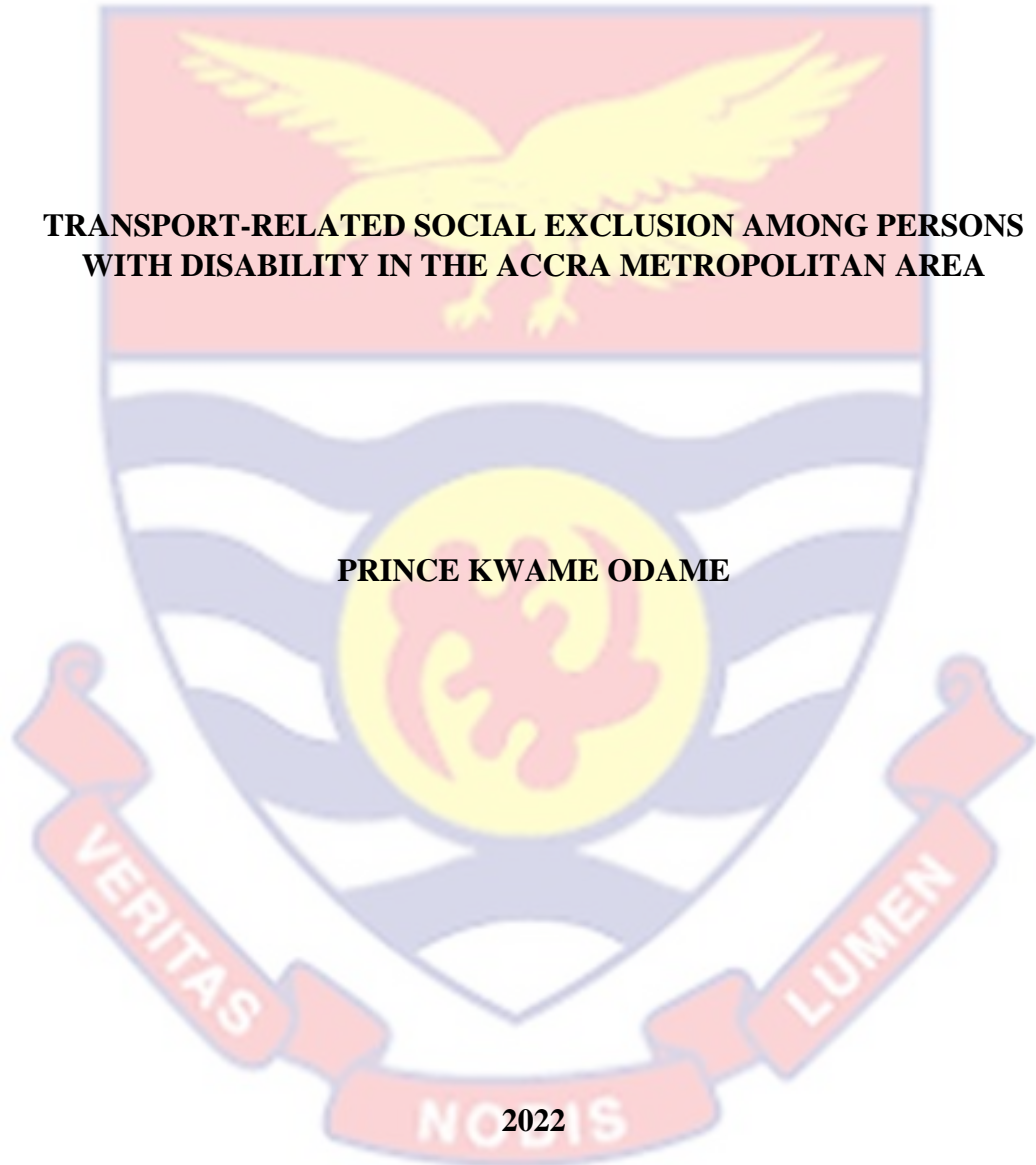


UNIVERSITY OF CAPE COAST

**TRANSPORT-RELATED SOCIAL EXCLUSION AMONG PERSONS
WITH DISABILITY IN THE ACCRA METROPOLITAN AREA**

PRINCE KWAME ODAME



UNIVERSITY OF CAPE COAST

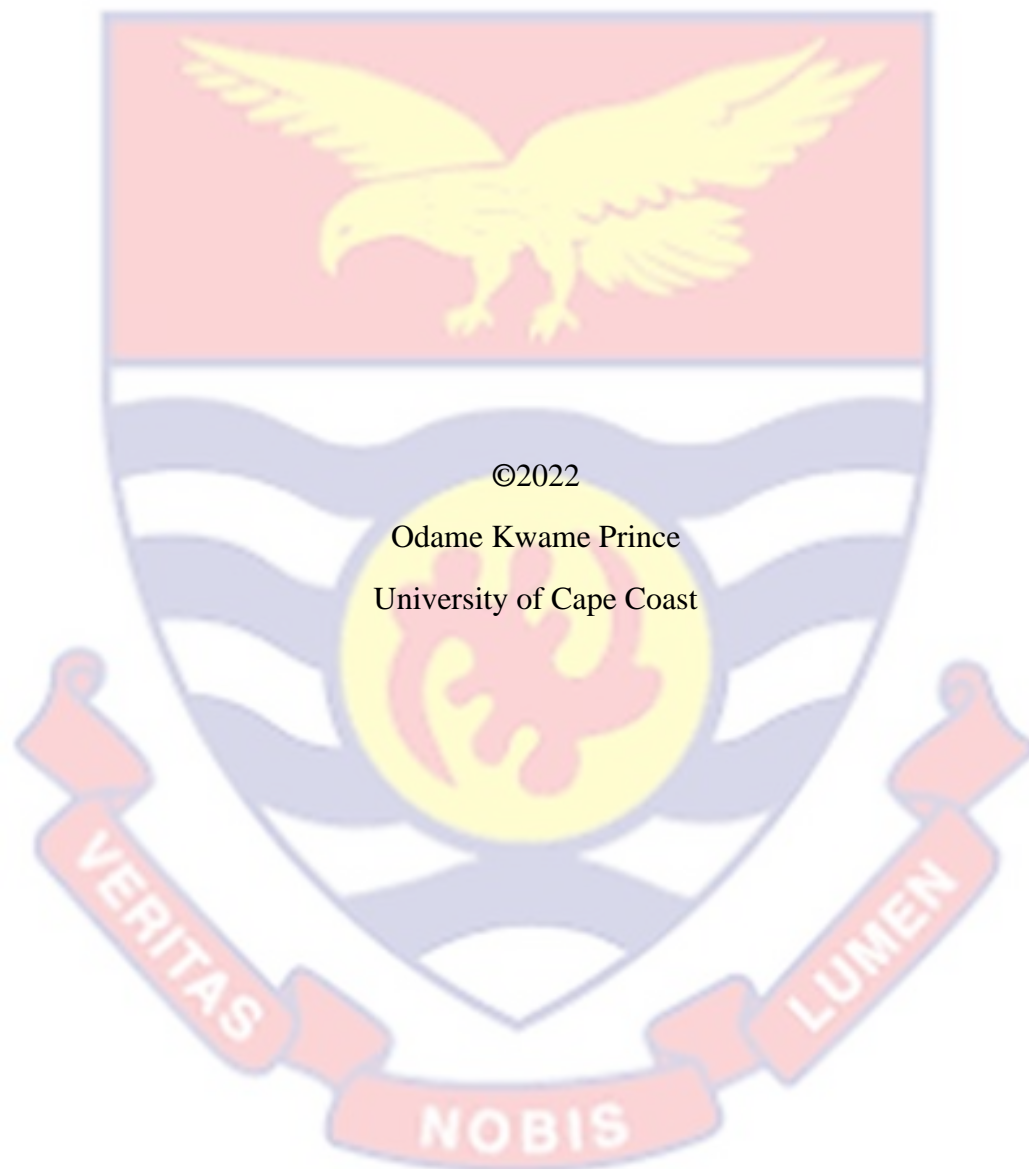
TRANSPORT-RELATED SOCIAL EXCLUSION AMONG PERSONS
WITH DISABILITY IN THE ACCRA METROPOLITAN AREA

BY

PRINCE KWAME ODAME

Thesis submitted to the Department of Geography and Regional Planning of
the Faculty of Social Sciences, University of Cape Coast, in partial fulfilment
of the requirements for the award of Doctor of Philosophy degree in
Geography and Regional Planning

DECEMBER, 2022



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Odame Kwame Prince
University of Cape Coast

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

Name: Odame Kwame Prince

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Name: Prof. Albert Machistey Abane

Signature: Date:

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Signature: Date:

ABSTRACT

Access to public transport is essential as it connects people to various life enhancing opportunities but not everyone in the general population enjoys the same level of ease when engaging transport services. Persons with disability (PWDs) who form about 15% of the world's population making them the world largest minority group are among those who face severe accessibility challenges. Unfortunately, measure of the ease in using transport services have been dominated by objective accessibility approaches which largely project the travel needs of the general population. This study uses a subjective accessibility approach, which seeks to amplify the voices of PWDs and ascertain the influence of both cultural and behavioural dimensions to transport exclusion, an area that the objective measures have ignored. A sample of 50 PWDs, 10 transport operators and 4 key stakeholders were reached through convenient, snow balling and purposive sampling. Research instruments employed include an interview schedule and an auditing scheme. Data from the interviews were transcribed, edited and coded using MaxQDA. Results from the study reveals that low fares attract PWDs to trotro services but the conditions of trotro buses and behaviour of operators presented a major obstacle to PWDs. A major strategy to escape these challenges is the reliance on Uber but higher fares limit PWDs' ability to use Uber service frequently. Transport operators acknowledged the noncompliance of their vehicles to the dictates of provisions in Ghana's disability Act but were hesitant to modify their services given the higher cost associated with this modification. Finally, stakeholders did not find PWD's transport concerns critical to their survival hence the low attention given to this issue.

