School of Environmental Technology
Federal University of Technology
Minna, Niger State, Nigeria.

Volume 1

PROCEEDINGS OF 5th SETIC 2024

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Hosted By:
Federal University of Technology,
Minna, Niger State, Nigeria
ISBN 978-978-54580-8-4

ISBN 978-978-54580-8-4

Proceedings of SCHOOL OF ENVIRONMENTAL TECHNOLOGY INTERNATIONAL CONFERENCE 2024 (SETIC 2024)

22nd – 24th October, 2024

Federal University of Technology, Minna, Niger State, Nigeria

EDITORS IN CHIEF

E. B. Ogunbode

O. G. Ajayi

O. A. Kemiki

ISBN 978-978-54580-8-4

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Published by
School of Environmental Technology,
Federal University of Technology Minna.
PMB 65, Minna, Niger State Nigeria.

ISBN 978-978-54580-8-4

PREFACE

The School of Environmental Technology International Conference (SETIC 2024), organized by the School of Environmental Technology, Federal University of Technology Minna, Nigeria, is a prestigious platform that brings together experts from diverse fields to exchange knowledge and drive innovation. This year, the conference is held in collaboration with notable institutions, including the School of Architecture and Design, Lovely Professional University, New Delhi, India; Abubakar Tafawa Balewa University (ATBU), Bauchi State, Nigeria; the Architectural Engineering Department, Najran University, Najran, Saudi Arabia; Perch Inc Development Consultancy Services, Zimbabwe; Faculty of Health Sciences, Graduate Education Institute, Istanbul Gelişim University, Istanbul, Turkey; Robotics & Additive Technologies Innovation Research Cluster, Transport & Communication Institute, Riga, Latvia; Architectural Engineering Department, College of Engineering, University of Hail, Hail, Saudi Arabia; New Gate University, Minna, Nigeria; and the University of Law Business School, Birmingham, United Kingdom, to mention a few.

This year's theme, "Global Economic Revolution and the Resilience of the Built Environment in an Emerging World," seeks to explore the dynamic relationship between global economic shifts and the adaptability of the built environment. The theme emphasizes the necessity for resilience, sustainability, and innovation in the face of unprecedented challenges and evolving economic landscapes. The sub-themes of the conference delve into crucial aspects such as sustainable design, technological integration, disaster management, and the role of policy in shaping future infrastructures.

The response to this year's conference has been both enthusiastic and far-reaching, with participants from a wide range of countries, including Latvia, India, Turkey, United Kingdom, Malaysia, Saudi Arabia, Zimbabwe, South Africa, and beyond. The hybrid nature of the event offering both virtual and physical participation has enabled an even broader exchange of ideas and perspectives. The conference serves as a vibrant platform for professionals, academics, and researchers to engage with cutting-edge developments in the built environment and related fields, fostering collaborations that will shape the future of global practice.

A wide range of papers, spanning science, engineering, and the social sciences, have been presented at this year's event, highlighting the interdisciplinary nature of challenges we face and the solutions to these challenges.

We would like to express our deep gratitude to the SETIC 2024 Conference Organizing Committee (COC) for their unwavering dedication and hard work in making this conference a resounding success. We are confident that this event will inspire all participants and leave a lasting impact on the field

ACKNOWLEDGEMENT

The success of SETIC 2024 is built upon the foundation laid by the previous editions of the School of Environmental Technology International Conference held in 2016, 2018, 2020, and 2022. We owe a great deal to the unwavering support and commitment of many, particularly the Vice-Chancellor of the Federal University of Technology, Minna, and the Dean of the School of Environmental Technology, alongside Dr Dodo Y. A., Dr Ajayi O. G., Dr Moveh S., Dr Kayode I. Adenuga and other esteemed colleagues whose efforts has been instrumental to this success.

It is my privilege, on behalf of the Conference Organizing Committee (COC), to extend a big thank you to all that attended the 5th Biennial SETIC, held between October 22nd to 24th, 2024. We are grateful for the opportunity to witness this grand event, now enhanced by the hybrid format, accommodating both physical and virtual participation—an innovation born from the challenges of the global pandemic.

