

**ANALYSIS OF MOBILITY PATTERNS OF THE ELDERLY IN RURAL AREAS OF
ONDO STATE, NIGERIA**

BY

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Thesis submitted to the Department of Geography in Partial Fulfilment of the requirements for
the award of the Degree of Doctor of Philosophy in Geography in Obafemi Awolowo University,
Ile-Ife, Nigeria

2016

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DEGREE: DOCTOR OF PHILOSOPHY (Ph. D)

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This thesis has been read and certified as meeting the requirements of the University for the award of Doctor of Philosophy degree in Geography.

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DEDICATION

This thesis is dedicated to the glory of Almighty God and also to the memory of my late parents
Mr. Joshua O Afe and Mrs. Omfe mi Afe

OBAFEMI AWOLOWO UNIVERSITY

ACKNOWLEDGMENTS

I give glory to Almighty God who has bestowed on me an all round favour throughout the period of this programme. I am sincerely and wholeheartedly grateful to my distinguished supervisor, Dr. O A Ajala who rendered invaluable guidance, suggestions and constructive criticisms towards the successful completion of this thesis. My sincere appreciation also goes to Prof. Aoba, O (Rtd), for his wonderful and valuable contributions to the success of this thesis before he retired. Thank you, sir.

My sincere gratitude also goes to Dr. N O Adeoye, the Head of Department of Geography, for his support during the course of my studies at this institution. My special appreciation goes to Professors O Ekanade (Rtd), O O Ogunkoya, F A Adesina, A S Aguda, Jide Kufoniyi, T O Odekunle and Remi Adediji, for their encouragement and supports during the period of this work. I want to express my profound gratitude to Drs. O Babatimilehin, O O Oriogunje, A M Olayiwola and D Baloye for their words of encouragements.

My special thanks also go to Dr and Mrs. Oawole, M O for their assistance, tireless efforts, love and support towards the success of this work. Also, I cannot but appreciate the efforts of Dr Bayo Eudoyin for his wonderful contributions. I am also grateful to my colleague Mrs. Joy Nwaezeigwe and her wonderful husband, M. P.I. Nwaezeigwe, for their supports to the success of this work. I would like to express my gratitude to M. Oapojun, O M M. Adolabi, Mr. Babalola, Yomi and M Adeyefa a colleague who is currently undergoing his Ph.D

programme in the Department too. I also appreciate all non-academic staff of the Department for their support during this programme.

I am grateful for the support and words of encouragement from my colleagues and the senior colleagues in the Department of Geography and Planning Sciences, Adekunle Ajasin University, Akungba Akoko especially Prof. and Mrs. E F Ogunbodede, Dr. Arihigbola, A. Dr. Fatunsi n Afolabi, Dr. (Mrs). Hudoyin, M O Dr. (Mrs) Allen, A. The Head of Department for her understanding whenever I am away from work and also others that I did not mention their names. My appreciation also goes to my good friend and my BEST MAN Mr. Tiamiyu for his assistance morally and financially. To my students that assisted me during data collection especially; Adelerin Esther, Aladejana Ayo, Lekan Famole, Omtayo Kayode, Seye, Seyi, Deborah Bamidele and others, I say thank you for your support.

My unreserved appreciation goes to my friends for their support at one stage or the other in the writing of this work among which are Mr. Sunmola, R Seye Aladejomi, Olu Adebayo, Bayode Ajayi and Mr. Tobi (OAU)

My thanks also go to my Big brother, Mr. Femi Ale for his prayer, support and encouragement. May God Almighty take you to a higher ground and enlarge your coast too. I cannot but remember my in-law Hon. Mr. and Mrs. Adeyemi, ME(JP) for their supports. I pray that God in His infinite mercy grant unto you long life and prosperity. My appreciation also goes to Tope Adeyemi, Sister Hannah and My spiritual fathers, Pastor and Prophet Samson Oluwamodede (GO) PCCG Pastors Aluko, Emma, Mark, Ogunleye, Most Snr. Evangelist Peter Bolarinwa, Pastor Ore-ofe and Pastor Victor for their prayers to the success of my PhD programme. I pray that God will continue to strengthen you in mind and in spirit

(Amen).