KEYWORDS

Visually impaired

Physically challenged

Public transport

Accra Metropolitan Area

Social exclusion

Accessibility



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To my family: Antoinette Ama Rhule (wife), Adom-Akyedze Dwamena Odame (son), Theresa Aseidua (mother) and Mettle Manu-Yeboah (brother), I appreciate your support offered through prayers and encouragement. May God bless you. Finally, to the most amazing wife in the world, Antoinette who has been with me every step of the way. Thank you for being there for me.

DEDICATION

To James Kweku Eshun, Kofi Ameyaw Gyamfi and all persons with disability.



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LIST OF ACRONYMS



ADB	Agricultural Development Bank
AICC	Accra International Conference Centre
AIMFREE	Accessibility Instruments Measuring Fitness and Recreation Environments
AMA	Accra Metropolitan Area
BRT	Bus Rapid Transit
COVID-19	Corona Virus
CRPWD	Convention on the Rights of Persons with Disability
DADF	District Assembly Disability Fund
DANIDA	Danish International Development Agency
DSW	Department of Social Welfare
DVLA	Drivers and Vehicles Licencing Authority
EC	Electoral Commission
GAPA	Ghana Association of Persons with Albinism
GBU	Ghana Blind Union
GFD	Ghana Federation of Disability Association
GIPC	Ghana Investment Promotion Council
GNA	Ghana New Agency
GNAD	Ghana National Association of the Deaf
GOIL	Ghana Oil Company Limited
GPRTU	Ghana Private Road Transport Union
GSPD	Ghana Society of the Physically Disabled

GSS	Ghana Statistical Service
GSSD	Ghana Society for the Socially Disadvantaged
ICT	Information Communication Technology
LEAP	Livelihood Empowerment Against Poverty
LI	Legislative Instrument
MAXQDA	Max Qualitative Data Analysis
MMT	Metro Mass Transit
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Service
NIA	National Identification Authority
NIB	National Investment Bank
NPP	National Patriotic Party
OSA	Omnibus Service Authority
PDIS	Physical Disability Inclusion Sub-score
PWD	Person with Disability
SERVQUAL	Service Quality
SEU	Social Exclusion Unit
SHS	Senior High School
SJS	Stevens-Johnson Syndrome
SSNIT	Social security and national insurance thrust
STC	State Transport Company Limited
TV	Television
UK	United Kingdom

UMI	Universal Mobility Index
UN	United Nations
UNICEF	United Nations International Children's Emergency Fund
VIIS	Visual Impairment Inclusion Sub-score
WHO	World Health Organization



CHAPTER ONE

INTRODUCTION

Background to the study

The need for out-of-door trips is informed by the fact that many life-enhancing opportunities like schools, nightclubs and hospitals are found outside one's home (Brussel, Zuidgeest, Pfeffer & van Maarseveen, 2019). This situation highlights the importance of transport services in connecting people and opportunities and also demonstrates how the absence of transport services may hinder life's progress by making it difficult for people to enjoy services or take part in activities of their choice (Kett, Cole, & Turner, 2020). Additionally, Ahmad (2015) purports that access to transport may also alleviate people from poverty since transport services guarantee autonomy, reduces isolation and demand for support from family and friends. Regardless of the purposes that inform one's decision to undertake an out-of-door trip, not all people in the general population enjoy the same level of ease when engaging transport services. A common phrase that is used in reference to people who encounter challenges in their use of public transport services is transport disadvantaged (Hernandez & Titheridge, 2016).

In a cross-country study to identify the composition of the transport disadvantaged group using an online Delphi survey, 33 transport experts unanimously identified persons with disability (PWD) as the most represented group since their challenges in using public transport are permanent as compared to other groups like pregnant women, children and the aged whose challenges have been identified to be temporary (Yigitcanlar, Mohamed, Kamruzzaman, & Piracha,

2019). In addition, the challenges experienced by other identified groups are known to be common to PWDs who constitute about 15 per cent of the globe's population (Ipingbemi, 2015; World Health Organization, 2011a). This proportion makes PWDs the world's largest minority group, hence attention to their travel needs may go a long way to address the needs of other transport disadvantaged sub-groups.

The movement of the transport-disadvantaged group is largely dominated by the road transport sector due to lower fares, large coverage and flexibility in schedules (Yobo, 2013). Being the largest, road transport is estimated to be responsible for the movements of about 96 per cent of passengers and freights in Ghana (Atubiga, 2016). Aside the state that exclusively provides the road infrastructure, the provision of vehicular services is heavily dominated by the Ghana Private Road Transport Union (GPRTU) that controls about 80 per cent of all human and freight movement in Ghana (Ojo, Amoako-Sakyi & Abane, 2014). For PWDs in Ghana, the potential of transport services to create an inclusive and participatory environment accounted for their decision to seek a court injunction to halt the commissioning of the 14.1 Kilometre Tetteh Quashie - Mallam highway. To them, the contractor's omission of key disability-friendly accessories automatically hindered their mobility and alienated their desire to seek opportunities and move freely (Ghanaweb, 2012)

Even if such disability-friendly transport accessories are provided, Munyi (2012) opines that attitudes of transport agents have been identified to have a greater influence on the status and acceptance of PWDs in their usage of public transport services. Such cultural elements may reflect in the language used to

describe disability, the symbology or connotation of disability as well as society's norms or conceptualisation of beauty or body image (Nyerere, 2011). Apart from transport operators' attitudes, cultural orientation equally influences support services like the need for ramp, shelter and assistive technology that are offered to PWDs at various transport terminals. Evidence from South Africa indicates how poor reception from taxi drivers affects PWDs' patronage of taxi services which results in a subsequent reduction in trips generated since other public transport options are not available or accessible to them (Scior, 2011). While identifying the contribution of culture to PWDs' ease of using public transport services, such narrative equally fits into the social model of disability which identifies social interaction as the principal factor that restricts activity participation among persons with impairment (Soffer & Chew, 2015)

Contrary to the social model, the medical model of disability identifies impairment as the principal cause of disability. By this definition, any individual who does not fit the narrative of an 'ideal or normal' body type is considered as having a disability (Anastasiou & Kauffman, 2013). This may range from people who have lost body parts like eyes or amputees to those who have poor functioning of any part of the body. The medical model has however been condemned since it considers persons with impairment as a 'faulty group' that needs to be 'repaired' or rehabilitated to fit into society (Hughes & Paterson, 1997; Oliver, 2013). This claim also shifts the responsibility or burden of creating an inclusive and sustainable environment from society to individuals (Reddy, 2011).

As the social model of disability focuses on social interaction as the cause of one's disability, the literature indicates that the conceptualisation of disability and associated response towards the disability community has not always been negative. Indeed, the Ga, Yoruba and Hubeer of Ghana, Nigeria and Somalia respectively relate disability to gifts from a deity or supernatural being (Nyangweso, 2018). To such groups, PWDs are seen as reincarnated beings, a portal or connection to departed folks or representatives of deity in a local setting. Whereas religious and mystical views sharpen such positive thoughts, the proportion of such groups are in the minority since the Ga's are known to constitute only 7.4 per cent of all ethnic groups in Accra (Ghana Statistical Service, 2012a). With its cosmopolitan status and having the highest urban disability population in Ghana, a transport-focused study on PWDs ability to engage public transport activities in Accra may go a long way to understand their mobility needs and social exclusion.

On citing the role of social interaction and cultural identity in PWDs' usage of public transport services, the process by which transport operators' attitude, support services offered to PWDs and interaction with commuters reduces PWDs ability to reach opportunities, social networks and goods and services is known as social exclusion (Lucas, 2012). With its roots in the Marxist notions of the capitalist oppression, social exclusion has taken centre stage in the United Kingdom's development agenda which has even resulted in the creation of a Social Exclusion Unit (SEU) and the realization of how access to transport services contributes to one's social exclusion (Hernandez, 2018; Oviedo Hernandez & Titheridge, 2016).

Being a measure of one's level of deprivation, the subject and measurement approach of social exclusion has also been a topic for debate since different scenarios may exclude an identified group from participating in a preferred activity (Schwanen, Lucas, Akyelken, Cisternas Solsona, Carrasco, & Neutens, 2015). Regardless of the measurement approach in use, vulnerable populations like PWDs, women, aged and some rural folks have been identified as most susceptible to being excluded from mainstream activities like enjoying transport services (Brussel et al., 2019).

The statement of the problem

Evidence from literature indicates the dominance of quantitative accessibility approaches to the measure of social exclusion (Deboosere & El-Geneidy, 2018). Thus, researchers measure accessibility to opportunities in units of cost such as time, distance and money/income and this approach has proven to be crucial in the siting of health facilities for paramedics or estimating the amount of money saved in reaching an opportunity (Iwarsoon & Stahl, 2003). Also, a report on social exclusion in Ghana by Abane, Amoako-Sakyi, Owusu, Agyemang, & Odame (2019), largely centred on the general population and used income as the basis for measuring social exclusion.

While such quantitative approaches could be applied in different models, Lättman, Olsson, & Friman (2018) argue that these measures only assume a homogeneous travel population characterised by good health and no disability. Apart from ignoring other population groups, such measures do not account for the

role of commonly held views, beliefs and practices as well as its ability to influence one's status and attainment of life-enhancing opportunities.

