

Passengers with disabilities encountered challenges in the bus rapid transit (BRT) system: A case study of Dar es Salaam Rapid Transit (DART), Tanzania

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ABSTRACT

This study assessed the inclusivity of the Dar es Salaam Bus Rapid Transit (DART) system by examining how its physical conditions support passengers with disabilities. The objective was to evaluate key infrastructural elements – ramps, wheelchair-friendly stations, and accessible seating – and analyse staff preparedness and passenger experience using the Theory of Planned Behaviour and Service Quality Theory. A mixed approach and descriptive cross-sectional research design was used, employing stratified random sampling of 178 Dar es Salaam Rapid Transit (DART) staff and purposive sampling for five zonal station leaders and snowball sampling for selecting 100 passengers with disabilities. Data were collected through structured questionnaires and analysed using SPSS (Version 26). Quantitative findings were presented through descriptive statistics, while narrations presented the qualitative findings that were analysed through content analysis. The findings reveal that while some inclusive infrastructure such as ramps and reserved seating exists, functionality is compromised by poor design, maintenance gaps, signage deficiencies, and lack of enforcement. Additionally, training among frontline staff is inconsistent and inadequate, further impeding service delivery. The study concludes that Dar es Salaam Rapid Transit (DART) had to deliver transport that is equitable and inclusive for people with disabilities. The recommendations were made on the provision of regular staff training, improvements in accessibility features, and stronger enforcement of inclusive policies.

Keywords: Accessibility, Bus Rapid Transit, Disability, Inclusivity, Infrastructure, Public Transport

I. INTRODUCTION

Public transportation as the dominant mode of urban mobility, its accessibility to disabled individuals has become a very serious problem (Cao & Shahraki, 2023). Bus Rapid Transit (BRT) is a solution to urban congestion and sustainable transport system (Medeiros et al., 2024). Brazil and Colombia have shown in their case cities that BRT networks can reduce times spent on transit, rewrite environmental scores and lead to potentially positive consequences when properly integrated into the urban networks (Medeiros et al., 2024; Ardila, 2020). However, BRT networks have yet to secure the rights of passengers with disabilities, as most cities are neither offering accessible infrastructure solutions nor sufficient service provision methods (Mwesigwa et al., 2024).

In developed areas, while the BRT physical environment appears to be advanced; key attributes of it including ramps, priority seats and audio announcements are underdesigned or absent hence impeding disabled person's independence (Alnsour, 2023; Malekzadeh & Chung, 2020). Inclusive urban development is complicated linked to accessibility to public transport. African counterparts in Lagos and Johannesburg had yielded positives for reduced travel time and employment access, but are struggling to cater to the needs of people with impairment due to some form of infrastructure inadequacies coupled with low disability consciousness among workers (Mwesigwa et al., 2024).

Dar es Salaam Rapid Transit (DART) was launched in 2016 in Tanzania to provide the nation's first BRT service to replace daladala and reduce traffic congestion, as well as save time (Joseph et al., 2021). Despite these objectives, Dar es Salaam Rapid Transit (DART) continues to have operating problems that affect passengers who are disabled. (Park & Chowdhury, 2022) emphasize a physical barrier such as an absence of ramps on raised platforms, vast size gaps between the platforms, deficient in an audio system. In addition, a great portion of BRT staffs have not received adequate training to assist disabled commuters and little attention is given for accommodating mobility-impaired clients (Tengecha & Juma, 2021).

Inclusive legal and policy environments are necessary to promote fair access (Johnson et al., 2025). In spite of Tanzania's Persons with Disabilities Act (2010) and the global campaign for inclusion in urban mobility such as SDG 11, implementation gaps continue to exist on the ground in terms of infrastructure and service delivery through the Dar es Salaam Rapid Transit (DART) system (Mchome & Nzoya, 2023). The study sought to assess inclusivity of the Dar es Salaam Rapid Transit (DART) system by examining how its physical conditions support passengers with disabilities.