Finally, I am sincerely grateful to my wife, Josephine Ouwafunmilola ALE for her love, patience, understanding and prayers and also to my children, Favour Fehintoluwa Ale, Okioluwa'Juwon Ale and Yetunde Ouwasewaola Ale for their love, patience and understanding during my graduate studies. Once again, I say thank you and God bless you all.

Adeniyi Samuel ALE

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ABSTRACT

The study examined the socio-economic characteristics and mobility characteristics of the elderly in the rural areas of Ondo State. It also identified mobility constraints of the elderly and examined the effects of transportation services on quality of life of the elderly population in the study area. These were with the view to determining the principal factors influencing the mobility of the elderly in the area.

Primary data were used for the study. The primary data were socio-economic characteristics, cost of transport, travel time and trip survey as well as the mobility characteristics of the elderly in the study area. The data were collected through a set of questionnaire, which were administered to the systematically selected elderly people (age 60 years and above) in the area. The sampling was achieved using a multi-stage sampling procedure. First, three Local Government Areas (LGAs) were randomly (balloting method) selected from each of the three existing senatorial district in Ondo State. This translated into nine LGAs. Second, the settlements within each of the selected LGA were stratified into three classes using population figure (i.e. settlements with population less than 2000, 2,100 - 5,000 people and above 5,000). This resulted to a total of 27 settlements (i.e. 3 settlements in each of the three existing senatorial districts). Finally, 10 % of the elderly (both male and female of age 60 years and above) population were selected for the study. Data on the socio-economic and mobility characteristics were analyzed using simple percentage distribution and t-test statistics while the mobility constraints were ranked using the principal component analysis (PCA).

The results showed that the elderly in the area were characterized by about 53.3 % males and 46.7 % of females who mostly (77.5 %) were within the age group of 60 – 80 years

and above. They were mostly farmers (45.3 %) and traders (31.8%), about 51.2 % of who earned below ten thousand naira (N10, 000) monthly. The examination of the mobility constraints of the elderly indicated that most important destinations are the religious centres (27.9%), relatives and friends (21.4%), farms (20.5%) and market (13.8%) and that the most important means of mobility was trekking (82.7%). The most important (first five by rank) mobility constraints as ranked by the results of the PCA were poor road condition, health or physical condition of the elderly, high cost of transport, poor safety consideration and poor quality of services. Furthermore, the measures of quality of life of the elderly in the area were significantly ($t \leq -3.02$, $p < 0.05$) related to conditions of transportation services, poor road, and physical capability of the elderly, travel mode and cost of transport.

The study concluded that the principal factors that influenced the mobility of the elderly in the area were the health or physical capability of the elderly, poor road condition and relatively high transportation cost.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Mobility or movement from one place to another is an inherent characteristic of any human society. Basically, mobility is an indispensable component of the economy and it plays a major role in spatial relation between locations (Ogunsanya, 2000). Mobility, according to Olawole and Aloba (2014), is a means of interaction between people and their immediate environment (urban or rural) to meet diverse fundamental needs. As people get older, the ability to move from place to place reduces, and becomes difficult, due to some factors, including inability to see clearly because of old age as well as poor economic status to finance their movement to their various destinations among others (Ipingbeni 2010). Mobility in urban areas may be quite different from that which takes place in rural areas with agrarian economy. In both economies, the movement of the elderly people (senior citizens) may be similar in some characteristics. For example, aging is a limiting factor of mobility to places both in urban and rural areas. Mobility, therefore, involves the need to reach and satisfy individual socio-economic, cultural and political activities, as well as the need to conduct daily activities, including visit to workplace, market, visiting friends and families (Aloba, 1985). In general, mobility is a critical condition for socio-economic developments and an important catalyst for rural transformation.