Aside focusing on the use of quantitative measures, the discourse on the accessibility for the PWDs also centres on PWDs' access to various destinations and buildings leaving out the conditions of the transport environment that facilitates the movement of PWDs from one place to the other as seen in Table 1. The output of Table 1 was derived an extensive review of literature in Accra from 2011 to 2021 (10 years interval). Though such scholarly work focused mainly on PWDs, the concentration on the physical environment resulted in some attempt to retrofit a portion of the physical environment leaving out the transport sector entirely. It must be noted that, the mode of assessment, in this case, is consistent with reliance on the subjective assessment of the accessibility auditors which equally ignores the views of PWDs.

Table 1: Studies on Transport and Disability in Accra

	Author(s)	Year	Title	Focus
1	Danso A. K., Ayarkwa J. & Danso A.	2011	State of Accessibility for the Disabled in Selected Monumental Public Buildings in Accra, Ghana	Building
2	Ashigbi Y.E, Danso A.K, Dogbe J, & Owusu D.E.	2013	Limitations to Mobility of Building Students with Special Needs: A Case Study of the University of Ghana, Legon	Building
3	Danso A. K.,	2014	Mobility Challenges of	Building

	Ashigbi Y.E.		Persons with Disabilities (PWDs)	
	Tudzi E. P.		at the University of Ghana.	
4	Ashigbi Y.E,	2015	Persons with disabilities and the	Building
	Danso A.K,		built environment: A user	
	Tudzi, E.P		perception of the University of	
			Ghana, Legon Campus	
5	Danso A.K. &	2015a	Consultants and Users: Who is	Road
	Tudzi E.P.		Right on the Accessibility of Accra	
			Road Interchanges?	
6	Danso A.K &	2015b	Inclusive access to Accra shopping	Building
	Tudzi E.P.		malls	
7	Danso A.K &	2016	Inclusive access to Accra shopping	Building
	Tudzi, E.P		malls	
8	Ashigbi E. K.Y	2017	Mobility challenges of persons	Building
	Danso A.K		with disabilities in a University in	
	Tudzi E. P.		Ghana.	
9	Adam, Issahaku	2019	Drivers of physical accessibility	Building
			among hotels	
10	Ashigbi Y.E,	2015	Persons with disabilities and the	
	Danso A.K,		built environment: A user	
	Tudzi, E.P		perception of the University of	
			Ghana, Legon Campus	

Source: Authors construct, 2019

Having identified the quantitative measure as potentially eliminating the mobility aspiration of PWDs and poorly measuring social exclusion, Lucas (2011; 2012) has called for the use of a person-based accessibility measure since this approach acknowledges the heterogeneous characteristics of the travel population and also makes room to place PWDs at the centre of an accessibility measure. This makes the person-based measure relevant as it amplifies the voices of PWDs to articulate their concerns to various planners and managers of the physical environment (Peña Cepeda, Galilea, & Raveau, 2018; Saif, Zefreh, & Torok 2019).

In addition to ascertaining the extent of usage of transport services from the perspective of users, the person-based approach offers a platform to measure PWDs' social exclusion through a socio-cultural lens which has a much greater effect on PWDs quality of life (Bi, Card, & Cole, 2007). Here the emphasis will be placed on how belief, norms, language, connotation or symbology of disability as well as attitudes of people influences PWDs usage of public transport vehicles.

Challenges of PWD may seem to be a common phenomenon but Pyrialakou, Gkritza, & Fricker (2016), are of the view that its representation and experience differ among countries, social and cultural groups hence the need to adopt the person-based measure to examine this issue within an urban context like Accra which is known to have the highest urban disability population in Ghana and about 60 per cent of all registered vehicles in Ghana (Ghana Statistical Service, 2012a). In connection with the aforementioned issues, the following questions would be addressed:

Research questions

1. What are persons with disabilities' knowledge of the concept of disability?
2. What factors influences PWDs extent of using public transport services in the AMA?
3. What strategies are adopted by PWDs to overcome their social exclusion in the AMA?
4. What support services do transport operators' provide to PWDs in the AMA?
5. What is the role of stakeholders in addressing the mobility concerns of PWDs in the AMA?

Purpose of the study

The general objective of this study is to explore persons with disability social exclusion through the provision and usage of transport services in Accra.

The specific objectives of this study are as follows:

1. Explore persons with disability' knowledge of the concept of disability.
2. Assess the factors that influences PWDs extent of using public transport services in the AMA
3. Explore strategies adopted by PWDs to overcome their social exclusion in the AMA.
4. Examine transport operators' support services to PWDs in the AMA.
5. Determine the role of stakeholders in addressing the mobility concerns of PWDs in the AMA.

Justification for the study

On the methodological front, the study fills the gap in the measure of social exclusion since it introduces a cultural perspective that highlights society's attitudes to PWDs social exclusion through the provision and usage of transport services.

Being captured among the vulnerable road users, this study will give an indication of the travel needs of persons with disability. The concerns expressed by PWDs in their ease of using current public transport services in selected terminals will reveal the extent to which Ghana has responded to the concept of universal designs as prescribed by the Ghana Disability Act, Centre of Universal Design and the United Nations (UN).

The study will further offer insights into the lived experiences of persons with disability particularly in the area of transport operators' reception. Specifically, this study will offer researchers and readers an insight into drivers' knowledge on this subject as well as how society treats persons with disability.

The study would also offer insight into the position of state machinery when it comes to meeting the mobility needs of PWDs. This will provide a background of various activities taken by the state when it comes to the creation of an inclusive and accessible transport services. A look at these roles will give readers a fair assessment of Ghana's' commitment to ensuring an inclusive and barrier-free transport environment.

Finally, the outcome of this study may serve as a source of information to Civil Society Organizations (CSOs) and state legislators who may fall on this study

to revisit, amend or enforce existing legislation on transport and disability issues in Ghana.

Delimitation of the study

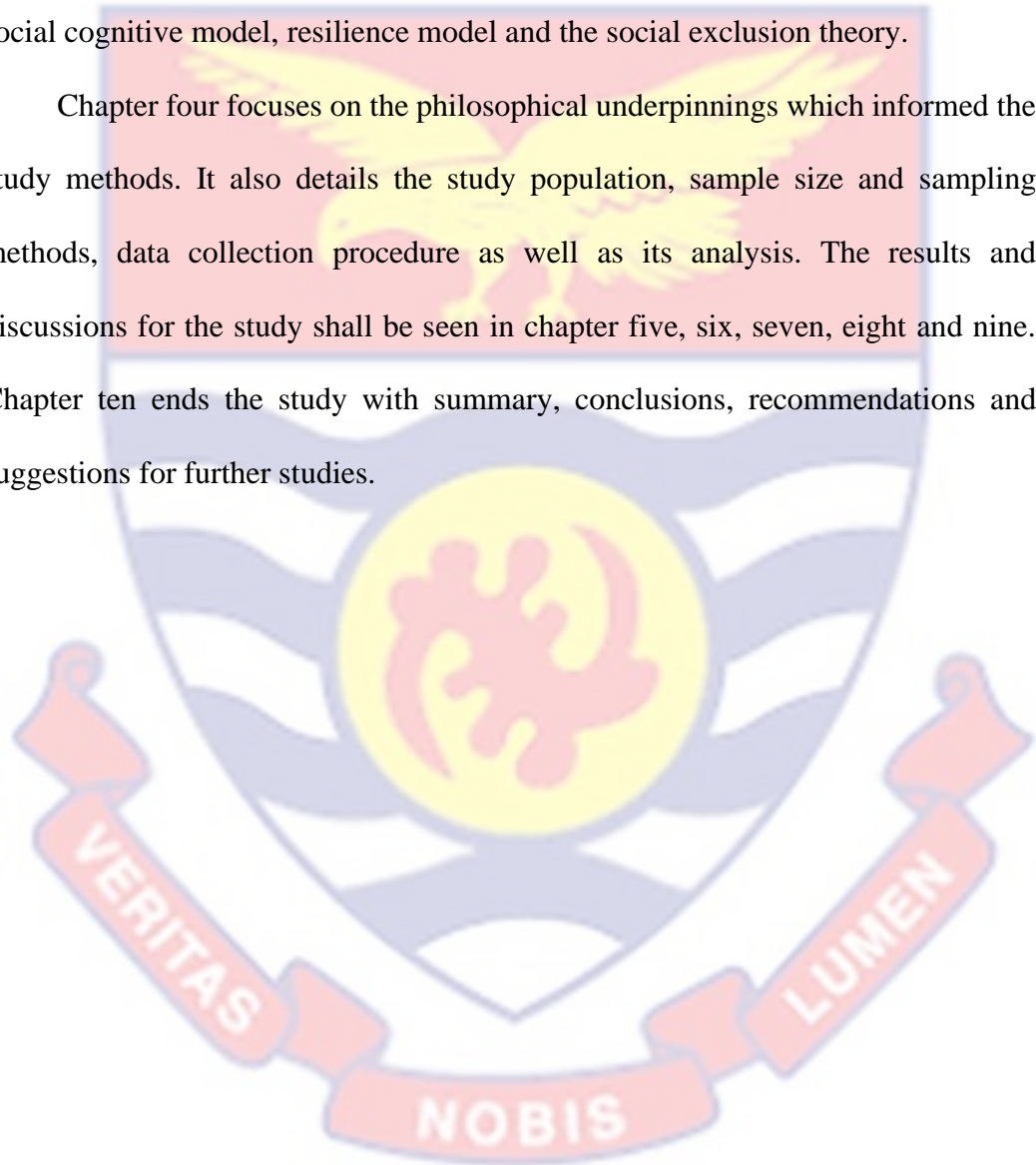
This study focuses on the commuters with physical disability in Accra. Emphasis is placed on physical disability since they form about 60 per cent of Ghana's disability population and is also the most visible form of disability (Voice of People with Disability Ghana, 2014). The transport needs and social exclusion experienced by this group is known to be representative of other disability groups. While PWDs constitute the demand side of transport services, the study also focuses on station managers and transport operators of two of Accra's largest and busiest transport terminals (Kwame Nkrumah Circle and Kaneshie) that serves as transit points to other parts of the country. In addition, the study also includes key stakeholders who play a key role in the operations and management of transport services in Accra. Any other individual who falls outside these descriptions will not be considered for the study

Also, having based on the lived experiences of PWDs in describing the extent to which transport services influence their social exclusion, this study adopted an exploratory research design since it affords the opportunity to investigate topics that have not received much attention and can also be readily used as the basis for further studies (Owens, 2018). Being qualitatively inclined, the conclusions drawn will only reflect the views of respondents in the study area.