1.1 Statement of the Problem

Passengers with disabilities face inadequate experiences on the Dar es Salaam Rapid Transit (DART) system because of operational difficulties that generate extended waiting times and congestion that worsen travelling comfort. The BRT scarce priority services, social discrimination and inadequate public attention worsen the situation. Despite other research examining the larger socioeconomic implications of the BRT system in Dar es Salaam (Juanita et al., 2023; Mwesigwa et al., 2024) not much has been written specifically how the system serves passengers with disabilities. Representatives of this school, such as (Krüger et al., 2021; Mchome & Nzoya, 2023; Msangi et al., 2025) lay emphasis on the role of accessibility but do not examine infrastructure and service practices particular to Dar es Salaam Rapid Transit (DART). This study aims to address the gap by assessing the passengers with disabilities inclusivity in BRT transportation services in Dar es Salaam with a particular concern on how the BRT system physical conditions support the passengers with disabilities.

1.2. Research Question

How does the Bus Rapid Transit system (BRT) physical conditions support passengers with disabilities in Dar es Salaam?

II. LITERATURE REVIEW

2.1 Theoretical Review

This study adopts Theory of Planned Behaviour (TPB) to describe behavioural variables that informs the interaction and support of passengers with disabilities by Dar es Salaam Rapid Transit (DART) staff. Theory of Planned Behaviour (TPB), introduced by (Ajzen, 1991) assumes that behaviour is contingent upon three major components, including attitude (what an individual thinks of the behaviour), subjective norms (what others think of the behaviour), and perceived behavioural control (whether the individual can perform the behaviour). Within Dar es Salaam Rapid Transit (DART), Theory of Planned Behaviour (TPB) is applied to study staff members' attitude towards serving disabled passengers, how they perceive the social expectation in their workplace and their confidence to attend to disability needs. Similarly, Theory of Planned Behaviour (TPB) is helpful to assess how passengers' inclusivity attitudes, perceptions, and perceived control were over accessing services with Dar es Salaam Rapid Transit (DART)'s accessibility features.

The Service Quality Theory (SQT), developed by Parasuraman et al., (1985) was also adopted to focus on the difference between customer expectations and perception of the actual received service. The Service Quality Theory (SQT), was essential in identifying potential service provision gaps (Parasuraman et al., 1985; Rejikumar et al., 2019). The Service Quality Theory (SQT) emphasises the five key dimensions of service quality, including reliability, responsiveness, assurance, empathy, and tangibility, to help assess the effectiveness of overall service delivery and customer satisfaction (Parasuraman et al., 1985). The Service Quality Theory (SQT) is important in assessing the efficiency and effectiveness of the BRT system's physical features such as ramp, signage, audio announcements and stations design. It facilitates a methodical examination of the physical facets of infrastructure and the compassion and aid provided by Dar es Salaam Rapid Transit (DART) workers. In combination, Theory of Planned Behaviour (TPB) and Service Quality Theory (SQT) offer a two-pronged approach to explain both behavioural and physical features of the service dimensions, providing a comprehensive evaluation of the inclusivity of the Bus Rapid Transit system.

2.2 Empirical Review

It also emerged through several international surveys that the physical accessibility of persons with disabilities in public transport is particularly low, namely for BRT systems. (Levine & Karner, 2023) studied U.S. transportation accessibility policy, finding that these policies are often "minimum compliance" requirements, and do not recognize the physical or physiological travel needs of passengers with disabilities other than medical conditions. To change planning culture, they emphasized disability-inclusive planning and community participation. In Europe, (Alçura, 2025) identified major barriers in BRT infrastructure including inadequate boarding and limitations on wheelchair access. The analysis indicated that implementation of accessibility standards should be better enforced and infrastructure retrofitted. However, in Asia (Tennakoon et al., 2020) observed Station misdesign and bus-only construction limited how persons with disabilities could access Bus Rapid Transit service. The recommendation was made on the need to incorporate diverse disability perspectives, closing data gaps, and prioritizing equity-based policies to enhance transportation accessibility for all.

In Africa, investigation was made by (Hotor, 2024) on the accessibility and use of public transport services by persons with disabilities (PWDs) in Ghana, with a focus on BRT systems. Using qualitative interviews and observational analysis, the study revealed that many BRT stations and vehicles lack adequate physical accessibility features, including ramps and tactile paving. Moreover, the conclusion was made by that research that the lack of accessible transport

options contributes to social exclusion and recommended comprehensive policy reforms and investments in disability-friendly infrastructure.

