

Gender Disparities in the Urban Public Transport

Subjects: Transportation

Contributor: Amatullah Abdullah

Gender and public transportation studies are critical for a nation's social and economic development, particularly in a developing country such as Nigeria. Men and women use public transportation due to their different social roles and economic activities. In other words, good public transportation improves or expands opportunities in health, education, and employment. Consequently, understanding the gender differences in accessibility will be crucial to enhancing existing transport services and helping design more efficient transport policies.

Keywords: gender disparities ; public transport ; travel patterns ; accessibility ; transport challenges

1. Introduction

In the 1990s, it became widely known that women and men have significantly different demand patterns for transportation services and that transportation sector interventions typically did not adequately address women's demands. The scope of the challenge and prospects were discussed in the context of poverty reduction and the relevance of gender equality ^[1]. Gender is commonly identified as a key explanatory factor for travel behaviour; since women's role in societal structure has changed in the past few decades, the question arises as to whether the "gender" factor still plays a decisive role in differences in mobility within the working population ^[2]. It is well known that travel behaviour is gendered. While there are differences in public transportation access between places, they all have one thing in common: women's travel patterns differ from those of men ^[3]. Generally, women travel shorter distances but spend more time travelling than males ^[4]. Since they make more non-work-related journeys, women make more and more complex trips than men. Women's journeys are often of longer durations than men's due to the prevalence of trip chaining. Even though women's travel habits are more complex than men's, women use public transportation more than men for similar journeys. ^[5] Gender disparities in daily mobility patterns have been largely explained by the role of men and women in society, resulting in distinct activity patterns and more complex trip chains, with a greater number of daily journeys, especially for non-work-related travels ^[6]. Although women's and men's access to mobility and transportation differ depending on age, socio-economic status, local culture, and other factors, there are widespread gender distinctions in Africa (particularly among lower-income groups) ^[7]. Women, on average, use public transportation more than men and are more reliant on it because they have less access to personal vehicles ^[8].

Globally, gender and socio-economic inequalities lead to differences between countries regarding access to places and different modes of transport. The UN Sustainable Development Goals 2030 recommend safe, accessible, and sustainable public transport, particularly for vulnerable road users. Several studies in the literature show that the evolution of transport is linked to the evolution of technology and planning; however, economic factors, lack of infrastructure and socio-cultural problems slow down the spread of sustainable mobility. Land use and transport planning are often related and connected by a cause-effect relationship: the historical growth of transport is, in this sense, driven mainly by other social factors, such as economic growth, spatial division of labour, large-scale social integration, and gender equality ^[9]. The socio-economic aspect derives from a disparity in wages between men and women. These differences are generally greater in low-income socio-economic areas, in agreement with Lecompte and Pablo ^[10]. They found that women generally travel less than men but spend more on transport than men, although their journeys may be shorter. This has led to less transport being accessible to the workplace. In addition, it has been found that there is a relationship between gender inequalities and lower socio-economic areas.

Women make up a significant share of the global population ^[11], yet gender dimensions in public transportation access have been among the least recognised urban transportation and development components in most developing nations. Inequalities in public transportation accessibility, safety, and security persist in many Nigerian cities. Kwan and Kotsev ^[12] found that demographic and socio-economic criteria, such as age, household size, education, driving license, automobile ownership, income, workplace, and accessibility, are the most prominent causes of varied disparities in urban mobility. According to Singh ^[13], it can be said that little attention is paid to how these inequalities affect the access, safety, ease,

and comfort of mobility for women, whose travel needs are genuinely different from those of men. However, challenges remain for the safety and comfort of women on public transport ^[14].

2. The Structure and Institutional Arrangement of Urban Transportation in Africa

Cities in Africa are rapidly expanding. In 2000, one out of three Africans lived in urban centres, and this figure is projected to be one out of two by 2030 ^[15]. As a growing percentage of the world population lives in cities, urbanisation in Africa has become one of the most important contemporary phenomena. In light of this tendency, urban transportation concerns are critical for meeting big urban agglomerations' passenger and freight mobility needs. Due to the various forms of transportation, the numerous sources and destinations, and the volume and variety of traffic, transportation in metropolitan areas is highly complicated. Public transport is an essential mode of transportation, particularly in densely populated areas ^[16]. Contemporary cities are extremely complicated and are serviced with transportation facilities to facilitate the essential functional interrelationships among the various land uses in urban regions. Transport systems serve as the veins and arteries of cities, connecting social and functional zones. Intra-urban transportation, in particular, serves to connect the city's many parts: work, school, recreation, and so on, into a coherent whole. As a result, urban centres as people know them today will not be viable until transportation provides for the mobility of people and things that allows them to function ^[17].

