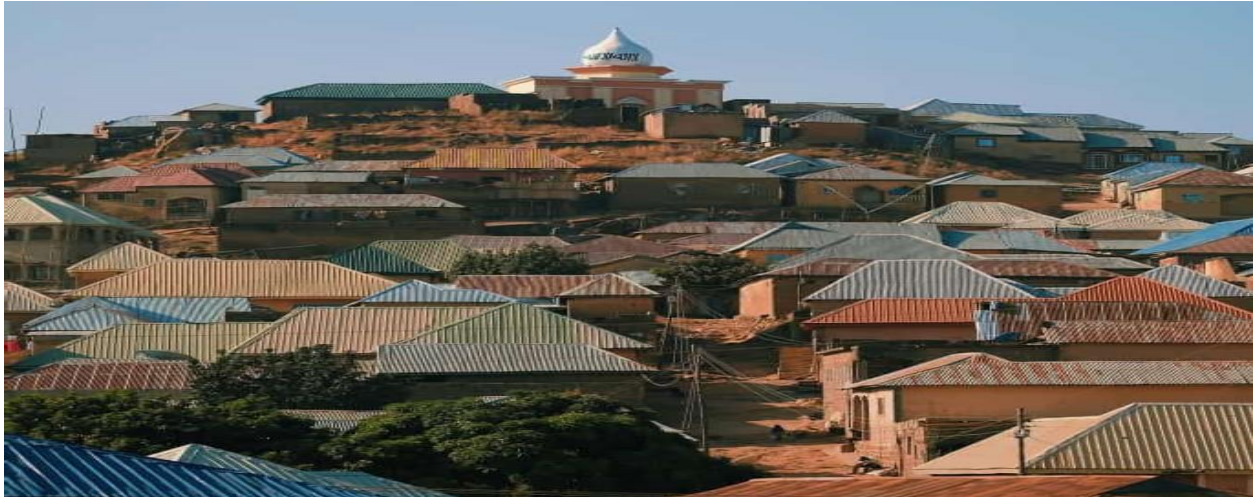


Plate 1: Showing Haphazard Housing Development in Azurfa, Naraguta 'B' Ward Jos North LGA

The result of the analysis in Table 5 revealed that there is no significant difference between former housing ownership title and housing relocation because the F-value calculated (2.0) is less than the F-crit (2.4). The implication is that housing ownership title was not an important factor that induced intra urban residential relocation in Jos North LGA. This finding is at variance with earlier findings that the majority of housing movers are renters and low-income earners which are often the most affected group of people during episodes of violence (Dietz and Haurin, 2003; Van Ommeren and Van Leuvensteijn, 2005; Lohor, Dung-Gwom, and Laka, 2015)

Table 5: ANOVA Result Test of Former Housing Ownership Right

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	24.06512	4	6.016279	<b>2.048822</b>	0.085353	<b>2.378854</b>
Within Groups	3773.349	1285	2.936458			
Total	3797.414	1289				

Source: Authors' Field work, 2022

#### 4.5. Special Factors

The special factors are grouped into five categories thus:

- Social (marriage, religion, education and health);
- Economic (employment, trading, farming);
- Cultural (ethnicity, family ties, place of birth, and food);
- Political (party affiliations, elections/voting and appointments); and
- Physical/environmental (flat land, rocky, flood/erosion, sanitation/pollution).



Table 6: Special Factors Triggering Intra Urban Residential Relocation

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	351.5799	17	20.68117	<b>10.05534</b>	6.59E-27	<b>1.624979</b>
Within Groups	9514.453	4626	2.056734			
Total	9866.033	4643				

Source: Authors' Field work, 2022

In table 6, the F value (10.1) is greater than both the P-value and F crit. (1.6) and thus shows a significant difference within and between the special factors as triggers of intra urban migration in Jos North LGA. Equally, this also agrees with Rabe & Taylor (2010) that life course events such as retirement, union formation or dissolution, births and children leaving their parental home as adult affects housing mobility. Theoretically, the findings support the residential mobility theory that families who experience life events are most likely to move their residence (Brummell & Arden Craig, 1977; Coulter, vanHam & Findlay, 2015).

## 5. CONCLUSION

The analysis revealed that security (28.6%) and high rental values (25.2%) for lands and properties were major drivers for intra urban residential relocation over the last two decades in Jos North LGA. The same reasons were given for not returning to their former housing which agrees with Hangen-Zanker (2008) and Dung-Gwom & Rikko (2009) that insecurity and the cost of rental values induce residential mobility and thus have serious implication for housing development prospects. The analysis also shows that house ownership, that is, those who owned houses were the majority of movers (21.6%) which contradicts Broulikova et al 2020; Dietz & Haurin, 2003; Van Ommeren & Van Leuvensteijn, 2005 & Lohor et al, 2015 who assert that the majority of housing movers are the renters, low-income earners and not house owners. This agrees with Lindley (2009) that protracted and life-threatening events such as violent conflicts, and natural disasters are major drivers for housing relocation.