(Lawrence et al., 2024) analysed the integration of non-motorised transport (NMT) in South Africa's Harambee BRT system to assess its inclusivity for people with disabilities. According to the findings by Lawrence et al., (2024), who utilised qualitative interviews and field observations, although there were some improvements still the physical barriers, such as inadequate ramp access and ineffective tactile guidance, remain a challenge to people with disabilities to access the service. The conclusion was made on the need for improving the physical infrastructure, and providing regular accessibility audits could enhance the mobility of people with disabilities.

In Tanzania, (Malume et al., 2024) assessed the passengers satisfaction in using Bus Rapid Transit stations and buses in Tanzania, focusing on Dar es Salaam, simple random and purposive sampling were employed among of respondents, and observations on station facilities. The findings disclosed the presence of a deficiency in accessibility features, including the majority of the stations lacked elevators, poorly maintained ramps, and lacked space for wheelchairs. The buses were not designed in a way to be accessible for all types of disabilities. Malume et al., 2024 emphasised the need to address the existing shortfalls of the BRT system in Dar es Salaam for the effective inclusion of passengers with disabilities into the public transport system

III. METHODOLOGY

3.1 Research Approach and Design

The mixed approaches were employed to assess the inclusivity of BRT system transportation services in meeting the satisfaction needs of passengers with disabilities. Quantitative approach enabled gathering of numerical data on accessibility, staff training and passenger experience to understand the effects on DART system user satisfaction (Ghanad, 2023). Qualitative approach focused on getting data concerning the personal experiences and gaining a deeper understanding of the challenges through the interviews with Dar es Salaam Rapid Transit Zonal station Leaders. The descriptive research design was deployed to describe the characteristics of a phenomenon or groups without influencing the outcome or manipulating variables. The descriptive research design was engaged to enable presenting the comprehensive overview of the current state of affairs, nature of training provided, physical accessibility, and experiences of passengers with disabilities (Ansari et al., 2022). Furthermore, the selected design evaluated the current accessibility conditions relative to the needs and experiences of passengers with disabilities at a specific moment.

3.2 Study Population

The population was made up of two strata, including 325 Dar es Salaam Rapid Transit (DART) employees distributed into 5 zonal station Leaders, 320 service assistants, and 100 passengers with disabilities. The selected employees were vital to be considered in the study at hand, as they are in the operations of Dar es Salaam Rapid Transit (DART) services since they are in charge of the ticketing process, guide passengers, and ensure smooth flow of activities at the stations. Also, the second strata was made up by passengers with disabilities, comprised of physical, sensory, and mobility impairments, using the Dar es Salaam Rapid Transit (DART) for transportation. Despite their actual population size remaining unknown, their experiences and satisfaction in using the Dar es Salaam Rapid Transit (DART) system were key in assessing the inclusiveness of the service provision.

3.3 Sample Size and Sampling Methods

Both probability and non-probability sampling methods were employed in the study to guarantee probability data. The sample size of 178 Dar es Salaam Rapid Transit (DART) employees was drawn by a stratified random sampling representation. The five zonal leaders as key informants were selected through purposive sampling, and 100 passengers with disabilities were identified using snowball sampling (Leah, 2024) as the population size was unknown, and the location was challenging to find. This multi-method approach enabled multifaceted and relevant outlooks within all stakeholder groups.

3.4 Data Collection Instruments

Questionnaires and semi-structured interviews constituted the main tools employed in data collection. Questionnaires, which were designed using 5-point Likert frameworks and translated into Swahili language, provided information concerning staff training, physical accessibility, and passenger satisfaction. They were given to both employees and travellers to gauge perceptions of the inclusivity of service delivery. The five zonal leaders were interviewed to discuss managerial insights on accessibility protocols and challenges through semi-structured interviews. Combined use of these tools provided both numerical and experiential data, which contributed to the mixed-method approach in the study.

3.5 Data Analysis and Processing

The questionnaire data were quantitatively analysed with the SPSS software as descriptive statistics (frequencies, percentages, mean scores, standard deviations). In the case of qualitative data, the content analysis involved a narrative method by sorting transcripts of interviews based on themes related to the research purpose. The combination of the two methodologies enabled a more complete set of results to be revealed indicative of the statistic patterns and in the specifics of personal experiences, as pertinent to physical accessibility within the Dar es Salaam Rapid Transit (DART) system.