This year's conference had serves as an international platform where scholars, professionals, and practitioners in the built environment and allied fields converge to tackle critical issues around the theme "Global Economic Revolution and the Resilience of the Built Environment in an Emerging World." The conference offered an opportunity to share best practices, theories, and concepts, fostering meaningful discussions that can shape future research and industry practices.

We were honored to have our distinguished keynote and guest speakers:
Prof. Kamuzhanje Joseph, Perch Inc. Development Consultancy Services, Zimbabwe.
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Dr. Ahmed Osman Ibrahim, Associate Prof. Architectural Engineering Dept., College of Engineering, University of Hail, Hail, Saudi Arabia.

Additionally, we extend our appreciation to the esteemed panelists that participated in the Round Table Talk on "Role of the Built Environment in Promoting Security Food Security (The Role of Building Integrated Agriculture [BIA]) in persons of Assoc. Prof. Dr. Habiba Atta (Nigeria), Assoc. Prof. Dr. Samuel Moveh (Latvia), LAr. Ts. Dr. Nurzuliza B. Jamirsah (Malaysia), Arch. Abdulmalik Aminu (Nigeria) and our amiable moderator, Asst Prof. Yakubu Aminu Dodo. The session with them on innovative architectural and urban design solutions for food security was insightful as it addresses pressing needs in the built environment.

With over 150 papers covering the twelve subthemes of the conference, SETIC 2024 was engaging and enriching experience. Through parallel sessions and poster presentations, participants had the chance to delve into key issues surrounding Global Economic Revolution and the Resilience of the Built Environment in an Emerging World. All attendees were believed to have made use of most of the discussions, collaborations, and networking opportunities available to them.

In closing, I would like to express my sincere gratitude to the Dean of the School of Environmental Technology, the Conference Organizing Committee (COC), and the entire School for their trust and support. To our reviewers and committee members, thank you for your dedication and hard work in making this event possible.

Wishing everyone the best and memorable experience as SETIC 2024 lives on in our heart.

Thank you, and God bless you all.

Assoc. Prof. Ogunbode E. B.
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This is to confirm that all papers included in the SETIC 2024 Conference Proceedings have undergone a rigorous peer review process. This process entailed an initial abstract review, followed by a blind review of the full papers by at least two independent referees. The reviewers' feedback was then communicated to the authors for revisions, after which the revised papers were thoroughly evaluated by the Scientific Committee to ensure they meet the highest standards of scholarly quality.

In accordance with the policy of the School of Environmental Technology International Conference (SETIC), only papers that have successfully passed this comprehensive review process and met the requisite criteria for academic integrity are accepted for publication in the conference proceedings. The final decision for publication is based on the recommendations of both the Reviewers and the Scientific Committee.

Selected papers from the conference proceedings will also be considered for publication in reputable academic journals.

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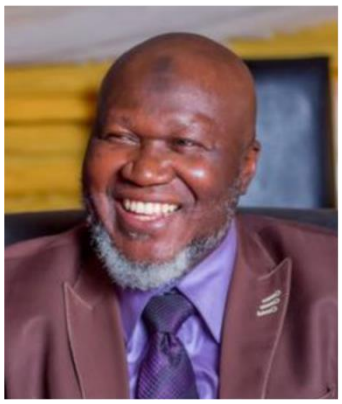

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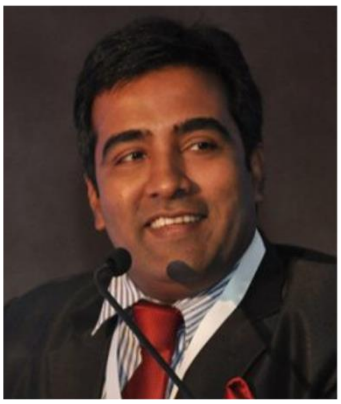