Organisation of the study

Apart from this chapter, the study is organised into nine additional chapters. Chapter two and three focus on theoretical and empirical literature in connection with the disability discourse focusing on the social materialistic model of disability, social cognitive model, resilience model and the social exclusion theory.

Chapter four focuses on the philosophical underpinnings which informed the study methods. It also details the study population, sample size and sampling methods, data collection procedure as well as its analysis. The results and discussions for the study shall be seen in chapter five, six, seven, eight and nine. Chapter ten ends the study with summary, conclusions, recommendations and suggestions for further studies.



CHAPTER TWO

THEORETICAL LITERATURE

MOBILITY AND SOCIAL EXCLUSION OF PWD'S

Introduction

Rising human population requires a tall list of services needed to improve quality of life. Indeed, physical mobility has for centuries been one of the active ways through which people reach various points of interest. While out of door trips become the focus of discussions, the role of society in influencing the ability of PWDs to engage transport services to enjoy various opportunities will be examined here. Specifically, this chapter reviews theories and concepts on disability, attitude towards PWDs, accessibility barriers, social exclusion and resilience.

The social materialistic model of disability

Historically, the ontology of disability has metamorphosed throughout the years and has seen a varied response to how PWDs are integrated into society. Inasmuch many models seem to explain the concept of disability, Anastasiou and Kauffman (2013) are of the view that the medical and social models have taken precedence over the rest and are currently used as the foundation for the development of contemporary models whose tenets are not so different from the medical and social model. One common characteristic of all these models is the observed difference in the rate at which PWDs and the general population enjoy various opportunities. This occurs due to differences in how disability is defined and measured and perhaps in the steps adopted to alleviate the plight of PWDs.

Prior to the social materialistic model of disability, the medical model of disability emerged after the Second World War (1939 – 1945) during which the medical and pharmaceutical industry started witnessing significant improvement in their operations. With these improvements came the need to integrate veterans who had lost various body parts during the war. The definition of disability in this era was limited to a loss in the functional body of an individual and by extension, all people who were considered as having a disability were also considered sick, unhealthy or unproductive.

This period saw the rise in the establishment of dormitories, asylums and institutions that were located in the outskirts of towns and also dedicated to offering rehabilitation services to PWDs. Having separated the ‘sick’ or PWDs from the general population also implied that all development progress like the construction of roads and vehicles were only centred on the needs of the ‘healthy’ population who did not possess any disability. Elements of this theoretical underpinning are evident in some accessibility and transport-related projects which often only reflects the needs of the ‘*general*’ population (Ferreira et al., 2012; Lättman et al., 2018; Proffitt, Bartholomew, Ewing, & Miller, 2019). As mentioned in the research problem, these approaches only rely on the subjective views of the so-called transport and planning experts who may not fully conceptualise or represent the voices of PWDs’.

Contrary to the medical model of disability, many disability advocates and activists who suffer some level of disability oppose the tenets of the medical model that considers disability as an embodiment of an individual (Terzi, 2004; Thomas,

2004; Zhuang, 2016). Here, the cause of disability is attributed to the unnecessary barriers in the built environment and poor social interaction that limit PWDs' ability to enjoy opportunities and not the loss of an arm or eye as indicated by the medical model. For instance, a cripple's inability to enter a car due to the lack of ramp or poor acceptance of a cripple in a community is rather the cause of his/her disability and not the loss of a functional leg. To the proponents of the social model, the removal of all unnecessary barriers in the built environment will actually lead to the extinction of disability (Oliver, 2013).

In addition, the social model tries to differentiate impairment from disability. Here, an impairment relates to the loss or poor functioning of a body part like an arm, eye or leg (World Health Organization, 2011a). Though this concept may be inherent in an individual, impairment cannot be used as a basis to classify an individual as having a disability since disability is related to an activity and not a person. At all times, it is a society that rather causes disability and not an individual.

Unlike the medical model which heavily relies on the assessment of medical experts in prescribing solutions for persons with impairment, the social model advocates for persons with impairment to have a say in what constitutes their environment. This position calls for a right-based approach that legally entitles PWDs to the same services the general population enjoys (Hughes & Paterson, 1997). This right-based approach highlights a power struggle between a privileged and underprivileged group, hence the emergence of a series of global declarations that profess to offer equal opportunities for PWDs in their attainment of rights relating to mobility, health, education and others (Addo, 2014). Some of these

declarations can be seen in Article 2 of the Convention of the Rights of Persons with Disability (CRPWD) which stipulates the:

Provision of necessary and appropriate modification and adjustments that does not impose undue burden as well as ensure the enjoyment of services on an equal basis with others of all human rights and fundamental freedoms [Article 2] (United Nations, 2006)

This underpinning has also informed the formation of many national and local legislations like the Ghana Disability Act (Government of Ghana, 2006), Americans with Disability Act (Shields et al., 2018) as well as the Disability Discrimination Act of the UK (Frye, 2013). Aside from these legislations, the use of subjective accessibility approaches also confirms the need to measure the impact of socio-cultural and behavioural indicators that are not accounted for in the case of the ‘so-called’ accessibility experts. Of course, all of these legislations highlight the subject of oppression suffered by PWDs when it comes to decisions on how to plan, design, construct and use the physical environment.

This theory is deemed fit for this study since it situates PWDs at the centre of the built environment and also attributes the cause of disability to society and not an individual. This theory gives room to amplify the voice of PWDs and further reviews the role of society and other anthropogenic factors which are inherent in one's society. On the other side, the theory downplays the emphasis on one's biological limitation or bodily functioning in reducing accessibility and subsequently causing social exclusion (Haegele & Hodge, 2016). In fact,

downplaying the perspective of seeing disability as an inherent trait of an individual is important since it absolves society and policymakers from establishing regulations that acknowledge the diversity of its population (Thomas, 2004).

Social cognitive theory

This theory postulates that behaviour towards an activity or object occurs in a social context which hinges on the reciprocal interaction between an individual and his environment. Grounded in educational research, Bandura's (1989) social cognitive theory believes that one's view of his world does not only originate from his experience or belief but also emanates from people's reactions to other elements in their society. Here, the emphasis is placed on the influence of both internal and external social reinforcement that shapes the extent to which an attitude towards a behaviour is developed. Unlike other behavioural theories, this theory does not only consider one's intentions as the primary prerequisite for behaviour but also considers self-efficacy or confidence in a person's practical ability to perform an action like boarding or disembarking from a bus. To Bandura (1989), the interplay between one's personal, behavioural and the environmental factors are the main elements that influence one's actions and all these are mediated by society's influence. Depending on the situation, any of the factors in Figure 1 may exert a different level of influence on others.

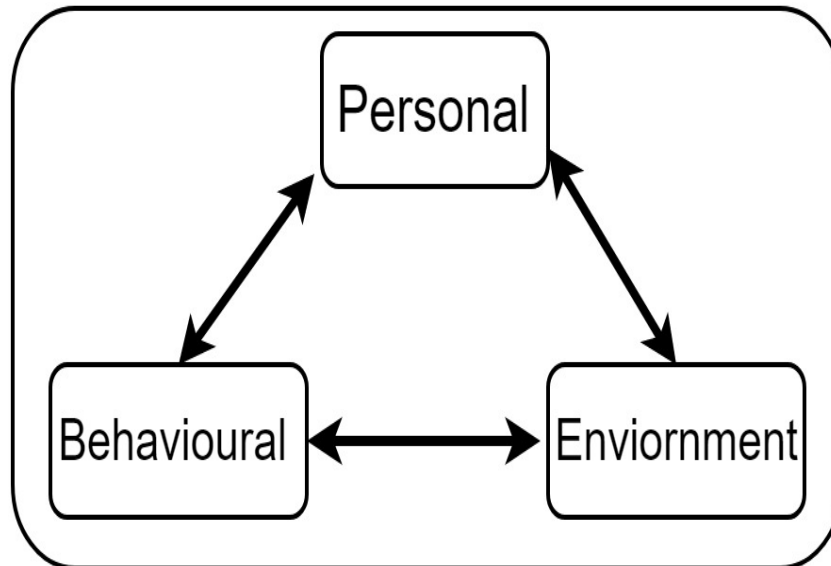


Figure 1: Social cognitive theory

Source: Bandura (1989)

The personal factors in Figure 1 refer to an individual's reflection of his/her personality which may be deduced from observing the behaviour of people around. This may be seen in the thoughts, perceptions, feelings and beliefs that shape an individual's practical ability or confidence to undertake a behaviour like joining a bus. On a personal level, one's ability to undertake an action may depend on one's cognitive abilities, physical characteristics, beliefs and attitudes. Cognitive abilities relate to an individual's brain process that energises and motivates action. This may be linked to the amount of information about a trip or one's evaluation of the ease or benefits that may be accrued from undertaking a trip. On the other hand, one's brain process may also be an indication of his world view about his physical characteristics as in the case of socially constructed themes like disability, racism or gender. In this case, observed difference in one's physical characteristics or deviation from society's expectations may deter such people from undertaking any desired activity. In the case of PWDs, the absence or poor functioning of a body

parts and poor status accorded such groups may equally lower confidence among this population (Frye, 2013). As indicated earlier, self-efficacy is a primary requirement for actions hence confidence is always key to the performance of an action.