IV. FINDINGS & DISCUSSION

4.1 Bus Rapid Transit System Physical Conditions features to Support the Passengers with Disabilities

The main objective was to assess the BRT system physical conditions to support passengers with disabilities in Dar es Salaam. The attributes such as Ramp availability, wheelchair friendly and Accessibility of seating arrangement were assessed.

Ramp Availability: The availability and functionality of ramps of BRT stations regarding experiences of passengers with disabilities was examined. Ramps were among the essential infrastructure for ensuring access and mobility, especially for individuals with physical impairments. Based on that stance to understanding ramps design, usability, and visibility is key to evaluating the inclusivity of the BRT infrastructure as presented in Table 1.

Table 1

Ramp Availability (n=178)

Ramp Availability	Mean	Std. Dev.	Interpretation
The ramps at BRT stations are designed with the needs of disabilities passengers in mind.	3.93	0.782	Agree
The slope of the ramps allows for safe and easy movement.	2.15	1.058	Disagree
Ramps are accessible at all points of entry and exit in BRT stations.	4.14	0.682	Agree
Adequate signage directs passengers to ramp locations.	2.68	0.863	Neutral
The ramps remain usable during peak hours and crowded conditions.	3.81	0.775	Agree

The findings indicated the level of respondents agree that ramps at BRT stations are designed with the needs of passengers with disabilities possessed the mean score of 3.93. Nonetheless, the findings revealed that the ramps were accessible at all key entry and exit points was found with a mean of 4.14 and the status of ramps to be usable even during peak hours held the mean of 3.81. Seemingly, the convenience of the slope of the ramps was with the low mean score of 2.15, reflecting disagreement that the incline is appropriate for safe and easy use. Additionally, neutral findings on the mean of 2.68 were obtained on visibility and adequacy of signage directing passengers to ramp locations.

Key informant interviews with Dar es Salaam Rapid Transit (DART) zonal leaders were conducted to gather expert views guided by the question of how they would assess the current physical accessibility features of Dar es Salaam Rapid Transit (DART) stations and buses for people with disabilities. Respondent from Zone A explained:

"...Some stations have ramps and markings, but not all. At peak hours, even the ramps are blocked by crowds or parked carts. It's not always practical for wheelchair users." (Interview, Respondent A, 12/06/2025)

Wheelchair-Friendly Bus Stations

An exploration was made on how passengers with disabilities perceive the overall wheelchair accessibility of BRT stations. Key structural features such as station layouts, boarding platforms, and support facilities like elevators provide a safe and efficient environment for wheelchair users within the public transport system, and the findings are shown in Table 2

Table 2

Wheelchair-Friendly Bus Stations (n=178)

Wheelchair-Friendly Bus Stations	Mean	Std. Dev.	Interpretation
BRT stations accommodate wheelchairs without causing delays for other passengers.	1.90	0.628	Disagree
The design of bus stations prioritizes the safety of wheelchair users.	2.15	0.821	Disagree
Pathways within bus stations are wide enough for wheelchair manoeuvrability.	4.04	0.567	Agree
Wheelchair users face no obstacles when entering or exiting BRT buses.	1.97	0.784	Disagree
Facilities like elevators and ramps are in good working condition for wheelchair users.	1.95	0.687	Disagree

The results indicated that there were substantial deficiencies in the support of BRT stations for people who use wheelchair, and strongly disagreed standard had a mean score of 1.90 for ‘stations accommodate wheelchairs without causing delay to others. Mean disagreed value of 2.15 was observed on prioritization of safety in design at stops for wheelchair users. Moreover, passengers against mean score of 1.97 opinion that wheelchair users do not have problem when boarding (alighting) public haulages and also that vital facilities such as elevators and ramps are in proper working order had the mean score value of 1.95. Additionally, the availability of station pathways for turning wheel chairs around was rated as a mean of 4.04.