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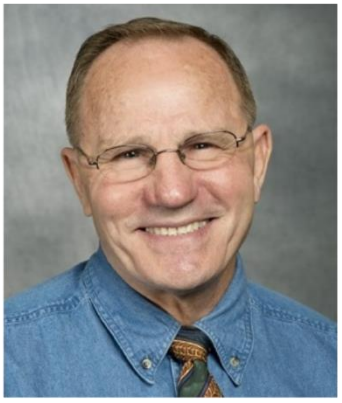

Prof. William Mosier

Faculty Of Health Sciences,
Graduate Education Institute,
İstanbul Gelişim Üniversitesi
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School of Environmental Technology International Conference Proceedings

ISBN: 978-978-54580-8-4

Received: 30 June 2024; Accepted: 04 October 2024; Available online: 07 November 2024

Volume 1 proceedings

Effects of Demographic Features on Household Residential Mobility in Bida

Samuel, J[1,2], Kemiki, O.A[1], Ajayi, M.T.A[1], Musa, H.D[3], Olawale, A.A[3]

[1] Department of Estate Management and Valuation, Federal University of Technology, Minna, Nigeria

[2] Department of Estate Management and Valuation, Federal Polytechnic, Bida, Nigeria

[3] Department of Urban and Regional planning, Federal University of Technology, Minna, Nigeria

jonathansamuel05@gmail.com

Abstract

This study examined the impact of demographic characteristics on household residential mobility in Bida, Nigeria. Residential mobility, a critical aspect of urban dynamics, is influenced by various demographic factors including age, income, education level, household size, and employment status. Through a descriptive survey approach, the study administered questionnaires on 385 residents of selected neighbourhoods in the study area with 276 questionnaires, indicating 83.6, returned valid for analysis. The collected data were analysed descriptively with frequency tables, percentage distribution and mean values. Findings of the study indicated a steady pattern of residential mobility across the selected neighbourhoods with high income earners more susceptible to mobility than their low-income counterparts. It was further observed that highly educated and younger households exhibit greater mobility, often seeking improved housing conditions and employment opportunities. In contrast, lower-income households tend to have lower mobility rates, constrained by economic limitations and affordability issues. This implies that economic demographic feature (income, employment and home ownership status) is more effective than social features (age, marital status, religion, cultural and social ties) in determining residential mobility (weighted mean score of 3.55 for social features and 3.66 for economic features). The study highlights the importance of understanding demographic influences on residential mobility to inform urban planning and housing policies aimed at fostering equitable and sustainable urban development by concluding that demographic features indeed influence residential mobility pattern overtime. The need for policy formulation such as improvement of economic possibilities, encouragement of affordable house ownership, and the promotion of education and skill development are recommended.

Keywords: Bida, Demographic Features, Household, Residential Mobility, Urban Planning

1. Introduction

In urban sociology and human geography, residential mobility is characterised either by the frequency or causes of family relocations, thus making it an important field of research (Coulter *et al*., 2016). Numerous demographic characteristics, including age, income, education level, family structure, and ethnicity, are closely associated with this phenomenon. These demographic factors are crucial in determining whether to relocate, where to live, and how frequently to move (DeLuca *et al*., 2019; Lin and Wei, 2023). In this regard, younger people and higher-earning families tend to be more mobile because they have more financial resources and less social ties, whereas elderly folks tend to be less mobile because of deeper community ties and health concerns. Comprehending the relationship between demographic attributes and residential mobility might provide significant perspectives on housing policy, urban development, and social equality (Coulter *et al*., 2016; Fleming, 2018).

In addition to being a social phenomenon, household residential mobility has a big impact on local economies, housing markets, and urban planning (Flournoy, 2020; Ajayi *et al*., 2015). The source location tends to witness a decline in population and economic activities while the potential destination is poised to witness more demand for goods and services as an externality of the population influx (Oluwole, 2013). Residential mobility is significantly influenced by demographic characteristics such household income, work position, and educational attainment (Causa and Pichelmann, 2020). Higher-income households typically relocate more frequently in search of better jobs, better housing, or better amenities. On the other hand, lower-class households could have obstacles that restrict their capacity to move around, such a lack of cheap housing alternatives or unstable finances (DeLuca *et al*., 2019; Schouten, 2021). Policymakers may create focused interventions that address housing affordability, encourage economic integration, and support sustainable urban expansion by analysing the economic elements of demographic impacts on mobility.