The social element is another factor in this framework (Figure 1) and this relates to one's verbal and interpersonal interactions with other members of society. This centres on how the definition of social constructs like disability influences people's behaviour, beliefs and attitudes towards a particular group of people or an activity. In the wake of such definitions, constructs identified as odd, different or deviant may witness varying degrees of negative receptions as in the case of persons with disability. Whether by historical, religious or mystical sources, such definitions may result in psychological discomfort that may see a withdrawal of community members from people who have been identified to be in this bracket. Such withdrawal accounts for punishment that is meted out to people who have been identified as non-conformant to society's expectation.

Here, the approval or expectations of the significant other or society becomes the basis for which PWDs are able to enjoy opportunities that are easily enjoyed by the general population. Just as prisoners are incarcerated and separated from mainstream society, negative constructs on disability may also subject PWDs to such fate since their uniqueness may be considered as an affront to their society. Indeed, some societies have a positive outlook on disability and in such context, much efforts are made to integrate PWDs into mainstream society. One possible

way of averting such negative views may be to offer information on the need to see disability as part of human uniqueness or diversity and not in terms of deviance.

The final element in this theory as seen in Figure 1 is the environment which relates to the physical component that supports one's attainment of opportunities. The influence of society's views on the status of such construct equally determines the extent to which the physical environment is planned, designed or built. In the case of the transport environment, this may be seen in the design and construction of the transport terminals and road infrastructure as well as the provision of vehicular services that have also been identified to alienate the needs of PWDs. A typical example of this can be found in this country where the Ghana Federation of Disability Association sought a lawsuit to halt the commissioning of a major highway that did not meet their mobility needs (Ghanaweb, 2012). Here, a barrier laden transport environment that only meets the needs of the general population is a clear indication of society's rejection or/and its poor understanding of the mobility needs of PWDs.

Unlike other theories on people's behaviour, this theory has been criticised to be loosely organized, based solely on the dynamic interplay between person, behaviour, and environment. By this, it is unclear the extent to which each of these factors into actual behaviour and if one is more influential than another. However, this theory offers a one-stop-shop to view the contribution of the personal characteristics, socio-cultural and physical component of the environment in shaping attitude towards a reference group or activity. Indeed, the theory's

applicability to persons with disability and focus on one's self-efficacy as against intention was a key determinant in choosing this theory for the study.

Accessibility barrier for commuters with disability

Accessibility is defined in terms of the ease of using transport services, enjoying opportunities or both and the extent of this pursuit varies with road users (Adhvaryu et al., 2019). The differences in accessibility levels results from the degree of incompatibility between the physical characteristics of commuters and the pressure required by the environment in undertaking an action (Venter & Rickert, 2002). In line with this, Venter & Rickert (2002) developed a three-fold approach that can be used to examine barriers confronting PWDs in their use of transport services and access to opportunities.

Backed by the social materialistic model of disability, Venter & Rickert (2002) employed the needs analysis which offers room to evaluate PWDs' beliefs, views and opinions on the gaps in the transport services that prevent them from enjoying it and subsequently reaching various opportunities. This approach also gives room to evaluate the contribution of the physical, social and cultural factors that influence transport usage and also cause social exclusion. As seen in Figure 2 and explained in the subsequent paragraphs, the three-fold barriers to PWDs' accessibility are structural, social and psychological. These barriers may either work in isolation or collectively work to influence the accessibility of PWDs.

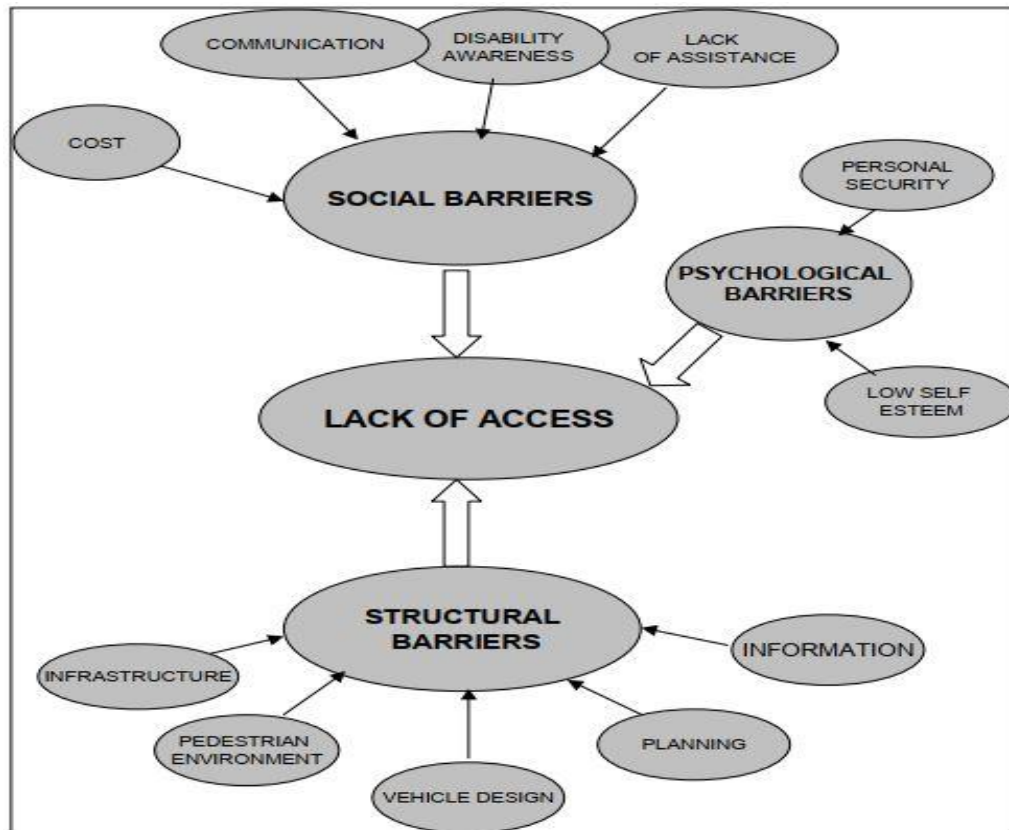


Figure 2: Accessibility barrier framework

Source: Venter, Savill, et al., (2002)

Social barriers result from PWDs' interaction with their immediate environment or barriers that arise from a community's culture. These may range from a community's perception of the definition and entitlements of PWDs' to the way this definition translates into the design, construction and provision of services including the transport-related ones. This may also extend to the reception accorded to PWDs in their usage of such transport services. While such elements may be perpetuated by the general population, Venter, Savill, et al., (2002) identified communication issues, disability awareness, lack of assistance and cost as social elements that reduce PWDs' access to transport services and opportunities. For PWDs, cheaper transport options may not be directly accessible since they may not

conform to the needs of wheelchair users, crutches or even the visually impaired. At this moment, the next best alternative may be the employment of more expensive transport service especially if there are no concessionary provisions.

In addition to the aforementioned, the absence of public awareness on disability is another social element that greatly influences PWDs' relationship and their use of public transport services. Here, the thought of viewing PWDs as objects of pity and not people who have equal rights may manifest in transport operators or other passengers demeaning attitudes when offering assistance to PWDs. In fact, lack of awareness and biased cultural inclination may even reflect in people's outright refusal in offering support services to PWDs when joining or disembarking from buses. In cases where such assistance is offered, they may be offered in a demeaning manner.

Another social barrier relates to communication challenges which highlight PWDs' inability to independently relay their travel plans to other commuters or transport operators. This may range from the difficulty of relaying one's intention to alight at the next bus stop or even seek directions. Such communication gaps may result from the absence of technology for the visual or audible impaired as well as the absence of assistance to make complicated fare system easier.

Besides the social factors which are non-tangible, Venter and Rickert identify the structural factor as the most visible of all the elements that affect PWDs' accessibility. In this case, the emphasis is placed on the design and construction of the pedestrian and/or passenger environment. On the pedestrian environment, the focus lies on the availability, conditions and presence of sidewalk

infrastructure while the passenger environment, on the other hand, considers the design of both vehicles and transport terminals. This may range from the absence of disability-friendly facilities in vehicles to the unfriendly conditions of transport terminals. Indeed, Venter, Savill, et al., (2002) identify these elements as having the ability to greatly hinder PWDs' manoeuvrability and the frequency of trips generated by PWDs.

Whereas the structural barriers have many sub-elements, Venter, Savill, et al., (2002) cites PWDs' access to information as critical in disenfranchising commuters with disability. To Venter, Savill, et al., (2002), such struggles can be seen in one's difficulty in identifying the right vehicle to board as well as knowing the correct fare to pay especially in terrains where transport fares keep fluctuating (Peña Cepeda et al., 2018). On the other hand, when such information is provided, Venter & Rickert (2002) cite the use of small signages (notice boards) or other methods like shouting as a way of drawing people to the right services. In some complex or unregulated terminals, the proximity of different services and associated shouts from conductors may even confuse PWDs and make travel decisions more difficult.