Equally, the title of ownership of former residences revealed that over 21.6% had no title right for their former housing while 21.3% of the current housing do not have title or right of ownership either. This explains what Dung-Gwom & Oladosu (2004) and Wapwera et al (2015) opined that haphazard development and unplanned settlements proliferate in the Jos metropolis.

Based on the findings of the study, even though migration is complex and has a series of implications for both the places of origin, and destinations of migrants; the negative impact it exerts on housing development demands urgent attention. This is so important because, according to Maslow (1943), in the hierarchy of needs, after physiological needs (food and clothing), the next most important need is safety, which includes housing and job security. Hence, the following conclusions are made:

- The majority of migration in Nigeria in recent times is tied to economic factors, population increase and, of particular concern, the rise in insecurity.
- All interventions overtime to mitigate the plight of victims of violent conflicts in terms of housing have been piecemeal approaches and not durable solutions or sustainable development interventions.
- There is no provision nor was it captured in the Ministry of Humanitarian Affairs, Disaster Management and Social Development nor the Ministry of Housing and Urban Development, for any policy or action towards resolving the challenges of IDPs and those constantly affected by massive developmental projects and disasters. There is no preparedness for unforeseen events in spite of the increased vulnerability of migrants.

## 6. RECOMMENDATIONS

Intra-urban residential relocation is not a completely undesirable phenomenon. It is a process of adjustment. It is when the process is drifting towards the creation of a divided city along religious and ethnic divides that it becomes undesirable because it is a manifestation of a disintegrated and non-peaceful community which is not desirable in planning parlance.

The finding of this study shows that of recent, there has been an unprecedented residential relocation among the inhabitants of Jos North Local Government Area of Plateau State and the problem of insecurity during the protracted period of violent conflicts in the area played dominating triggering role in the mass intra-urban residential relocation. Other contributory factors such as increased rental values, family ties, religion and the availability of social amenities can all be traced back to the question of insecurity. Thus, to find a lasting solution, there is the need to positively resolve the issue of insecurity. If the issue of insecurity is favourably resolved, a conducive atmosphere will be created for the implementation of meaningful housing policies for the benefit of all.

It is therefore recommended that there be a dialogue among all stakeholders in a forum organised by independent domestic and foreign organisations to facilitate peaceful coexistence and avoid a drift towards a divided city based on religious and ethnic enclaves. The plight of IDPs is being casually handled in the country. Assistance to IDPs is limited to the donation of items that will alleviate their conditions. However, the ever-increasing insecurity, hence mounting number of IDPs, requires that the government should evolve a durable solution policy for the resettlement of IDPs.

It is also recommended that rigorous research be conducted on the root causes of lingering violence and insecurity in the country in general because the negative impact of the current wave of insecurity in the country is capable of consuming the nation. The political elites should develop the political will to resolve the situation by emphasising on public policies that will unite the country towards meaningful developments.

## REFERENCE

- Adhikari, P. (2013). Conflict-induced displacement, understanding the causes of flight. *Journal of Political Science*, 57(1), 82-89.
- Aliyu, A. A., (2012). Impact of Intangible Location Attributes on Residential Property Value in Nigeria. An Unpublished PhD Dissertation, Department of Real Estate, Malaysia.
- Best., S. G., (2007). Conflict and Peace Building in Plateau State. Spectrum Books Limited.
- Animashaun, I.A. & Eni, D.D. (2012). The Pull Factors of Intra-Urban Residential Mobility in Calabar, Nigeria. *International Journal of Development and Management review*. Vol.7.
- Broulikova., Huber., Montag., & Sunega. (2020). Homeownership, Mobility, and Unemployment: Evidence from Housing Privatisation. *Journal of Housing Economic*.
- Brown, & Moore, (1970). The Intra-Urban Migration Process: A Perspectives. *Geografiska Annaler Series, B. Human Geography*. Taylor & Francis Ltd.
- Brummell, A. C., (1977). Theory of Intraurban Residential Behaviour. Unpublished PhD Thesis submitted to Postgraduate School, McMaster University, Hamilton, Ontario.
- Clark, W.A.V. (2013). Life Events and Residential Change: Unpacking Age Effects on the Probability of Moving. *Journal Population Research* 30 319-334.
- Crawley, H., & Skleparis, D. (2018). Refugees, migrants, neither, both: Categorical fetishism and the politics of bounding in Europe's 'migration crises. *Journal of Ethnic and Migration Studies*, 44(1), 48- 64.

