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A STUDY ON INCLUSIVITY, SAFETY, AND COMFORT IN PUBLIC TRANSPORTATION AMONG INDIVIDUALS WITH PHYSICAL DISABILITIES

Madhumetha. G.[1] & Dr. T. Kavitha[2*]
[1]Student, MSW in Disability and Empowerment, MSSW, Chennai
[2]Assistant Professor, Madras School of Social Work, Chennai

ABSTRACT

Social inclusion and economic participation and independent living heavily rely on the need to have social transport. Yet Person with physical disabilities must encounter a lot of obstacles that deprive them of a chance to travel safely, comfortably, and independently. This research helps to analyze how individuals with physical disabilities perceive inclusivity, safety and comfort in the public transport systems. Quantitative research design was taken with descriptive research design. Non-probability purposive sampling was used to collect the necessary data of 120 respondents, who were commuters with physical disability based on a self-prepared interview schedule. The study was conducted with key dimensions based on accessibility of infrastructure, the existence of assistive facilities, the conduct of transport personnel, the affordability, the safety provided during boarding and traveling, and the general comfort of travel. Results show that poor infrastructure, ramps, and specific seating, congestion, poor information systems and staff support greatly affect mobility. Most respondents indicated that they were reliant on other people to travel with, less often they used public transportation, and that they felt unsafe during transit. Although the policy provisions stipulate access to transportation, the gaps of implementation are still noticeable. The paper identifies the pressing necessity of inclusive transport planning, higher standards of accessibility, and awareness of personnel disabilities, as well as optimal control over the current policies. It is also crucial to ensure that the physical disabilities of individuals are promoted to independence, dignity and equal opportunities as well as all-inclusive social participation using public transportation that is accessible.

Keywords: Physical disability, transportation, accessibility, inclusiveness, safety, comfort.

INTRODUCTION

Mobility is a basic human right and a fundamental part of social participation, economic independence and well-being in general. The transport systems are important life support systems to the community since they assist them to get access to education, jobs, medical facilities, and social amenities. In the case of physically challenged individuals, the accessibility, security and comfort of such systems are usually an issue, with regard to independent travel. Although the need to have inclusive development and disability rights has

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been increasingly focused globally, most of the infrastructures of transport have remained a great challenge to this group of people. Physically challenged individuals often face the challenge of environmental, structural and attitudinal barriers when using the transport in society. These can be a handicapped car and a handicapped station, non-existence of ramps and elevators, and insufficient seating, inadequate space to assist with mobility aids, poor signage, and untrained personnel to provide service. Unsafe boarding conditions, overcrowding and uneven surfaces additionally expose one to the risks of accidents and discomfort. These obstacles do not only limit physical movement but also lead to social isolation, lack of self-sufficiency, and low living standards. Policy systems and legal requirements in most nations in recent years have asserted the significance of the availability of transportation as an inclusive element of societies. However, the difference between the provisions in the policy and the actual implementation at the ground level is still huge. The lived experiences and perceptions of people with physical disabilities are needed to understand these gaps and devise powerful solutions that are user centered. The purpose of the study is to investigate the concept of inclusivity, safety, and comfort when using public transportation as perceived by physically challenged people. It is based on the experiences of users that the research aims to point out the practical issues that arise in daily travel, as well as give insights that can be informative to policymakers, urban planners, transport authorities, and social workers. Provision of accessible and inclusive transport systems is not just an issue of infrastructural development, but an important process of enhancing equality, dignity and total participation of people with disabilities in society.

REVIEW OF LITERATURE

Soltney, Sham, Avang and Yemen (2012) conducted an experiment in Malaysia to establish accessibility of public transport terminals among individuals with disabilities. The research quantitative in nature utilizing structured questionnaires to collect data on 30 people with disabled commuters in two large transport terminals. It evaluated levels of satisfaction with infrastructure components like ramps, platforms, signs and safety in various journey stages. The study found out that there was a lot of dissatisfaction especially the platforms and the safety of the boarding. On the ground of these results, the research recommends that during the planning phase, universal design principles should be adopted and accessibility audits conducted on routine basis so that there are constant improvements in the structure of the public transportation systems to accommodate the PWDs.

The Lättman et al. (2016)carried out a study entitled Perceived Accessibility of Public Transport as a Potential Indicator of Social Inclusion, the researcher surveyed 750 bus passengers in Sweden, using the Perceived Accessibility Scale and a Conditional Process Model to analyze key factors like quality, safety, frequency, and age in accessibility perceptions findings says that Perceived transport quality and feelings of safety make public transport feel more accessible for users, while people who travel often tend to perceive higher accessibility; however, older adults face greater barriers. He suggests expand to include more user groups and influencing factors.

Daruwalla, P., & Darcy, S. (2005), Personal and Societal Attitudes to Disability. The study used surveys and in-depth interviews with persons with disabilities and public transport

providers across various Australian cities to assess accessibility and satisfaction. The study found that accessibility was closely tied to user satisfaction. The study specified that while certain improvements had been made in the physical accessibility of transport systems, satisfaction levels remained moderate due to inconsistent service and inadequate staff training. The researchers suggest that need for on-going improvements in both infrastructure and service delivery to enhance user satisfaction.

METHODOLOGY

The major focus of the present study is analyzing the perceptions of inclusivity, safety, and comfort of person with physical disability in Chennai. The sample consisted of 120 respondents who are using public transport in Greater Chennai Corporation. Both primary and secondary data were employed for the current study. Primary data were collected through interview schedule by using purposive sampling method and the secondary data were collected from the articles, journal and newspapers. The data were coded and analyzed with the help of SPPS version 30.