From Figure 2, the third barrier of the model hinges on psychological factors which relate to the internal processes that propel actions or use of services. For PWDs, barriers in this regard may result from either the use of the physical environment, engagement in activities or narratives of other commuters who may have expressed an ordeal in using transport services or reaching an opportunity. Elements that matter most to PWDs at this point are concerns of safety (Friedner &

Osborne, 2015). Of course, safety in this context does not only centre on the risk of getting physically hurt or harassed but may even extend to how such incidents affect one's self-esteem.

This model offers a simplified representation of factors that influence PWDs' use of transport services to reach opportunities. In conformity to the social model of disability, these challenges are situated in one's immediate environment where attention is drawn on both socio-cultural and environmental factors.

Transport related social exclusion

The context of social exclusion indicates the extent or process to which people experience a reduction in their ability to use a service or participate in an activity. Considering this, transport and mobility become crucial in the examination of the socially excluded since the absence of transport services reduces people's chances of reaching various life-enhancing opportunities. To Yigitcanlar, Mohamed, Kamruzzaman, & Piracha (2018), the denial of services (which includes transport) cannot be seen in the context of an absence of material wealth since the absence of money cannot solely account for a reduction in one's ability to participate in activities. Rather, social exclusion should be seen in a wider context of various mediating factors that includes one's physical characteristics, social, economic and physical environment that influences one's practical ability to engage in activities. At the heart of social exclusion, Yigitcanlar et al., (2018) identify persons with disability, women, children and people in rural areas as key reference groups who

are most susceptible to experience a reduction in their ability to participate in activities.

Based on Church, Frost, & Sullivan (2000) and other works on social exclusion, Yigitcanlar et al's multidimensional approach considers six mediating factors namely; physical, economic, temporal, spatial, psychological and information elements which are explained in the preceding paragraphs.

For the physical component, the emphasis is on the functional abilities or characteristics of the commuter. In one case, the loss of body parts may highlight the differences with which activities like boarding high floor vehicles, communicating one's intention to transport operators and finding the right vehicle are undertaken. Aside from this group, pregnant women, temporarily injured persons and children who may not present any bodily loss may also witness challenges in using or enjoying opportunities due to changes in one's bodily function. Indeed, Yigitcanlar et al., (2018) reiterate that this indicator is not enough to reduce one's ability to engage transport services or reach any opportunity of choice and further call for a combination of other factors which are examined next.

As popularly acclaimed, income availability greatly influences the quality and frequency of transport services or opportunities available to a person. While transport services are usually offered on paid services, the group(s) with limited or no income may further witness a substantial decline in their ability to undertake out-of-community trips to enjoy various opportunities (Peña Cepeda et al., 2018). Even in the case of enjoying opportunities which can easily be reached via walking, an incompatible walking environment may render this resort unattractive hence a

growing desire for vehicles whose usage may come at a cost to the commuter. Income in the context of this study refers to both the amount of disposable income available to an individual and the proportion of that spent on transportation.

Geographically, spatial and temporal characteristics of transport infrastructure and opportunities also influence the extent to which people are excluded from activities. The spread of transport infrastructure and distance to opportunities are the main barriers that need to be conquered if opportunities are to be enjoyed. Temporal issues, in this case, relate to all variables that are likely to influence the amount of time committed to a journey. For PWDs, elements like the frequency of transport services, in-and out-of-vehicle waiting time, as well as the availability of a vehicle in one's household are deemed to influence the amount of time spent in commuting to an opportunity as well as influencing the level of desirability of an opportunity.

The last two determinants of social exclusion relate to intangible objects that highlight one's psychological positions on the quality of transport services as well as the amount of information on transport services. For PWDs and other vulnerable groups whose response to emergencies does not come at the same level of swiftness as the general population, perceived thoughts of personal safety like falling while attempting to board a bus or being manhandled by transport operators or other commuters may equally influence their use of transport services. In pursuance to the aforementioned, perception of safety and convenience may also be informed by the amount of information about the services that exist in a transport terminal. This could include information on the location of a moving vehicle,

washroom and other complimentary disability services as well as knowledge on prevailing transport fares. Of course, such information is needed to ensure independent decisions on the use of transport services.

This framework was deemed useful due to its applicability to various transport disadvantaged populations. Apart from its reliance on a multidimensional approach to the study of social exclusion, the model also gives room to highlight the relational context in which social exclusion is studied. This will allow for a smooth comparison between the ‘oppressed’ and those at the top of the power chain who are usually the general population. Just like other existing models, this one fail to categorically define social exclusion but leaves its definition at the mercy of the six multidimensional indicators. While this critique makes sense, it must also be stated that this model also gives room for researchers to contextualise and study the role of each mediating element in reducing one’s ability to enjoy opportunities.

The Resilience Theory

From its inception in the study of the wellbeing of children born into different social conditions in Haiti, the concept of resilience has not had a definite definition. To Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum (2008) resilience highlights people’s adaptive capacity to a positive trajectory after a disturbance. This definition views resilience as the outcome variable which describes people’s posture as having survived a shock or disturbance. Contrary to this assertion, Van Breda (2001) views resilience in terms of people’s capacity to conform to changing situations and recover swiftly after a disturbance. Reviewing these two definitions

highlights two key perspectives to the definition of resilience. Norris et al., (2008) indicate that resilience is measured as a static parameter (outcome) while Van Breda considers resilience as a dynamic variable (process) that considers the interaction between an individual and the environment. Regardless of the perspectives, one common denominator that has cut across the definitions is the competence or capacity of people to live through adversities.

With its roots among medical and social workers, outcome-based resilience is always measured regarding vulnerable people's adaptive capacity to recover from shocks. This assumption is coupled with a positive association between vulnerable groups and negative outcomes anytime shocks and adversities are discussed. The conclusion drawn from the aforementioned relates all vulnerable populations to a lower ability to recover from such shocks even though Van Breda, (2018) have refuted this claim.

Van Breda (2018), highlights a difference in the extent to which vulnerable populations in the same setting react differently to similar shocks. This has raised the notion that one's resilience to a shock can best be described in terms of their dynamic capacity to conform to the changing environment and recover from the shock. Unlike the outcome-based approach, this dynamic process highlights the existence of both internal and external factors that influence one's interaction with the environment (Fletcher & Sarkar, 2011). These factors may be evident at an individual or community level and even happen at different scales. To fully appreciate one's resilience to shock, there is the need to examine the link between

three elements: adversity, mediating factors and outcome, as seen in Figure 3 (Van Breda, 2018).

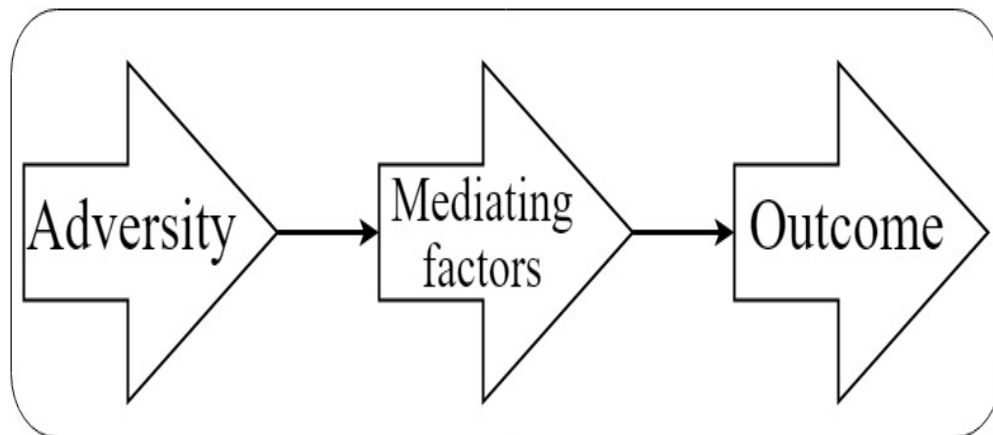


Figure 3: Resilience Model

Source: Van Breda (2018)

Without struggle or adversary, there will be no resilient and in this case, adversities refer to negative events that have the propensity to disrupt the activities of an individual or community. From the aforementioned, these negative events may be caused by many factors relating to personal, physical or cultural environment as seen in PWDs' social exclusion. From a socio-cultural context, social exclusion has been identified as reducing PWDs' ability to access activities and goods and services (Craig, 2012). Depending on the starting time of an event, adversities may be viewed from two perspectives: chronic and acute (Afifi et al., 2016). In the case of the former, no defined starting time is known, and such an adversary's effect may follow an individual or society for the rest of its life. A typical example of such adversity is poverty, social exclusion or family violence. In contrast, the acute adversary has a known starting time and may only affect a portion of an individual's life as in the case of road traffic crashes (Norris et al., 2008).

The impact of shocks over individuals or society depends on the range of available support systems or assets. These facilities are referred to as a mediating factor in the resilient framework (Figure 3) and may also include both personal, family and institutional safe nets (Craig, 2012). For PWDs such support systems may include a sense of high self-esteem, economic wealth, the positive reception to PWDs as well as the presence and enforcement of disability legislation. Even in the face of physical support systems like good roads and disability-friendly vehicles, social and cultural support systems have been identified to greatly influence PWDs' ability to engage in economic, civic and social opportunities. In fact, these mediating factors may be likened to Yigitcanlar et al's., (2018) factors that influence social exclusion.