- Coulter, VanHam& Findlay (2015). Rethinking Residential Mobility: Linking Lives through Time and Space. Progress in Human Geography, UK.
- Cui. C., Geertman. S, &Hooimeijer. P. (2014). The intra-urban distribution of skilled migrants: Case studies of Shanghai and Nanjing. Habitat International.
- Dietz, Robert D. and Donald R. Haurin. (2003). "The Social and Private Micro-Level Consequences of Homeownership." *Journal of Urban Economics* 54:401–450.
- Dung-Gwom J.Y. & Rikko L. S. (2009). Urban Violence and Emerging Housing Markets in Jos, Nigeria. Paper Presented at the International Sociological Assoc. Housing Conference, Glasgow.
- Dung-Gwom, J.Y., and Oladosu, R.O., (2004). Characteristics and Physical Planning Implications of Slums in Jos, Nigeria. *Journal of Environmental Sciences*, Vol.8 No.2, FES, University of Jos.
- Federal Republic of Nigeria (2019). Nigeria Primary Health Care Development Agency (NPHCDA). A compilation of Report of Jos North Local Government, Plateau State.
- Higazi, A., (2011). The Jos Crisis: A Recurrent Nigerian Tragedy. Friedrich Ebert Stiftung, Abuj. Discussion Paper No. 2.
- Hangen-Zanker, J. (2008) Why do people migrate? A review of the theoretical literature. Maastricht Graduate School of Governance. MPRA Paper No. 28197
- Heenan, B., Johnson, S., and James, H. (1998). Intra-urban Migration: Caversham Working Paper. Dunedin City, New Zealand.
- Ikwuyatun, G. O. (2016) Migration and Urbanization: Exploring the Factors of the Nexus in Nigeria. *International Journal of Humanities and Social Sciences*, vol. 6, No. 8
- IOM, (2011). Glossary on Migration (2<sup>nd</sup> Ed.): International Migration Law, No.25. Geneva, Switzerland.
- Kortum, Paleti, Bhat and Pendyala, (2012) A Joint Model of Residential Relocation Choice and Understanding the Causal Factors.
- Krause, J., (2011). A Deadly Cycle: Ethno-Religious Conflict in Jos, Plateau State, Nigeria. Working paper, Geneva Declaration Secretariat, Geneva Switzerland.
- Lee, E. (1966). A Theory of Migration. A Journal of Demography, USA.
- Lohor, A. A., Dung-Gwom, J. Y., &Laka, I.S., (2015). Effect of Urban Polarization on the Control of Development in Jos, Nigeria. *Journal of Contemporary Urbanology*, A peer review Journal, Department of Urban & Regional Planning, Benue State University. Vol.2. No.1
- Lohor, A. A., Dung-Gwom, J. Y., Rikko, L. S., and Pam, H. M., (2013). Territoriality, Territorial Claims and Planning Challenges in a fragile Urban Setting, Jos, Nigeria. In *Emerging Issues in Urban Planning and Development*, ed.
- Mallo, M. D and Anigbogu, A.N (2009). Housing Quality between Residential Neighbourhoods in Jos, Nigeria. Conference Paper.
- Patel, P., (2015). An Introduction to One Way Anova.  
<https://www.researchgate.net/publication/281441058>. Accessed 9thOctober, 2021
- Papaelias, T. (2013). Theory on the Urban Rural Migration. *International Journal of Economics & Business Administration* pp. 17-30 Volume I, Issue (4).
- Plateau State Government (2001) Plateau State: *The Heritage and Hope*. Jos, Plateau State.
- Plateau Indigenous Development Association Network (PIDAN) (2010). The History, Ownership, Establishment of Jos and Misconceptions About the Recurrent Jos Conflicts. DAN-Sil Press Jos.
- Rabe, B. & Taylor, M. (2010). Residential Mobility, Quality of Neighbourhood and life course events. *Journal of Royal Statistical Society*. Vol. 173

- Sun, S. & Manson, S., (2012). Intraurban Migration, Neighbourhoods, and City Structure. *Urban Geography, University of Minnesota*.
- Van Ommeren, Jos and Michiel Van Leuvensteijn. 2005. "New Evidence of the Effect of Transaction Costs on Residential Mobility." *Journal of Regional Science* 45:681–702
- Wolpert, J. (1965). "Behavioural Aspects of the Decision to Migrate." *Papers of the Regional Science Association* 15: 159-169.
- World Economic Forum (2017). Migration and its Impacts on Cities. *In Collaboration with PwC*.
- Wapwera, S. D. &Egbu., C.O. (2013a). Planning Authorities: A Review of Roles, Functions and Responsibilities in Jos Metropolis. *Journal of the Built & Human Environment Review*
- Williams, N. (2015). Mixed and complex mixed migration during armed conflict: Multidimensional empirical evidence from Nepal. *International Journal of Sociology*, 44.
- Zetter R. and Purdekova A. (2011) Violent Conflict and Mobility-A Micro Analysis. Institute of Development Studies, University of Sussex, UK.
- Zetter, R. (2015). Protection in crisis: Forced migration and protection in a global era Washington DC: Migration Policy Institute (MPI).
- Zimmermann, S. E. (2011). Danger, loss, and disruption in Somalia after 1991: Practicalities and needs behind refugee decision-making. *Refugee Survey Quarterly*, 30(2), 45-66.

#### Appendix 1: ANOVA Result Test Ownership Status of Former Residence

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	42.74419	4	10.68605	<b>4.541346</b>	0.001205	<b>2.378854</b>
Within Groups	3023.678	1285	2.353057			
Total	3066.422	1289				

Source: Authors Field work