The private sector (individuals, cooperative organisations, enterprises, and transport unions) and the government mass transit outfit, operated by the Abuja Urban Mass Transit Company (AUMTCO), provide public transportation services in the Federal Capital Territory. The latter is often unregulated, but the former is responsible for scheduling, bus routing, and fare charges. Nigeria's urbanisation is accelerating at a fast pace. Nigeria has the largest population and highest average population density in Africa, with a population of over 200 million people living in an area of around one million square kilometres. Between 2000 and 2004, the proportion of people living in cities increased from 36% to 38%. An increase in urban transportation accompanies urbanisation ^[18]. According to studies in urban transportation, more than 75% of city dwellers rely on public transport, while only 25% rely on private mobility. Nigerians' socio-economic characteristics play a significant role in this. The general decline in Nigeria's economy, which resulted from the worldwide recession of the 1980s, impacted all sectors, including the transportation system. Most Nigerians in cities were more affected than those in rural areas because people's commuting distances in cities had increased significantly. This demonstrates that commuting in cities is becoming increasingly difficult and inefficient as the city's territory expands ^[19].

3. Gender Differences in Access to Public Transport Services

The increased participation of women in the job market has increased the necessity for travel; children are less commonly home-schooled, and hospital visits and caregiving are sometimes delegated to nurseries, among other developments. Nonetheless, because household duties have not changed at the same rate as women's engagement in the labour market, many women are forced to accept harsh working circumstances in the informal sector, resulting in a gender pay gap ^[20]. On average, women in metropolitan areas make more and shorter excursions at varied times than men. They take public transportation and walk more than males, and they travel to more distant destinations during off-peak and non-working hours ^[21]. They are also more prone to trip chains, which means that they travel for different purposes and to multiple destinations in the same trip. This can be factored into fare structures and the design of new transportation routes. Women primarily rely on public transportation and its accessibility: when there is only one vehicle in the house, the male is more likely to use it. Women, aside from walking, rely heavily on public transportation ^[21]. Accessing public transportation is challenging for anyone with a physical impairment. They have difficulty boarding and alighting, whether when travelling with children and packages or because the steps are excessively steep. Women are also more impacted by issues of quality or capability. Overcrowding, for example, presents a security risk for women since it encourages grabbing and other unwanted behaviour ^[21].

Women are more likely than men to use public transportation, who, in typical societies, drive to work and have the first right to use a car in the home ^[13]. Minelgaité et al. ^[22] revealed that women often engage in time-consuming activities, such as synchronising, planning, and coordinating with household members, as well as the temporal and spatial patterns of public transportation and those of other facilities and services, such as shops, schools, and childcare, among others. All of this stem from developing far more complicated trip chaining for women. As a result, to properly comprehend gender-based mobility, one must first contextualise the institutional and familial context in which each individual lives. Characteristics such as their families' poor income, places of residency, age, or social background, according to ^[23], compound the differences identified in the travel patterns of the different genders. Other characteristics, such as race, social status, money, age, work, and family responsibilities, might influence gendered patterns, and these differences are

reflected in aggregate statistics. However, research shows that the differences in men's and women's travel patterns are due to more than a few factors, indicating that, regardless of the household, there are still differences in how men and women access public transport [24].

In comparison to men, women have a wider range of modal options. When public transportation is available and longer distances must be travelled, they are more likely to use it. As a result, they spend more time travelling and thus suffer from time poverty, or they seek work in regions that requires them to travel shorter distances. Even in some situations, women are more likely than males to work from home. As a result, women favour forms of transportation that allow for multipurpose journeys; [25][26] reported that in the Southwestern part of Nigeria, men's and women's decisions on whether or not to live in a city are influenced by their household income. According to the research, men commute by automobile to various activity patterns, but women commute by foot for short distances and rely on public transportation, which has high costs. Withers [27] highlighted the indices of an accessible public transport system, which include: safety, reliability, comfort, availability, public transport fare, distance to access points, and convenience. According to Ng and Acker [4], several empirical studies conducted in developed and developing countries have shown that women travel shorter distances, spend more time travelling, and prefer public transport and taxi services to cars more than men.