Having cited adversary and its associated mediating factors, the interaction between these two factors influences the extent to which an individual or society undertake an activity (Desiree, 2011). While such outcomes could either be positive or negative, the outlook of such an outcome depends on the individual's ability to employ all assets or resources available to him. For PWDs, the impact of poor transport services and negative social reception could result in a reduction in one's frequency of trips, use of expensive travel modes, use of a proxy for trips and in rare cases, one may forfeit an intended trip if the earlier approaches are not available. In the face of these negative outcomes, Van Breda (2018) indicates the adoption of strategies that may reduce the impact of such negative outcomes on one's quality of life. On the other hand, a positive outcome may rather lead to an improvement in one's ability in reaching economic, social and civic activities.

In the wake of the diverse definitions, this study shall adopt the process-based definition of resilience since it offers the best opportunity to examine the relationship between an individual and the environment. This approach allows for the examination of mediating factors that influence PWDs' ability to cope with the changes in their transport environment and observe possible strategies to stay afloat.

The selection of this theory offers grounds to study the specific context and circumstances of PWDs' life from a different perspective. In the first place, this theory allows for the examination of how people react to shocks and also examine strategies that can be adopted in the wake of one's social exclusion. Also, focus on adaptive capacity emphasises a hope and potential based platform that makes it possible to consider PWDs as individuals who have something valuable to offer and not just a problem that requires fixing. Being a socially constructed term, the resilient theory has been cited as being arbitrary since a cross-section of its parameters cannot be empirically tested and measured. This is typically so in the case of socio-cultural and sentimental values likes one's feelings, thought and actions.

Conceptual framework

The framework adopted for this study was generated from a series of theories that were reviewed in the literature. Whereas social exclusion remains the focus of this study, the concept of accessibility was used as the parameter to measure social exclusion. The reason is that, accessibility typically measures one's extent of using

transport services to reach various opportunities and by this approach, an inverse relationship between accessibility and social exclusion can be deduced since a rise in one's ability to use transport services may inadvertently reduce the likelihood of being excluded from reaching opportunities of his or her choice (Litman, 2019).

Borrowing from the resilience theory, this conceptual framework (as seen in Figure 4) considered the three linking variables namely adversary, mediating factors and outcome but some necessary modification was made to alter and make the framework more suitable to this study. First, the social model of disability sets the foundation since it situates social interaction and physical barriers as the principal factors that reduce PWDs' ability to engage transport services. On this premise, the frameworks' attributes society as the culprit in one's social exclusion and not the individual's inherent characteristics.

While identifying the society as the primary focus, the role of society in easing the use of transport services by PWDs may manifest in the extent to which the imagery of disability which entails the language and connotation of disability influences the provision of transport services and the type of social interaction that exist between PWDs and other transport agents like drivers, conductors and commuters. Being the physical component, the availability and quality of transport services were identified as two key sub-factors that greatly influence one's ability to use a specified transport service. The transport terminals and conditions of the vehicles were only considered under the transport environment since these have been identified to influence out-of-community travel especially in urban areas like Accra (Frye, 2013).

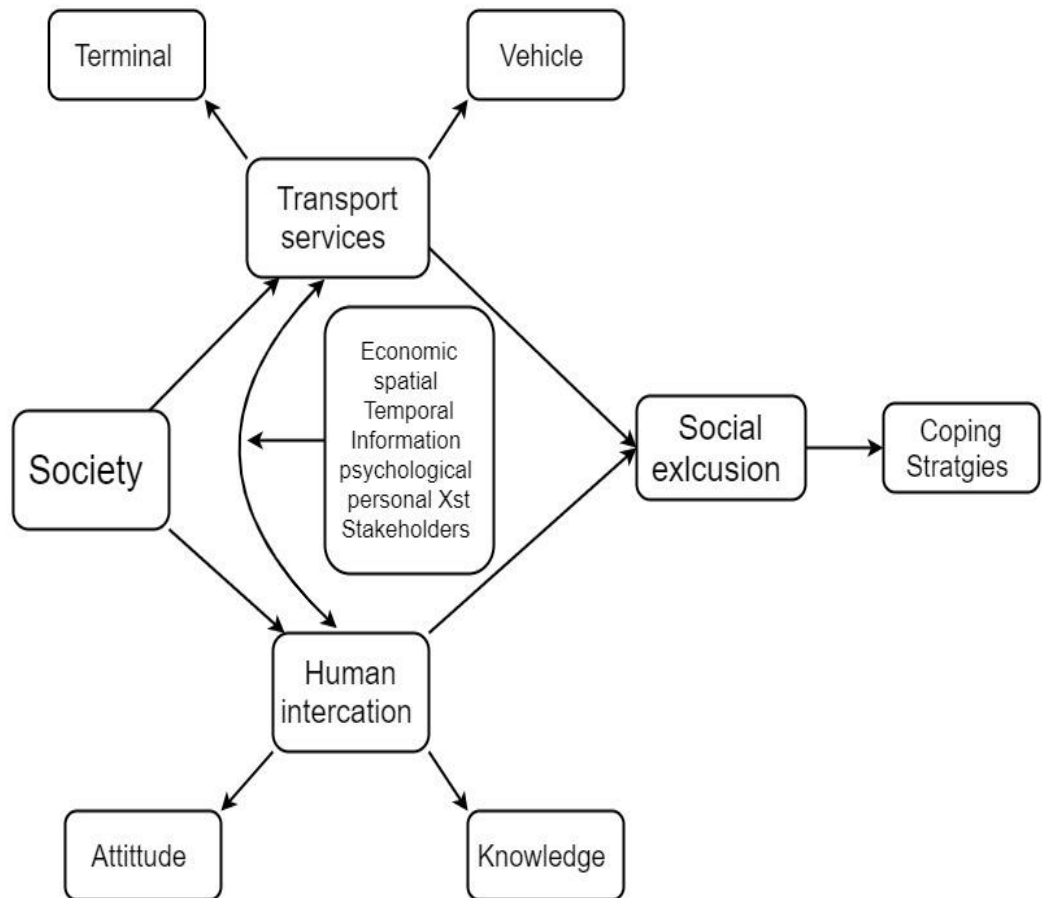


Figure 4: Conceptual framework

Source: Adapted from Van Breda (2001)

Having cited how physical and social factors influence PWDs' usage of transport services, the extent to which these factors reduce their ability to enjoy opportunities or cause social exclusion may depend on the presence of some mediating factors as indicated by Van Breda (2018) in the resilient model. These mediating factors may also conform to Yigitcanlar et al's., (2018) six-fold characteristics that socially exclude people from a service or an activity. As seen in the framework (Fig 4), emphasis will not only be placed on the availability of income or proportion of income spent on transport but on other factors like the type

of impairment present, spatial, temporal, psychological disposition as well as ability to obtain travel information when needed. Indeed, the inclusion of the personal characteristics situates this study in the context of the person based accessibility measure since it exclusively relies on the relationship between an individual and the environment as the yardstick in examining one's level of accessibility or social exclusion (Green, 2011).

Following the mediating factors, the final component of this framework is on outcomes which could either be positive or negative. In the wake of a good social reception and disability-friendly facilities, positive outcomes may boost self-confidence to undertake an out of room or community travel as well as one's ability to reach jobs, schools and other life-enhancing opportunities. On the other hand, a poor or negative outcome may reflect in one's withdrawal from social activities or a decline in the frequency of enjoying such opportunities. In fact, the type of outcome mimics an individuals' ability to apply assets available to him.

As indicated, social exclusion fits the category of an outcome since it marks the consequence of PWDs' ability to engage transport services to enjoy various life-enhancing opportunities (Van Breda, 2001). Contrary to the use of quantitative accessibility measure, this framework measured social exclusion through the lived experiences of commuters. This allowed for a shift in the use of an objective measure of travel impedance or accessibility to one that emphasises the meaningful nature of peoples' character and their participation in various opportunities (Benner, 2019).

Having endured this adversary, PWDs may adopt strategies to overcome their social exclusion. The choice of the strategy may depend on the assets or type of social exclusion indicators available to PWDs. Some observed strategies from the literature ranged from the use of proxy or aids for trips (Friedner & Osborne, 2015). When available, some PWDs rely on expensive travel options which may translate to more cost for the same travel opportunities. In extreme cases, PWDs may decline all travelling opportunities and live in solitude (Frye, 2013).

The weakness of this framework can be viewed from two perspectives, the first being the research approach. Being interpretive suggests that social exclusion is dependent on the examination of people's ideas, thinking and the relationships that exist between these thoughts and their experience. This gives little room to generalise the findings of such study to other areas. Also, the emphasis on society makes it difficult to isolate the role of individual variables like sex, race and religion that are key in the definition of social exclusion.

Despite these limitations, the framework was preferred because of its ability to clearly capture the role of society in influencing PWDs level of social exclusion through the provision and usage of transport services. This framework allows for the examination of transport operators and other commuters attitude as well as support services offered towards PWDs' usage of transport services. By adopting the person based 'accessibility approach, this framework allows PWDs to clearly offer real-life narratives on living with a disability and using transport services in Accra. Secondly, the focus on the resilience model allows for the acknowledgement of social exclusion in distorting one's life but also offers a suitable platform to

explore strategies that could be adopted by minority transport groups. This will offer illumination and give PWDs some visibility when it comes to their travel concerns and social exclusion. Finally, the framework can be applied to other population groups since variables inherent in the model can easily be assumed by other travelling groups like children, pregnant women and the aged. The dependent variable in the model is social exclusion since its outcome depends on the nature of the other variables like social interaction and transport service provision which form the independent variables.