Residents' residential mobility has a significant impact on the social dynamics of a community (Pagani *et al*., 2021). Age, ethnicity, and family structure are examples of demographic characteristics that influence the variety of movement patterns that in turn influence the stability and cohesiveness of a neighbourhood (Méndez *et al*., 2021). While single professionals may choose to relocate to metropolitan locations with thriving cultural and job possibilities, families with small children frequently prioritise migrating to areas with superior schools and safer settings (Jones and Dantzler, 2021). Due to things like housing availability, community networks, and discrimination, racial and ethnic minorities may move in diverse ways (Kull *et al*., 2016; DeLuca *et al*., 2019).

Effective urban governance and growth strategies depend on the interaction between residential mobility and demographic aspects, as seen from a planning and policy viewpoint (Bernelius and Vilkama, 2019). The influence of demographic changes on residential mobility, such as ageing populations, rising immigration, or shifting family patterns, must be considered by planners and policymakers (Stoker *et al*., 2021). For instance, the need for more accessible housing and healthcare services due to the ageing population may affect residential choices and mobility rates. Policies that assist integration and housing access may be necessary for immigrant groups (Galaskiewicz *et al*., 2021). Comprehending these demographic factors facilitates the formulation of adaptable housing regulations, transit schemes, and community amenities that suit a range of requirements and foster just urban settings (Warner and Zhang, 2022). This strategy makes sure that urban expansion is equitable, sustainable, and advantageous to all locals.

Studies pertaining to residential mobility often emphasise the importance of demographic variables in determining patterns of travel and housing choices. A substantial amount of research indicates that age has a significant role in determining mobility, with younger people and families moving around their homes more frequently than older ones (Li *et al*., 2022). Younger people's pursuit of employment prospects, educational chances, and lifestyle choices are sometimes blamed for this tendency, whereas elderly persons tend to remain immobile and not relocate outside the existing neighbourhoods because of established community ties and social support and health concerns (DeLuca *et al*., 2019; Ronald and Lennartz, 2019; Salvati and Benassi, 2021; Li *et al*., 2022.). Mobility has also been demonstrated to be influenced by educational attainment and income levels, with more mobile people typically being more educated and having higher incomes (Davidai and Gilovich, 2015). This association is frequently associated with these groups' higher flexibility in accessing other housing markets and their capacity to cover relocating expenses (DeLuca *et al*., 2019; Schouten, 2021; Li *et al*., 2022). These results from the body of literature demonstrate the intricate relationship between demographic characteristics and residential choices, highlighting the necessity of localised research to comprehend these dynamics in particular contexts like Nigeria's organically growing town of Bida.

Emerging literatures highlights certain elements impacting residential migration in the context of emerging nations, including Nigeria. According to research, these regions' migration patterns are greatly impacted by infrastructure deficits, housing shortages, and economic restrictions (Okeke *et al*., 2021; Adedeji, 2023). For instance, financial constraints and a dearth of cheap housing alternatives frequently limit the mobility of lower-income households in Nigerian towns and cities (Efobi, 2021; Yakubu *et al*., 2023). Furthermore, community relationships and cultural preferences can affect residential stability and migration, therefore ethnic and cultural factors also come into play (Adebayo and Omololu, 2020). Addressing the unique issues in Bida, where socioeconomic and cultural dynamics may influence residence mobility differently than in more developed areas, requires an understanding of these localised elements.