The other interview item was about what is the main hindrance people with disabilities experience in obtaining Dar es Salaam Rapid Transit (DART) service. The quote shows only a limited support for accessibility, unsupported by both user preferences and utility design. Some infrastructure is there, but it is being silent by a failure to control crowds and manage space. Inconsistent designs between stations make access difficult. Respondent from Zone B stated:

“...Elevators and lifts in some stations do not regularly work, and there isn’t a sign or any information to show you an alternative. “As myself, and many people over 50 are finding — stiffness really does start to set in with or without exercise on a regular basis” — this fact is indeed hard for those with mobility issues.” (Interview, Respondent B, 12/06/2025)

The lack of, or the failure of, ancillary equipment (e.g. elevators) significantly limits access by passengers with disabilities—especially when alternate routes are not apparent. Respondent from Zone C added:

“... Most buses lack low floors, and drivers are not trained to assist with boarding. “With a lot of people using walkers or crutches, it’s not conducive to getting in easily.” (Interview, Respondent C, 13/06/2025)

Accessible Seating Arrangements

Attribute of accessibility and usability of designated seating areas for passengers with disabilities aboard BRT buses. Findings captured respondents' views on seat identification, space, and maintenance, ease of access and benefit of the reserved spaces during their journeys and the findings are shown in Table 3.

Table 3

Accessible Seating Arrangements (n=178)

Accessible Seating Arrangements	Mean	Std. Dev.	Interpretation
Designated seating for passengers with disabilities is easily identifiable.	4.12	0.700	Agree
Enough space for passengers with disabilities to comfortably access seating.	2.16	0.861	Disagree
Accessible seats are always kept vacant for eligible passengers.	2.13	0.837	Disagree
The location of accessible seating ensures quick entry and exit.	3.98	0.586	Agree
Designated seating is clean and well maintained.	2.18	0.770	Disagree

Pre-designated seating for passengers with disabilities were sign-posted and ideally positioned for convenient access and outlet was rated at an average of 3.98. On the seating, the mean score for _being adequate spacious was disagreed by most of the passengers, that is 2.16; with an exception made by consistently reserved for people with disabilities, and status of the area being kept clean and well-maintained at a mean of 2.18 (=0.730). In addition, responses to questions which aspects do you think should be improved during the test sessions were presented and demonstrated. The reply highlighted operational and maintenance shortfalls. Lack of implementation and public understanding resulted in poor seating principles, inadequate supervision and abuse, which negatively impacted the success of such facilities. Respondent from Zone E stated:

“...There are still tactile gaps and visual signage for the blind. The system for the most part accommodates physical mobility but not sensory disabilities.” (Interview, Respondent E, 14/06/2025)

This observation highlighted the inappropriate design of buses, which do not accommodate the needs of their users - not being able to board and disembark low floor buses, whose simply installed mechanical ramps are unusable with a mobility aid. Respondent from Zone D commented:

“...Some are already there; they’re just not being honoured. They’re used all the time by regular passengers, and there’s no policing of them to keep them for people with disabilities.” (Interview, Respondent D, 13/06/2025)

The physical capacity evaluation results indicate that while some structural characteristics, namely ramps, reserved seating and wide walkways, are in the Dar es Salaam Rapid Transit (DART) system; their operability has been considerably questioned due to poor design considerations, inadequate maintenance and lack of enforcement. Though there are ramps and the occasional seating area, many of them conveniently fall out of reach or recede during rush hours or at the hands of other passengers; key facilities such as elevators also happen to still be out order. This indicates that the physical environments of Dar es Salaam Rapid Transit (DART) system do not meet the needs of disabled passengers.

Passenger Satisfaction with BRT Services

This sub-section considered the expectation and perception of the passengers with disabilities inclusivity of BRT transportation services in Dar es Salaam as shown in Table 4.

Table 4

Passenger Satisfaction with BRT services (n=100)

Passenger satisfaction	Mean	Std. Dev.	Interpretation
Accessible features are provided on BRT buses for passengers with disabilities.	2.21	0.880	Dissatisfied
Comfort and suitability of the seating arrangements for passengers with disabilities.	2.25	0.869	Dissatisfied
Assistance and training are demonstrated by BRT staff toward passengers with disabilities.	2.05	0.869	Dissatisfied
Smooth and convenient, the journey is when using BRT buses.	2.19	0.800	Dissatisfied
Clarity and visibility of signage that helps passengers with disabilities at BRT stations.	2.07	0.844	Dissatisfied
The BRT system meets my expectations for inclusivity and accessibility as a passenger with a disability.	2.32	0.863	Dissatisfied
Overall BRT services	2.23	0.897	Dissatisfied

