

CHAPTER TWENTY-ONE

MOBILITY FRIENDLINESS OF PUBLIC TRANSPORT FACILITIES AMONG THE ELDERLY IN LAGOS, NIGERIA

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Abstract

This study examined the mobility friendliness of public transport facilities for the elderly in Lagos, Nigeria. Data were collected through the administration of structured questionnaire on the elderly population and transport operators. The sample frame for the elderly evolved from the total average of the elderly at the various bus stops along the study area (Mile 12-CMS) during the hours of 3pm and 5pm (afternoon/evening peak period) on a particular week day. Multi-stage sampling was adopted in the administration of questionnaire. 12.7% of the sample frame was used as the sample size (137). The data collected were analyzed, using descriptive and inferential statistics. Frequency distribution of trips, access time and surface covering from residence to bus stops as well as availability and adequacy of public transport facilities were presented. This was followed by an examination of the relationship between public transport and mobility demands on the elderly. Relationship between public transport facilities and elderly mobility demands was investigated through Spearman's rank correlation co-efficient. The study revealed that there was a positive statistically significant relationship between rating of surface covering and elders' travel frequency ($n=137$, $r=0.178$, $p>0.005$). This implies that the better the surface covering, the higher the trip frequency of the respondents. Also, there is a statistically significant relationship between the curbs and stairs among others. There is the to improve the mobility of the elderly in the study area among other recommendations

Introduction

The transportation parlance that 'immobility perpetuates poverty' is aptly exemplified by the plight of the elderly in major cities in Nigeria. According to Roberts and Babinard (2006) the elderly population, who usually exhibit physical challenges, are more likely to be poorer than the rest of population in low income countries. The livelihoods and economic opportunities of the elderly population are often worse because they are more likely to be excluded from services, social contact and community activities; thereby increasing the risk that these disadvantaged members of our society will further fall into poverty.

In Nigeria, access to personal cars is very limited as over 80% of the households in the country do not have personal vehicles (Badejo and Bawa-Allah, 2000). Hence transport services are largely provided by public transport. The public transport service in Nigeria can largely be described as uncoordinated, unreliable and frustrating while the vehicles are regarded as mobile 'coffins' due to their deplorable conditions. Particularly vulnerable to the poor public transport situation are the elderly who due to reducing physical strength find it difficult to satisfy their mobility needs when compared with the younger members of the society (Badejo, 2000).

The challenges to the mobility of the elderly population is perhaps more precarious in evolving megacities such as Lagos city in view of the burgeoning population growth and attendant urban sprawl which usually results in the inability of public transport to provide adequate transport services for the emerging peripheral urban communities. The unplanned nature of these settlements means that the residents cannot be efficiently serviced with public transport facilities and services. Furthermore, the uncoordinated nature of public transport is likely to result in low patronage, thereby reducing the attractiveness of such fringe location to public transport operators. Consequently, the accessibility of the

inhabitants of these areas, most especially the elderly, to public transport services is further worsened.

The exclusion of the elderly also imposes direct costs on society by reducing the economic and social output, not only of the elderly population, but also those who care for them and whose productive employment may be reduced as a result (Metts, 2000). Therefore, the provision of an inclusive transport system which enhances the mobility of the elderly will help to alleviate the isolation, vulnerability and dependency associated with the elderly population. It is in view of the foregoing that the paper investigates the mobility friendliness of public transport facilities of the elderly in Lagos, Nigeria.

Literature Review

According to Hetzel and Smith (2001), 35 million people aged 65 years or older were counted in the 2000 census. This is an increase of 12% in the age group since the 1990 census count, in which 31.2 million people aged 65 years and above were enumerated. Similarly, the European Conference of Ministers of Transport (ECMT) (2001) stated that the number of older people represents a growing percentage of the total population. The average percentage of population aged 65 years and over in ECMT member and associated countries increased from 10.6% in 1990 to 13.1% in 2000. It is anticipated that the population of this age cohort will rise to as much as 27.1% by the year 2050. In the US, the women outnumbered the men in the 65 years and older population as at 2000 and this trend is expected to continue into the foreseeable future (Wallace and Franc, 1999; Hetzel and Smith, 2001).

Skinner and Stearns (1999) describe ageing as the 'slow, but cumulative building of physical and cognitive deficits'. The ageing process introduces the possibility that functions such as vision, hearing, sensation, cognitive and motor abilities may become impaired (Straight and Jackson, 1999). Examples of impairments include: decline in peripheral vision and short term memory loss. These can affect a driver's ability to process information when merging with traffic or changing lanes.

Similarly, Skinner and Stearns (1999) opined that there is a strong relationship between ageing and motor vehicle operation. Failing health and fragility are generally products of ageing and appear to be the main causes of elevated risks to older drivers. However, some older people are able to recognize physical and mental diminishments and adjust their driving behaviour accordingly. Such adjustments may include: less night driving, avoiding heavy traffic areas and high speed roadways, driving with a navigator or passenger and reduction in automobile usage. The deterioration of physical ability alone does not translate into higher crash rates. It is generally the inability to acknowledge or recognize the deterioration and the absence of adjustments to driving to counter the deterioration (Skinner and Stearns, 1999).

Bullard and Johnson (1999) believe that the decline in the use of public transport as well as walking to achieve mobility in the last decade can be adduced to the fact that public transportation systems are ordered as if the city centres were the major destination for residents, even in suburban areas. The new city landscape was designed for a highly mobile younger population and the dearth of alternative transportation to suburban service and commercial hubs make automobile travel an imperative for elders to maintain independence (Rosenbloom, 1993). This viewpoint was corroborated by Coughlin and Annalyn (1997) in a study which revealed that 75% of older Americans live in suburban areas where alternative forms of transportation are not readily available and the primary mode of transportation is the private vehicle.

While the challenges of urban structure and growth of the developing countries such as Nigeria are similar to the aforementioned, the ownership of personal vehicles by the elderly population contrasts sharply. In Africa, between 60 and 80% of urban dwellers use some form of public transport, walks or cycles (Serageldin and Barrette, 1993). The percentage of the population who own personal vehicles in Nigeria is just over 20% (Badejo and Bawa-Allah, 2000). Odufuwa (2006) also observed that about 88% of elderly respondents in a study had no access to private car and depended on public transport for intra and inter city travels. In a low income country, such as Nigeria, it is very unlikely that a