The Push-Pull Theory of Migration, which was first introduced by Everett Lee in 1966, provides a theoretical framework for comprehending residential mobility by classifying the elements that push people to relocate (pull factors) and draw them to new places (push factors) (Safeer and Abbas, 2023). Negative features of the existing living environment, such as unemployment, subpar housing conditions, high crime rates, and a lack of facilities, are often considered push factors. Pull factors, on the other hand, are the alluring features of possible new locales, such greater employment prospects, better housing, better educational possibilities, and a safer environment (Wapwera and Gajere, 2017; Igwedibia and Ezeonu, 2023). This theory allows for a detailed examination of the unique demographic characteristics impacting household decisions to migrate, which makes it especially pertinent to the study of residential mobility in Bida, Nigeria. For example, younger, better educated people may be 'drawn' to other metropolitan centres by better work chances and 'pushed' by the lack of job prospects (Sumberg *et al*., 2021). In a similar vein, low-income households may be attracted to more cheap housing options elsewhere and pushed by substandard housing circumstances elsewhere (Flournoy, 2020). This study may systematically identify and classify the many demographic elements influencing residential mobility in Bida by utilising the Push-Pull Theory. This will give policymakers and urban planners important insights on how to successfully handle these dynamics. With this strategy, interventions may be specifically designed to reduce push causes and increase pull factors, promoting sustainable urban growth and raising the standard of living for locals.

Demographic features have impacted the opportunities and constraints associated with residential mobility in Bida, Nigeria. The Nupe Kingdom's headquarters, Bida, is a mid-sized organic town in Nigeria with a diversified population that ranges in income, educational attainment, and ethnic makeup. Furthermore, residential mobility in Bida has a variety of effects that impact the town's long-term growth possibilities as well as its socio-economic fabric. For example, younger, more educated people may be more likely to relocate in pursuit of better work or educational opportunities, which might result in a brain drain that impedes local economic progress. In order to address these issues, policymakers and urban planners must have a thorough understanding of the demographic dynamics at work and develop inclusive policies that meet the diverse needs of Bida's residents. This will help to promote a balanced and resilient urban environment, which is essential for promoting sustainable growth, equitable access to resources, and an improved standard of living for locals.

This study aims to examine how household residential mobility in Bida, Nigeria is influenced by demographic variables. Through an examination of the ways in which factors like age, family structure, income, education, and ethnicity impact the frequency and causes of household moves, this study attempts to offer a thorough grasp of the trends and factors influencing residential mobility in Bida. The results will help shape housing and urban planning regulations, resulting in more practical approaches to sustainable urban growth and better living conditions for Bida residents.

2. Methodology

The historic traditional Nupe settlement of Bida town, located in north central Nigeria, is the site of this investigation. The town serves as the capital of the Nupe-speaking culture, which is headed by the Emir in his traditional capacity as well as the Chairman of the Local Government. The town according to Mohammed and Sulyman (2019) has 266,008 populations and a total built-up area of around 67.45 km^2, as per the most recent national population Figures census (Mohammed and Sulyman, 2019). This population was projected to be 315,934, using 3.5 annual growth rate. A total of 385 sample size was adopted for this study by using the Krejcie and Morgan (1970) sample size calculator. The study adopted the quantitative descriptive design hinged on collection of quantitative data such as household demographic features, building status and mobility data through structured questionnaires administered on residents of the selected residential properties completed within the last two decades. The study area was divided into three distinct clusters of neighbourhood densities (high, medium and low) with properties behind polytechnic classified as high density; those around Pichi road falls under medium density and the rental properties around GRA were classified as low density. A total of 276 questionnaires were returned valid for analysis from the administered closed ended questionnaires to respondents/occupants of residential properties identified across the selected neighbourhoods as collated from Usman Maishera and Associate Estate Management firm via a stratified random sampling approach for the three densities as a means of data collection. With the aid of a five-point Likert scale measurement criterion, the collected data were then descriptively analysed by using mean score for ranking the demographic and building ownership features and presented in frequency tables. The data collected were presented in frequency tables and percentage.