Source: Field Data (2025)

The findings revealed the dissatisfaction among passengers with disabilities regarding various aspects of the BRT system in Dar es Salaam including the accessible features on buses (mean = 2.21), seating comfort and suitability (mean = 2.25), and the level of assistance and training presented by BRT staff (mean = 2.05), convenience of their journeys (mean = 2.19) and the clarity of signage at stations (mean = 2.07). Additionally, the findings on the overall impression of the BRT system were at dissatisfaction levels as it was not meeting the passengers with disabilities accessibility needs (mean = 2.32) and BRT services in general (mean = 2.23).

4.2 Multiple Linear Regression Model

Staff training, physical accessibility, and passenger experience on customer satisfaction among passengers with disabilities using the BRT system in Dar es Salaam jointly were assessed by using Multiple Linear regression as presented in table 4.

Table 4

Multiple Linear Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.660 ^a	.435	.417	.38555	.258

a. Predictors: (Constant), Passenger Experience, Physical Accessibility, Staff Training

b. Dependent Variable: Satisfaction

The model summary showed that the correlation coefficient (R) was 0.660, which means that there was a strong to moderate positive correlation between the three predictors and the dependent variable, Passenger Satisfaction. The R Square of 0.435 required that 43.5 per cent of the variance in satisfaction be attributed to these three predictors. The adjusted R Square (0.417) strongly supported the model despite the prediction adjustment. In addition, Durbin-Watson was 0.258, indicating some apprehension regarding autocorrelation in the residuals, which might influence confidence in the predictions and therefore needs further investigation

4.3 Analysis of Variance (ANOVA)

The ANOVA results revealed statistically significant results, as the F-value was 24.645, and the p-value was 0.000. Based on the findings, there was at least one independent variable (Staff Training, Physical Accessibility, or Passenger Experience) that significantly contributed to the variation in the satisfaction level. The P-value of less than 0.05 was evidence that the regression model fitted to the observation of relationships was not likely to be caused by chance, as shown in Table 5

Table 5*Analysis of Variance (ANOVA)*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.990	3	3.663	24.645	.000 ^b
	Residual	14.270	96	.149		
	Total	25.260	99			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Passenger Experience, Physical Accessibility, Staff Training

4.3.1 Multiple Regression Analysis Coefficients

The regression coefficients indicated that three predictors had a statistically significant negative effect on passenger satisfaction, as shown in Table 6. The coefficient for staff training was -1.027 ($p = 0.004$), suggesting that inadequate or ineffective staff training is associated with a decrease in satisfaction of passengers with disabilities. Similarly, physical accessibility possessed the coefficient of -0.622 ($p = 0.001$), indicating that poor physical conditions (e.g., ramps, elevators, or station design) negatively influenced passenger satisfaction. Passenger experience showed the coefficient of -1.238 ($p = 0.000$) and a beta weight of -0.504, indicating the strongest influential predictor in the model.

That means that negative passenger experiences, such as overcrowding, lack of assistance, or discomfort, had the greatest impact in reducing overall satisfaction with BRT services. Conclusively, negative coefficients for passenger experience, staff training, and physical accessibility strongly contributed to shortcomings, which resulted in much lower satisfaction, indicating that improvement is required.

Table 6*Multiple Regression Analysis Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.789	1.224		8.817	.000
	Staff Training	-1.027	.351	-.273	-2.921	.004
	Physical Accessibility	-.622	.188	-.277	-3.301	.001
	Passenger Experience	-1.238	.212	-.504	-5.828	.000

4.4 Discussion

The study discovered a significant gap between the intended accessibility of the BRT system and the experiences of individuals with disabilities, particularly in terms of infrastructure use and personnel help. The presence of ramps and appropriate seats is the most important element of acceptance, which is unfortunately counterbalanced by disregard, poor signage, and uneven adherence within specific stations. Passenger experience, physical accessibility, and staff training were also found to be negatively correlated with user happiness, according to the findings of the regression study. These findings indicate that, despite good intentions and some progress in infrastructure development, the Dar es Salaam Rapid Transit (DART) system still fails to provide a reliable and comfortable passenger journey for passengers with disabilities, necessitating systematic and long-term operational changes.