ANALYSIS AND INTERPRETATION

Table 1 Demographic details

S.NO	Variables	Factors	Frequency	Percentage (%)
1	Age	15-25	29	24.2
		26-35	44	36.7
		36-45	33	27.5
		46-60	14	11.7
		Total	120	100.0
2	Gender	Male	58	48.3
		Female	62	51.7
		Total	120	100.0
3	Nature of Disability	Locomotor	37	35.0
		Visual impairment	43	43.3
		Hearing impairment	11	13.3
		Others	6	1.7
		Elderly	3	6.7
		Total	120	100.0

4	Assistive device used	Wheelchair	31	35.0
		Crutches	12	30.8
		Cane	35	11.7
		None	10	35.0
		Others	12	10.0
		Total	120	100.0
5	Frequency of using public transport	Daily	40	33.3
		Weekly	30	25.0
		Monthly	21	17.5
		Rarely	29	24.2
		Total	120	100.0
6	Most frequently used mode of transportation	Bus	52	43.33%
		Metro	57	47.50%
		Sub Urban Train	14	11.67
		Total	120	100.0
7	Income	Below 10000	24	20.0
		10001-20000	24	20.0
		20001-30000	16	13.3
		above 30000	3	2.5
		no income	53	44.2
		Total	120	100.0
8.	Education Qualification	Illiterate	19	15.8
		Schooling	30	25.0
		Diploma	7	5.8

		Undergraduate	25	20.8
		Postgraduate	25	20.8
		Government exam preparation	14	11.7
		Total	120	100.0
9.	Employment type	Self employed	14	11.7
		Private sector	41	34.2
		Public sector	19	15.8
		Unemployed	46	38.3
		Total	120	100.0

INTREPREATATION

The table 1 shows that the socio-demographic details of the respondents, most of the respondents (36.7%) are in the age group of 26-35, Half of the participants (51.7%) are female, Most of the respondents (42.5%) is commuter with visual impairment, (35.0%) of the respondents are rely on cane, Most (33.3%) of the respondents are using public transport in daily basis. Most of the respondents (48.50%) use the metro frequently, (44.2) of the participants stated they don't have any income. Most of the participants (25.0%) done their schooling, (38.3%) of the respondents are unemployed.

Table 2

S.NO	Variables	Factors	Frequency	Percentage (%)
1	Perceived respect while using public transportation	Strongly agree	24	20.0
		Agree	42	35.0
		Neutral	22	18.3
		disagree	24	20.0
		Strongly disagree	8	6.7
Total			120	100.0
		Strongly agree	31	25.8

2	Experience of discrimination from staff or co-passengers	Agree	32	26.7
		Neutral	44	36.7
		disagree	9	7.5
		Strongly disagree	4	3.3
Total			120	100.0
3	Avoidance of public transport due to safety or comfort concerns	Strongly agree	27	22.5
		Agree	33	27.5
		Neutral	43	35.8
		disagree	15	12.5
		Strongly disagree	2	1.7
Total			120	100.0
4	Perceived dignity and independence in public transportation	Strongly agree	14	11.7
		Agree	34	28.3
		Neutral	48	40.0
		disagree	14	11.7
		Strongly disagree	10	8.3
Total			120	100.0

INTREPREATATION

Table 2 shows that most of the respondents (35.0%) that they are treated with respect, most (36.7%) of the respondents were neutral on their experience of discrimination from staff or co-passengers while using public transportation, most (35.8%) of the respondents were neutral based on avoidance of public transport due to safety or comfort concerns, most (40.0%) of the respondents were neutral based on perceived dignity and independence in public transportation.

MAJOR FINDINGS

Demographic findings

- Most of the respondents (36.7%) are in the age group of 26-35.
- Half of the respondents (51.7%) are female.
- Most of the participants (42.5%) are commuters with visual impairment.
- (35.0%) of the respondents are rely on cane.
- Most (33.3%) of the respondents are using public transport in daily basis.
- Most of the participants (48.50%) use the metro frequently.
- (44.2) of the respondents stated they don't have any income.
- Most of the respondents (25.0%) done their schooling.
- (38.3%) of the respondents are unemployed.

Findings related to inclusivity, safety, and comfort in public transportation

- Most of the respondents (35.0%) say that they are treated with respect.
- Most (36.7%) of the respondents were neutral on their experience of discrimination against staff or co-passengers while using public transportation.
- Most (35.8%) of the respondents were neutral based on avoidance of public transport due to safety or comfort concerns.
- Most (40.0%) of the participants were neutral based on perceived dignity and independence in public transportation.

SUGGESTION AND CONCLUSION

The research shows that people with physical disabilities encounter notable obstacles that pertain to inclusivity, safety, and comfort when using the transport. Increased inclusiveness would be achieved by introducing universal design elements like ramps, low-floor buses, reserved spots, and available information to transport systems to ensure that everyone participates equally. Enhancing security needs proper illumination, surveillance mechanisms, emergency service and sensitized personnel who can offer prompt service and decent treatment. To be more comfortable, priority seating, less overcrowding, less complicated boarding, and well-maintained vehicles are obligatory. Overall, the establishment of an accessible public transport space requires concerted activities of government agencies, transport operators, and communities to put policies into practice and stimulate the culture of disability. Transportation is an important part of encouraging independence, social inclusion, and better quality of life of commuters with physical disabilities, which is ensured by inclusive, safe, and comfortable transportation.

These initiatives are consistent with the objectives of the United Nations in Sustainable Development Goal, especially SDG 10 (Reduced Inequalities), SDG 11 (Sustainable Cities and Communities) and SDG 3 (Good Health and Well-being).

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