3. Results and Findings

3.1 Respondents Demography

Findings revealed that majority of the respondents to the study's instrument are male accounting for 69.6% and the remaining 30.4% are female as contained in Table 1. Also, 8.7% are within the age of 18 - 25, 18.5% falls within 26 - 40 years, 37.7% falls within 41 - 55 years while 30.4% are within the age range of 56 - 70 and the remaining 4.7% minority are above 70 years. In the same vein, 53.2% of the respondents practice Islam as religion while 38.9% are Christians and the remaining 7.9% are traditionalist. More so, results indicated that majority of the participants 40.9% are of the Nupe ethnicity, 15.2% are of the Hausa/Fulani extraction while 13% are Igbo 21.7% are Yoruba and the remaining 10.2% are from other ethnic extractions across Nigeria. In relation to marital status, result revealed that 14.1% are single, 72.8% are married while 4.3% are divorced and the remaining 8.7% of the respondents are widowed. Furthermore, 19.6% had less than 5 household size, 20.3% falls within 5 – 10 household size, another 19.9% are from household with 11 – 15 individuals while 25% had a size of 16 – 20 individuals and the remaining 15.2% had a household size above 20.

In relation to educational background and qualifications as presented in Table 1; 26.1% had Secondary education, 15.2% had ND/NCE, 24.6% had HND/B.Sc., another 10.1% had M.Sc. while 6.2% had Ph.D. and the remaining 17.6% had no formal education. In the same vein, 38.8% of the participants are self employed, 30.1% are civil servant and the remaining 12.3% of the study's participants are unemployed and the remaining 18.8% are retired, giving a total of 87.7% of the participants engaged in one activity or the other. In addition, 17.6% generate less than ₦30,000

monthly income, 40.6% generates ₦31,000 – ₦60,000 per month, another 24.2% recorded monthly income of ₦61,000 – ₦90,000 while 9.1% made ₦91,000 – ₦120,000 per month and the remaining 8.3% had monthly income above ₦120,000.

Table 1: Respondents Demographic Features

Features	**Options**	**Frequency**	**Percentage**
Gender	Male	192	69.6
	Female	84	30.4
Total		276	100
Age	18 – 25	24	8.7
	26 – 40	51	18.5
	41- 55	104	37.7
	56 – 70	84	30.4
	Above 70	13	4.7
Total		276	100
Religion	Islam	147	53.2
	Christianity	88	31.9
	Traditionalist	41	14.9
Total		276	100
Ethnicity	Nupe	113	40.9
	Hausa/Fulani	42	15.2
	Igbo	36	13.0
	Yoruba	53	19.3
	Others	28	10.2
Total		276	100
Marital status	Single	39	14.1
	Married	201	72.8
	Divorced	12	4.3
	Widowed	24	8.7
Total		276	100
Household size	< 5	54	19.6
	5 – 10	56	20.3
	11 – 15	55	19.9
	16 – 20	69	25
	Above 20	42	15.2
Total		276	100
Education	SSCE	72	26.1
	ND/NCE	42	15.2
	HND/B.Sc.	68	24.6
	M.Sc.	28	10.1
	Ph.D.	17	6.2
	No formal education	49	17.6
Total	276	100	
Employment	Self employed	107	38.8
	Civil servant	83	30.1
	Unemployed	34	12.3
	Retired	52	18.8
Total	276	100	
Income (₦)	< 30,000	49	17.6
	31, 000 – 60,000	112	40.6
	61, 000 – 90,000	67	24.2
	91,000 – 120,000	25	9.1
	> 120,000	23	8.3
Total	276	100	

Source: Field survey, 2024

Results illustrated in Table 2 represent building status and mobility where 50.4% of the participants attested to occupying a rented apartment, 21.4% resides in self-owned property and the remaining 28.3% of the study's participants are residents of compound family houses. However, 44.6% of residents in rented properties seldom move/relocate while 29.5% attested to often relocating and the remaining 25.9% submitted that they quite often relocate/move from the buildings occupied. In the same vein, 28.6% if the respondents have resided in their current residence for less than three years, another 30.1% have been residents for 3 - 5 years 16.7% have been in the building for 6 - 9 years while 13.8% have been reading for 10 - 15 years and the other 10.9% have been occupying the same building for more than 15 years. In addition, 38.8% of the buildings are tenement type while 30.4% are bungalow, 24.6% are compound type of resident and the remaining 6.2% are other categories like duplex among others.