Mobility of various forms, in both developed and developing countries of the world, plays a significant role in enhancing independent liveability, having access to medical services, market, as well as having contact with people outside one's immediate environment. According

to Adetunji (2007), mobility is a means of reaching and satisfying individual needs in different places because these activities are not located in the same point over space. Mobility involves trips from home to work, schools, postal services, recreation, health centres, shops, markets and banks as well as visiting relatives (Ogunsanya, 2002).

The possibility and ability of people to meet or satisfy basic environmental requirements and or societal needs in a nearby point or over a given distance, call for human mobility over space (urban or rural areas). This is often because those things that determine a community's capacity to sustain itself are not available in one place; but drawn from various sources. As observed in previous studies by Aloba (1985) and Ogunsanya (2002), mobility is a phenomenon that pervades every aspect of human life. Factors that affect mobility of the elderly, however, may include consideration of the cost implications of the journey, available transport facilities, and required overall transport system within a given environment (Ogunsanya, 2002). Other factors include proximity to amenities and services, closeness to family members and friends, closeness to doctors and hospital or health services and inability to drive are important factors especially for the elderly people.

Most elderly people encounter mobility difficulties either because they can no longer drive (where they own personal cars), or board commercial vehicle to travel to places of interest within their locality (Gullette, 2006). This is so because, effective mobility within the rural environment is expected to support the aged population whose mobility and accessibility needs are yet to be met; therefore, enhancement of the elderly mobility should involve transport services for moving them to where and whenever they want to travel (Gullette 2006; Parker, Power, Roff, Alnan, Winsted, and Springate, 2007). In other words, mobility should be geared

towards ensuring a good level of accessibility and safety for all categories of the elderly people whose mobility is being slowed down by their age.

In Nigeria, the elderly travel is important because such elderly are connected to their respective social needs, goods and services (Olawole and Aloba 2014). Enhancing older people's mobility capacity, has been considered as an integral part of efforts to promote overall societal development (Cobb and Coughlin 2000; Glasgow 2000; Rosenbloom 2004; Kerschner, 2006; Gullette, 2006; Mittson, 2011; Olawole and Aloba 2014)

Furthermore, studies have shown that mobility of the elderly people has constituted major constraint to their quality of life in many developing countries of the world (Odufuwa (2006). Many of the developing countries are characterised by poor, inefficient transportation system and safety needs, poor nature of route with poor service delivery systems especially in the rural communities. According to existing studies (for instance, Rosenbloom 2004; Mittson, 2011), the proportion of the elderly persons living in rural areas is higher than those that are living in the metropolitan areas.

In Nigeria, over 55 % of the people live in the rural areas and this population vary with location in the country (National Population Commission 2003). Majority of the rural dwellers often possess limited economic and social status to transport themselves in comfortable means, but walk to their destinations in most cases (Ogunsanya, 2002).

Existing literature shows that the frequency, patterns, forms and structure of trips made by the rural elderly to various centres of activity, especially in the developing countries, are generally influenced and constrained by physical, demographic, cultural and socio-economic factors (Cobb and Coughlin 2000; Gullette 2006 and Mittson 2011). These factors in turn affect

waiting time, modal choice and cost of trip making by the elderly within and between rural communities (Gillet, 2006 and Mutton, 2011).

Elderly people are also generally vulnerable to the effects of the poor transport infrastructure that characterize most developing countries, including Nigeria. In Ondo State, studies on the mobility characteristics of the elderly people are almost non-existing although few studies exist in Nigeria. Except studies such as Hani (1993), Olayinka and Adekunle (2005), Olayinka and Alaba (2014) which focused on transportation of this group of vulnerable people, information is scarce about their behaviour and attitude to transport. Apart from the above, these studies concentrate on urban areas, hence, little is known about the rural elderly people and their mobility behaviours.