Scarcity of resources, economic instability, and environmental collapse increasingly diminish human well-being. The largest portion of the burden of environmental crisis is borne by women and specifically by women in developing countries [28]. This burden adds to the economic, social, and political participation inequities already faced by women, and the lack of voice leads to negative social justice outcomes for women, children, families, and communities. Women's access, as leaders, administrators, advocates, and citizen experts, creates opportunities to exercise their decision-making and problem-solving proficiencies and leads to more inclusive and therefore more responsive public action [29]. Due to the nature of responsibilities, often women are forced to take short but more frequent trips than men [30].

Moreover, land use, the physical layout and design of road networks, the interior design of buses, as well as the design of bus stops and connecting sidewalks, greatly affect the needs of women in terms of ease, comfort, and safety [31][32]. However, public transit infrastructures (i.e., footpaths, bus stops, routes, and buses) are designed so that they are insensitive to their needs [33]. Therefore, diligent attention needs to be paid to the design of infrastructures, with an account of their common need profile and a special provision for pregnant women and those who travel with children [13].

The majority of research studies on the mode of operation of public transportation services in Nigeria ignore the quality of transportation services in terms of comfort, affordability, safety, and income level, which are critical to urban inhabitants' mobility patterns in any nation. Therefore, this research assesses gender disparities in the access and use of urban public transport in Abuja, Nigeria. The research also analyses the experiences of men and women in using urban public transport services and investigates the factors that influence their choice of transport.

Moreover, rapid growth in Nigeria's major cities is an essential element of urbanisation. However, insufficient transportation infrastructure and services have made urban mobility chaotic, complicated, and uncomfortable for commuters. In general, Nigeria's transportation system shows a sector with a skewed developmental approach, posing significant issues in urban mobility. Understandings of the nature of Nigeria's transportation system, the state of transportation infrastructure, gender, and difficulties with urban public transportation services were all suggested in the research. However, it is sufficient to highlight that most research on public transportation operations in Nigeria were conducted in the country's southwest, with little attention paid to the North Central zone, where the research region is located. Therefore, there is a need for comprehensive studies in exploring disparities in the access and use of the urban public transport system, especially in Abuja, the country's capital and seat of government.

References

1. United Nations Development Programme. Africa Human Development Report 2016 Accelerating Gender Equality and Women's Empowerment in Africa. Available online: https://hdr.undp.org/sites/default/files/afhdr_2016_lowres_en.pdf (accessed on 25 October 2021).
2. Havet, N.; Bayart, C.; Bonnel, P. Why do Gender Differences in Daily Mobility Behaviours persist among workers? *Transp. Res. Part A Policy Pract.* 2021, 145, 34–48.
3. Peters, D. Gender and Sustainable Urban Mobility. Global Report on Human Settlements. Available online: https://www.researchgate.net/publication/281102413_Gender_and_Sustainable_Urban_Mobility_Official_Thematic_Study_for_the_2013_UN_Habitat_Global_Report_on_Human_Settlements (accessed on 28 August 2021).