The researcher considered that the physical environment of a BRT system is important in conceptualizing access and usability to persons with disabilities. This research established that the Dar es Salaam Rapid Transit system had infrastructure, including ramps, designated seats and wheelchair access points which suggest inclusivity aspect in its nature though it was limited in terms of access (Andrew et al., 2022). (Mwaka et al., 2023) pointed out that the disabled people cannot deal with whole procedure including getting to or off the public transportation itself without any help of other persons due to several physical conditions, availability of space on narrow platform, audible sign and imperfect design of ramp. There seems to be a perception that these functionalities shape the UX (user experience). The similar conclusion, which comes from the research of (Liu et al., 2023) is that long time lost in crowded buses and disparities in infrastructure have been causing disabled users' high anxiety and low satisfaction.

Results regarding physical accessibility suggested the presence of ramps, as well as a relative ease to access the stations. However, that ramp was poorly sloped and very dangerous for people in wheelchairs and other mobility-limited. In addition, neutrality results from the sign-tapping task emphasized that passengers with disabilities had a communication barrier to find the ramps. Recommendations are made based on better signage, slope and universal design for easier usability and safety of the disabled passengers.

At the theoretical level, consistent with SQT, there was a schism between expectations (i.e. availability and comfort) and observations (i.e., functionality and enforcement inconsistency) which accounted for poor performance in empathy, assurance, and responsiveness scores. Similarly, the TPB concentrates on perceived behavior control; passengers with disabilities could also perceive themselves as disempowered due to being prevented from travelling because of infrastructural failures. At the very least, the researcher claims that when ramps or lifts are inoperable or

blocked, security purposes for passengers with disabilities are threatened. The implications made by this paper concerning the need to foster the existence and sustainability of inclusive infrastructure from which an efficient, accessible transportation system that is able to adhere with national disability laws and international development major objectives can also be inferred.

Furthermore, the findings offered description on ramps -slopes being inconvenient for wheelchairs or seeing the signs that indicated accessibility or broken elevators, thus contradicting the overall inclusivity. Mchome and Nzoya (2023) found that although perceived accessibility of users had improved after the implementation of BRT in Dar es Salaam, it was not always adequate with regard to crowd control and for physical reach when using the service. (Munishi et al., 2021) observed that structural gaps continue to persist even if Tanzania has the legal and policy-enabling environment for inclusion of PWDs. However, it is recommended that the current physical and functional gaps be corrected as they not only limit mobility, but also contribute to feelings of dependency and loss of self-respect among people with disabilities.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusion

The purpose of this study was to assess how well Dar es Salaam's BRT public transportation system accommodates PWDs in terms of the physical environment. The findings indicate that some features of the infrastructures (ramps, designated seating, wide passage remains) have been put into place but with uneven implementation, inadequate maintenance and weak enforcement. Lifts and ramps are frequently out of order or unsafe, there is insufficient signage, and designated seating for disabled passengers has no precedence. These obstacles significantly reduce independence, confidence, and happiness for riders with disabilities. In addition, the results show that most users with disabilities of the senses are not well accommodated due to absence of path-through-touch or sound announcements. These limitations undermine the system's ability to offer an accessible and equitable service as stipulated in Tanzania disabilities policies and SDG 11. The research has established that the physical access fixing targets were partially met and there are important structural and operational changes required.

5.2 Recommendation

All operational staff should undergo mandatory, rather than supplementary and optional, practical, situation training based on disability awareness, renewed regularly to maintain knowledge and skills by Dar es Salaam Rapid Transit (DART) management. Station accessibility crews at key stations would assist customers with disabilities getting on, around and off the system in emergency mode. Ultimately, set and enforce scheduled maintenance, monitoring for accessibility infrastructure, with obvious accountability when not met.

For Policy Makers, the use of digital accessibility solutions such as real-time navigation aids and feedback services in the provision of urban transport should be enforced as a requirement to improve passenger safety, autonomy and independence. Require that urban transport projects are subjected to a full accessibility design review at each stage of the planning process so that not only is accessibility 'feature' present, but it works well, or user friendly and introduce regular public reporting on performance against access to train standards including customer satisfaction scores from passengers with disabilities – improve accountability and continuous improvement."

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