Table 2: Building Status and Mobility

Features	Options	Frequency	Percentage
Building ownership status	Rented	139	50.4
	Self-owned	59	21.4
	Family compound/house	78	28.3
Total		276	100
Building type	Tenement	107	38.8
	Bungalow	84	30.4
	Compound	68	24.6
	Others	17	6.2
Total		276	100
Frequency of Mobility	Seldom	62	44.6
	Often	41	29.5
	Quite often	36	25.9
Total		276	100
Length of stay (in years)	< 3	79	28.6
	3 – 5	83	30.1
	6 – 9	46	16.7
	10 – 15	38	13.8
	Above 15	30	10.9
Total		276	100

Source: Field Survey, 2024

3.2 Influence of Demographic Features on Residential Mobility

Demographic features are often classified into social and economic features with each having its unique distinguishing features and resultant effect in residential mobility. As presented in Table 3; marital status ranked highest with 3.76 mean values among social demographic factors influencing residential mobility. This is followed by education and age respectively having 3.69 mean values while the least ranked social features ethnicity and religion with 3.39 and 3.35 mean score respectively. In the same vein, income and home ownership both ranked highest with 3.85 mean score as an economic demographic features influencing residential mobility, followed by employment status with 3.69 mean score. Taste and preference alongside infrastructural facilities however, ranks lowest with 3.51 and 3.49 mean score respectively as an economic factor influencing residential mobility in the study area. However, the cumulative mean score of 3.66 observed for economic demographic features influencing residential mobility ranks it higher than social demographic features with 3.55 cumulative mean score. It is therefore inferred, that economic induced demography has more impact on residential mobility in the study area.

Table 3: Influence of Demographic Features on Residential Mobility

	Statements	Mean	Rank
SOCIAL	Gender	3.42	4th
	Age	3.69	2nd
	Marital status	3.76	1st

	Religion	3.35	6th
	Ethnicity	3.39	5th
	Education	3.69	2nd
	Cumulative Mean	3.55	
ECONOMIC	Income	3.85	1st
	Employment	3.69	3rd
	Home ownership	3.85	1st
	Housing types	3.58	4th
	Taste and Preference	3.51	5th
	Infrastructure facilities	3.49	6th
	Cumulative Mean	3.66	

Source: Field Survey, 2024

4. Discussion of Findings

According to the demographic profile of participants in this study; the population is primarily male and is well-represented in a number of age categories, with the majority of respondents being between the ages of 41 and 55. The distribution of faiths is heavily weighted towards Islam, with a lesser percentage practicing traditional religions and a significant percentage identifying as Christians. Majority are from the Nupe ethnic section, with considerate size of other ethnicity in Nigeria like Hausa/Fulani, Igbo, and Yoruba. The majority of people are clearly married, with only a tiny percentage of people being single, divorced, or widowed. Household sizes vary, with the largest segment having between 16-20 members resulting from the predominantly polygamous nature of the study area where a man is entitled to more than one wife. The study's respondent demographics, which is dominated by men, a range of age groups, and a diversity of religious and ethnic affiliations, are consistent with findings from prior Nigerian studies on residence migration.

