

Public Transport Policy Enrichment in Improving Its Acceptance and Utilisation among the Ageing Population

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ABSTRACT

Population aging may pose a challenge to the public transport system. This study aimed to identify the travel behaviors, needs, and challenges of older adults living in the Klang Valley, Malaysia, when using public transport. A community survey was conducted with 497 older adults from all municipalities in the Klang Valley. Overall, the majority lacked adequate access to public transport facilities. Public transport was primarily used to access healthcare services. On average, respondents made four trips per week, typically in the morning. Many experienced more difficulties with the service itself than with the available infrastructure.

Keywords: Mobility, older adults, older public transport users, public transport, travel behaviour, trip characteristics

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INTRODUCTION

Mobility justice views equitable access to transport as a fundamental right, especially for vulnerable groups like the elderly (Sheller, 2020). From this perspective, the lack of reliable and safe transport options for older adults constitutes a form of social exclusion. Complementing this, the World Health Organization's age-friendly cities

framework advocates for inclusive urban environments that support active aging with accessible and affordable transport as a key component (World Health Organization, 2007). In Malaysia, public transport often overlooks older adults' needs, such as inadequate age-friendly pedestrian infrastructure, limited parking facilities, and insufficient security features (Zakaria et al., 2024). With the ageing population expected to place greater demand on public transportation, it is crucial to reassess and improve the current system to better serve older users (Ang et al., 2020). In light of this, this study explores public transport usage among older adults and identifies the key challenges they encounter when using it.

METHODOLOGY

The Consortium on Mobility and Transportation in an Ageing Society (CoMTAS) was established to look into older adults' mobility and transportation. A cross-sectional study was conducted with a survey administered to randomly selected older adults aged 55 years and above who reside in the Klang Valley through cluster sampling. Respondents completed a self-administered questionnaire that covered sociodemographic, socioeconomic, household characteristics, living environment, health and disability status, as well as travel modes, needs, patterns, and barriers. Descriptive statistics were used to describe the travel characteristics of respondents who use public transport. Additionally, multiple logistic regression analyses, conducted using the SPSS version 26, were performed to identify significant determinants influencing public transport use, while controlling for baseline characteristics.

RESULTS AND DISCUSSION

Of the 497 respondents, 39.4% reported regular use of public transport, with 26.8% by bus, 18.5% by train, 12.1% by taxi, and 10.3% by e-hailing services. Regular users were predominantly aged 80 and above (47.4%), female (43.7%), of Indian ethnicity (60.0%), and had no formal education (56.0%). Most were retirees (44.5%), from lower-income groups (39.0%), lived alone (77.8%), and reported having comorbidities (39.8%), functional impairments (39.9%), musculoskeletal pain (41.0%), or used a walking device (50.0%).

When examining travel behaviors, those who had stopped driving (52.5%) or had never driven (52.6%) were more likely to rely on public transportation to reach their destinations. Nearly half of them did not own a vehicle (47.2%). Most reported having access to a nearby taxi stand (46.3%), followed by a train station (44.1%), bus stop (42.1%), and bus station (38.5%). Nevertheless, only a small percentage used transport concessions for buses (24.9%), trains (18.7%), or transnational buses (9.9%). A larger proportion traveled in the morning (58.3%) and primarily for healthcare purposes (19.4%). Table 1 summarizes the travel characteristics of respondents who use public transport.

Table 1
Travel characteristics of respondents who use public transport

Variable description % per category	1	2	3	4
Driving status (1=still driving, 2=ceased driving, 3=never drive)	30.7	52.5	52.6	
Vehicle ownership (1=none, 2=has bicycle, 3=has motorcycle, 4=has car)	47.2	12.8	24.3	38.5
Facility near home (1=bus stop, 2=bus station, 3=train station, 4=taxi stand)	42.1	38.5	44.1	46.3
Use of concession card (1=RapidKL, 2=KTMB, 3=express bus)	24.9	18.7	9.9	
Perceived public transport affordability (1=affordable, 2=unaffordable, 3=undecided)	45.5	8.6	17.5	
The average number of trips per week 4.97 ± 3.54				
Travel time (1=morning, 2=afternoon, 3=evening/night)	58.3	57.8	33.5	
Common travel destination (1=healthcare facilities, 2= relative/ friends' house, 3=mall, 4=service center such as bank, post office, etc.)	19.4	11.7	11.2	10.2

Older adults living alone were less likely to use public transport (aOR: 0.860, $p=.001$). Conversely, those who had ceased driving (aOR: 1.262, $p<.001$) or had never driven (aOR: 1.025, $p<.001$) were more likely to rely on public transport. Additionally, bus concession users were nearly twice as likely to use public transport (aOR: 1.892, $p<.001$). However, train concession use was associated with slightly lower odds of public transport use (aOR: 0.926, $p<.05$).

Furthermore, a range of recurring obstacles was reported by the respondents. Among bus users, the most frequently cited issues were long waiting times (43.3%), lack of punctuality (39.4%), and limited parking at bus stations (39.4%). Train users experienced similar challenges, including limited parking (38.2%), long waits (34.8%), and unreliable schedules (33.7%). Taxi users most often pointed to inconsistent fares (32.0%), unclear fare displays (28.0%), and long waiting times (28.0%). For e-hailing services, the main concerns included high fees (41.3%), inconsistent pricing (28.3%), and limited availability during nights or weekends (28.3%). Figure 1 summarizes the obstacles they encountered when using public transport.

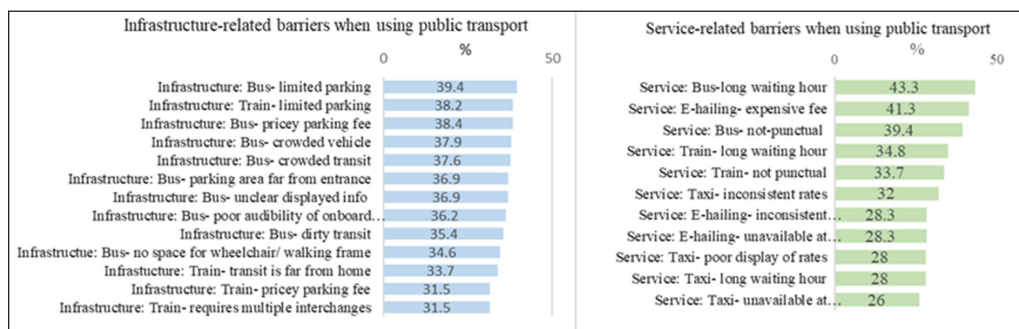


Figure 1. Summary of the obstacles older adults face when using public transport

Similar issues have been reported by Tang et al. (2022), Latiff and Mohd (2023), and Fatima and Moridpour (2019). To address the identified obstacles in public transport, several policy interventions can be proposed. To reduce long waiting times and improve punctuality, real-time tracking systems and increased service frequency should be implemented. For parking, dedicated age-friendly spaces near stations and park-and-ride schemes should be introduced. Inconsistent fare structures can be addressed by standardizing pricing across transport modes and offering clear, transparent fare systems with concessions for older adults. Finally, to improve e-hailing service availability, incentives for off-peak service provision and age-friendly taxi services should be established. These measures will contribute to a more inclusive and reliable public transport system for older users.

CONCLUSION

Public transport usage among older adults is low, with the presence of significant barriers to accessing services tailored to their needs, particularly for those with lower incomes or health challenges. Future transport policies should focus on improving accessibility, affordability, and engagement for older adults, while promoting concessionary travel and integrating transport with health and social care systems.

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