4. Ng, W.-S.; Acker, A. Understanding Urban Travel Behaviour by Gender for Efficient and Equitable Transport Policies. Available online: <https://www.itf-oecd.org/understanding-urban-travel-behaviour-gender-efficient-and-equitable-transport-policies> (accessed on 10 October 2021).
5. Loukaitou-Sideris, A.; Ceccato, V. Sexual violence in transit environments: Aims, scope, and context. In *Transit Crime and Sexual Violence in Cities*, 1st ed.; Routledge: Oxfordshire, UK, 2020; pp. 3–11.
6. Scheiner, J.; Holz-Rau, C. Gendered travel mode choice: A focus on car deficient households. *J. Transp. Geogr.* 2012, 24, 250–261.
7. Arora, D. Gender differences in time-poverty in rural Mozambique. *Rev. Soc. Econ.* 2015, 73, 196–221.
8. Institute for Transportation & Development Policy. Access and Gender: Access for All Series. Available online: https://itdpdotorg.wpengine.com/wp-content/uploads/2018/05/access_for_all_series_1_baja.pdf (accessed on 11 October 2021).
9. Holz-Rau, C.; Scheiner, J. Land-use and transport planning—A field of complex cause-impact relationships. Thoughts on transport growth, greenhouse gas emissions and the built environment. *Transp. Policy* 2019, 74, 127–137.
10. Lecompte, M.C.; Pablo, B.S.J. Transport systems and their impact on gender equity. *Transp. Res. Procedia* 2017, 25, 4245–4257.
11. Badiora, A.I.; Odufuwa, B.O. Fear dynamics in public places: A case study of urban shopping centers. *J. Place Manag. Dev.* 2019, 12, 248–270.
12. Kwan, M.; Kotsev, A. Gender differences in commute time and accessibility in Sofia, Bulgaria: A study using 3 D geovisualisation. *Geogr. J.* 2015, 181, 83–96.
13. Singh, Y.J. Is smart mobility also gender-smart? *J. Gend. Stud.* 2020, 29, 832–846.
14. Campisi, T. Gender equality on developing transport system in sicily: A consideration on regional scale. *AIP Conf. Proc.* 2021, 2343, 15–19.
15. Kumar, A.; Barrett, F. *Stuck in Traffic: Urban Transport in Africa*. Office 2008, 1, 70.
16. Rodrigue, J.-P.; Comtois, C.; Slack, B. *The Geography of Transport Systems*, 5th ed.; Routledge: London, UK, 2016.
17. Solanke, M.O. Challenges of urban transportation in Nigeria. *Int. J. Dev. Sustain.* 2013, 2, 891–901.
18. Adeyinka, A.M. Assessment of the quality of urban transport services in Nigeria. *Acad. J. Interdiscip. Stud.* 2013, 2, 49.
19. Ogunbodede, E. Urban Road Transportation in Nigeria from 1960 to 2006: Problems, Prospects and Challenges. *Ethiopia J. Environ. Stud. Manag.* 2008, 1, 7–18.
20. Gaunt, R. Breadwinning moms, caregiving dads: Double standard in social judgments of gender norm violators. *J. Fam. Issues* 2013, 34, 3–24.
21. Transformative Urban Mobility Initiative. Gender and Urban Transport iNUA#3: Implementing the New Urban. Available online: https://sutp.org/files/contents/documents/resources/L_iNUA/iNUA-Paper.Gender-and-Urban-Transport.pdf (accessed on 4 September 2021).
22. Minelgaitė, A.; Dagiliūtė, R.; Liobikienė, G. The Usage of Public Transport and Impact of Satisfaction in the European Union. *Sustainability* 2020, 12, 9154.
23. Eurobarometer, F. Attitudes of Europeans towards Tourism. Available online: <https://europa.eu/eurobarometer/surveys/detail/2283> (accessed on 14 August 2021).
24. Klinger, T.; Kenworthy, J.R.; Lanzendorf, M. Dimensions of urban mobility cultures—a comparison of German cities. *J. Transp. Geogr.* 2013, 31, 18–29.
25. Adetunji, M.A.; Aloba, O. The level of compliance of commercial motorcyclists to traffic rules on urban roads in South Western Nigeria. *J. Educ. Soc. Res.* 2014, 4, 345.
26. Mahadevia, D.; Advani, D. Gender differentials in travel pattern—the case of a mid-sized city, Rajkot, India. *Transp. Res. Part D Transp. Environ.* 2016, 44, 292–302.
27. Withers, M.M. Communication in the transportation sector. Available online: https://www.academia.edu/53804357/Communication_in_the_transportation_sector?from_sitemaps=true&version=2 (accessed on 28 August 2021).
28. Berkovitch, N.; Bergôvitch, N. From motherhood to citizenship: Women's rights and international organizations. *JHU Press* 1999, 30, 619.
29. Leuenberger, D.Z.; Lutte, R. Sustainability, Gender Equity, and Air Transport: Planning a Stronger Future. *Public Work. Manag. Policy* 2022, 1087724X221075044.
30. Lu, X.; Pas, E.I. Socio-demographics, activity participation and travel behavior. *Transp. Res. Part A Policy Pract.* 1999, 33, 1–18.

31. Kang, L.; Xiong, Y.; Mannering, F.L. Statistical analysis of pedestrian perceptions of sidewalk level of service in the presence of bicycles. *Transp. Res. Part A Policy Pract.* 2013, 53, 10–21.
32. Rahman, M.T.; Nahiduzzaman, K. Examining the walking accessibility, willingness, and travel conditions of residents in Saudi cities. *Int. J. Environ. Res. Public Health* 2019, 16, 545.
33. Gupta, N. Triple burden on women in science: A cross-cultural analysis. *Curr. Sci.* 2005, 89, 1382–1386.

Retrieved from <https://encyclopedia.pub/entry/history/show/57051>