Similar research has emphasised the impact of age and gender on residence preferences, with middle-aged people frequently exhibiting constancy in their choices as observed by Pagani *et al*. (2021) while exploring the roles of housing functions on residential mobility in Switzerland. Residential choices are influenced by religious and ethnic connections, especially in the case of Muslim and Nupe populations. These findings are consistent with research conducted in Nigeria on urban issues like that of Oluwole (2013) while sorting the socio-spatial indices of residential mobility in Kaduna metropolis, Nigeria alongside Wapwera and Gajere (2017) while exploring the correlation between ethno-religious urban violence and residential mobility in Nigeria. The high percentage of married people and the wide range of household sizes are in line with larger studies that demonstrate how marriage and family size have a substantial impact on residential stability and mobility (Kull *et al*., 2016). Given that demographics like age, ethnicity, religion, and family size frequently have an impact on people's housing selections and preferences, these characteristics may have an impact on patterns of residential mobility. Gaining knowledge about these demographic variables might enable stakeholders and policy makers to understand the effects of housing provision on regional residential shifts and migration. These statistics show that residential migration patterns in Nigeria are significantly shaped by demographic considerations.

Important insights into the impact of demographic determinants on residential mobility are provided by the data on educational background, employment status, income, and housing typology. The survey reveals a varied educational profile, with a considerable proportion of participants possessing tertiary education or advanced degrees, while a noteworthy proportion do not have any formal education. There are differences in employment status; most of the respondents are self employed or engaged in public service as civil servants, while the unemployed and retirees make up a smaller percentage. Residential patterns show that although a sizable portion of participants live in rental flats, a sizable portion owns their own property or lives in family compounds. Renters' relocation habits vary; many move regularly or seldom, while sizable portion of the participants have been in their present home for a number of years.

These results are consistent with previous research on the impact of demographic variables on housing mobility. Studies by Schulz *et al*. (2008) and Kull *et al*. (2016), for example, highlight the importance of education and income levels in influencing residence choices and stability. While lower income and educational attainment are linked to more mobility and rental housing, better education and steady work are frequently correlated with more permanent housing as concluded by Causa and Pichelmann (2020) in a similar study conducted across OECD countries. According to Gousia *et al*. (2021), economic considerations and the employment status equally have an impact on

the type of house and length of residency. The study's results on different housing tenures and patterns of movement are consistent with larger trends similar to other urban areas in Nigeria, where mobility and residential stability are significantly influenced by economic and educational characteristics.

The study reveals that demographic factors influencing residential mobility are divided into social and economic categories, each with distinct impacts. The most significant socioeconomic demographic element influencing residential mobility is married status; it is followed by age and education, while religion and ethnicity have less of an effect. On the other hand, it is evident that economic variables have a greater impact on mobility; the most important ones being work position and income and property ownership. In contrast, taste and preference as well as physical infrastructure have less of an impact. Economic variables have a cumulative mean score of 3.66, which is significantly higher than social factors' score of 3.55. This suggests that residential mobility in the research region is more influenced by economic conditions. This is consistent with the body of research that demonstrates that economic factors (income and property ownership) have a greater impact on residential mobility than social factors (religion or ethnicity) (Mridha, 2020; Salvati and Benassi, 2021; Zou and Deng, 2022).

5. Conclusion and Recommendations

In conclusion, this research has provided valuable insights into how demographic variables influence household residential mobility in Bida, Nigeria. The findings underscore that while both social and economic factors play a role, economic variables such as employment status, income and home ownership have a more pronounced impact on residential mobility compared to social factors like marital status, education, age, ethnicity, and religion. The study emphasizes that individuals who own an adequate residence and have a better income are less likely to move around a lot, which indicates that their residential choices are more solid. On the other hand, while still important, variables like marital status and level of education have less of an impact on patterns of migration than economic situations. This is consistent with a larger body of research indicating that residential selections are frequently influenced more by economic stability than by social demography. Therefore, in order to improve residential stability and address mobility issues, policymakers and urban planners in Bida should concentrate on enhancing economic circumstances and access to house ownership.

It is therefore recommended that improvement of economic possibilities, encouragement of affordable house ownership, and the promotion of education and skill development be the main priorities in order to improve residential stability in Bida, Nigeria. Reducing the high mobility associated with rental properties can be accomplished by expanding work possibilities and making cheap homes more accessible. Furthermore, social considerations in housing regulations and local infrastructure development can support a range of demographic demands and improve general quality of life, resulting in more stable residential patterns.

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