Chapter Summary

This chapter sheds light on key theories and concepts that situates the mobility needs of PWDs in context. The Chapter begins with a review of the social materialistic model of disability which cites ones physical and social environment as the cause of disability as compared to the medical model which identified differences in bodily appearance as the cause of a disability. While this theory offers foundation to examine the extent to which transport services hinders PWDs' ability to enjoy various opportunities, both the Social Cognitive theory and the Accessibility barrier for commuters also offered deeper insights to key issues that influences the individuals' trips formation process (issues with the individual travellers and those of the transport services). The interaction between these theories offered an appreciation of whether a said traveller is considered socially excluded using observed limitations in enjoying transport services as a key factor. Finally, the Resilient theory was employed to examine strategies adopted by

PWDs' in the face of their challenges in using trotro services. The interplay within these theories offered a good foundation to develop a conceptual framework that highlights all variables that influences PWD's use of transport services.



CHAPTER THREE

REVIEW OF EMPIRICAL LITERATURE

Introduction

This chapter focuses on an empirical review of the literature on PWDs with emphasis on PWDs' social exclusion. Issues discussed in this chapter centre on social exclusion, measures of accessibility, characteristics of travellers, attitudes towards PWDs as well as transport service provision for PWDs in Ghana.

Social exclusion

Certainty on the definition of social exclusion has been a long-standing debate given the many nuances and synonyms used to replace social exclusion (Dimitrov, 2010). At a point, terms like poverty, deprivation and other related concepts were used interchangeably to denote social exclusion. However Yigitcanlar, Mohamed, & Piracha (2018) have hinted at the errors associated with this posture since these other terms only represent a fraction of what social exclusion stands for.

To begin with, Schwanen, Lucas, Akyelken, Cisternas Solsona, Carrasco & Neutens (2015) and Preston & Rajé (2007) consider social exclusion as a broad concept that examines all factors that limit an individual's ability to enjoy opportunities or activities in an area. At the heart of this definition, Kamruzzaman, Yigitcanlar, Yang, & Mohamed (2016) stress the need to view social exclusion as a relative concept where a group or individuals' extent of reaching or using an opportunity is always compared to other groups. In the case of PWDs, social exclusion may be compared to the general population's ability to use existing

transport services to reach opportunities. Aside being relational, Jehoel-Gijsbers & Vrooman (2007) also highlight the need to view social exclusion as a dynamic concept since anyone in a given population stands the chance of being excluded from mainstream activities.

Having defined social exclusion in terms of a reduction of ones' ability to use a service or reach an opportunity, Muddiman (2000) raises concerns on the probability of using poverty as a fashionable way of describing the socially excluded. Both Muddiman (2000) and Bocarejo & Oviedo (2012) assert that, poverty only focuses on the absence or inadequacy of material wealth like income as the yardstick in measuring social exclusion. Indeed, income can reduce a person's ability to travel to a hospital, but this criterion cannot be considered sufficient and applicable to all other population groups. For instance, Yigitcanlar et al., (2018) cite public disapproval of homosexuals as a determinant of their inability to enjoy some opportunities or travel in public buses even though these people may be well off. This situation best demonstrates the limitation of economic wealth in measuring social exclusion.

Following the limitations of poverty to capture all socially excluded, an array of researchers have called for the need to view social exclusion from a multidimensional perspective. For instance, Church, Frost, & Sullivan (2000) identified seven elements in their multidimensional approach which includes physical exclusion, geographical exclusion, exclusion from facilities, economic exclusion, time-based exclusion, fear-based exclusion and space exclusion. On the other hand, Hine and Mitchell (2001) suggest a five-point elements of social

exclusion, namely physical; economic; temporal; spatial and psychological. On a closer look, common denominators can be found in many of the ideas presented by both the former and the latter. For instance, aside the presence of common terms like physical and economic exclusion in both cases, the tenets of Church, Frost and Sullivan (2000)'s fear-based indicator also conforms to Hine and Mitchell's psychological factor.

In order to harmonise all definitions on social exclusion, Yigitcanlar et al., (2018) indicate that the absence or limitation in transport options is a primary reason for which social exclusion occurs. This was because most opportunities were found outside of peoples' home and until favourable transport services are made available, none of these opportunities will be enjoyed easily. To Yigitcanlar et al, social exclusion should best be considered in terms of transport service provision hence the term 'transport-related social exclusion'. In their attempt to measure social exclusion from the perspective of the transport users, Yigitcanlar et al propounded a six-fold factor which covers the physical, economic, temporal, spatial, psychological and availability of information. The study adopts this six-fold hypothesis since it prioritises access to transport services in the definition and the measurement of social exclusion.

Measures of accessibility

In adopting transport accessibility as a suitable parameter to measure social exclusion, Gould (1969) in his seminal work was quick to highlight the ease with which people referred to accessibility without establishing a rigorous and well-

defined approach to its measure. In support of this, Geurs & van Wee (2004) remarked that a sound theoretical basis, data requirement, usability and interpretability of data ought to be key denominators that inform one's choice of an accessibility measure. Additionally, Lättman, Olsson & Friman (2018) also revealed that none of the existing accessibility measures seem superior to others given the different contexts within which these measures are deployed. Armed with this information, four distinct accessibility measures are discussed in the subsequent paragraphs, reflecting the different perspectives and conceptualizations. At all levels, any indication of an increase in one's accessibility level indicates an increase in one's travelling ability which translates to a reduction in social exclusion.

First, the commonest measure of transport accessibility is the infrastructure-based method which mainly considers the performance of transport services (Geurs & van Wee, 2004). This is heavily employed in many transport planning regimes, characterised by improving transport performance indicators like travel speed, travel time(s), and congestion (Ferreira et al., 2012). While centred on mobility issues, such methods have been dominant in studies on pathway walkability and road safety (Amoako-Sakyi, 2011, 2017b), travel behaviour and cost (Abane, 2011) as well as passenger movement and travel times (Ojo et al., 2014). In all situations, data for the infrastructure-based measure are known to be readily available through travel data surveys and are also quite easy to communicate with an audience. On the other hand, this measure has also been identified by Simonson (2012) to alienate the voice or plight of users of transport services since it focuses on the physical

transport environment or the engineering component of transport services. In terms of speciality, this approach is dominant among transport engineers and planners given their interest in traffic and mobility-related transport issues (Halden et al., 2000; Silva et al., 2017).

The second accessibility measure is location-based which centres on the spatial distribution of opportunities in an area and how transport services facilitate one's ability to reach such opportunities (Miller, 2018). Unlike the infrastructure-based measure which does not factor land use features in its measure, the location-based focuses on journeys from origin to destination. Common among this measure is the use of distance as a basic unit of measurement. As seen in studies by Agbenyo, Nunbogu, & Dongzagla (2017), Amoako-Sakyi (2017) and Danso, Atuahene, & Agyekum (2017), distance walked from home to various opportunities can also be used to describe the extent to which people are excluded from enjoying health or educational facilities especially if a walking or travelling threshold is known. In cases where multiple opportunities are in view, Curl, Nelson, & Anable (2011) mention the possibility of adopting a contour-based indicator which measures the number of opportunities that can be attained within a specified travelling distance.

Consistent with measures of accessibility by the use of the location approach, distance has been identified to be non-responsive to other travelling variables like fuel cost and conditions of the road (Karst & van Eck, 2003). Karst and van Eck further add that distance always remains the same regardless of one's physical condition and other external variables like time taken to get a bus or the level of convenience endured in boarding a bus. In response to these challenges,

travel time may serve as the closest and most responsive variable to the measure of one's level of accessibility. In this regard, variables like walking or travelling time, in and/or out of vehicle waiting time as well as time spent waiting for a bus can be used to measure the ease of using transport services (Litman, 2019). Just like the infrastructure-based measure, the location-based measure has also been cited for ignoring the travelling population in favour of the physical transport environment (Miller, 2018). Regardless of the measure in use, a reduction in travelling impedance as seen in time and distance indicates a rise in one's level of engaging transport services to reach various opportunities.

The third measure is the utility-based approach which hinges on the economic theory of utility that considers the net effect of every action. The cost and benefit of undertaking trips may either be expressed in extrinsic or intrinsic values. Given varied ways of estimating cost and benefit, Geurs, Wee, & Rietveld (2006) have called for using the Multilogic Logsum since it allows commuters to assign utility to various travel decisions and subsequently select one that offers the highest net benefit. Aside from relying on such cumbersome mathematical computation, Litman (2019) has expressed the stress in the use of monetary values in the estimation of both cost and benefit of any travel decision. This may seem tedious due to the difficulty in monetising intrinsic elements like feelings and aspirations (Jones et al., 2014). Just like the other two measurement approaches, the utility-based approach has also been criticised as lacking behaviour components of the travelling population and also alienating minority road population groups.

The final measure of accessibility is the person-based measure which focuses mainly on the user's subjective assessment of the quality of transport services, the extent of usage and degree to which transport agents influence usage. Geurs & Wee (2006) indicate that this approach sheds light on the limitations of an individual's freedom when using transport services. McKercher & Darcy (2018) opine that such a measure may be confined by an individual's conceptualisations of time, space and activity goals which may not be as objective and accurate as other cited measures in this section. On the back of McKercher & Darcy's comment, this approach has been hailed as being human-centred and also applied in the assessment of transport operators reaction to students with physical disability in the University of Cape Coast (Odame, 2017), rural folks ability to reach opportunities (Schwanen et al., 2015) as well as teenage wheelchair users mobility issues in the UK (Pyer & Tucker, 2017). In such studies, the reliance on users' lived experiences and focus on the dynamic nature of both accessibility and social exclusion became the basis for which Lucas (2011) called on researchers to apply qualitative research designs when adopting this measure. In the face of estimating accessibility and social exclusion from an individual perspective, Lättman, Friman, & Olsson (2016) have raised issues on the potential for exaggeration or under-reporting of details since issues of memory, feeling and cultural identity relating to an individual cannot be objectively measured or expressed.

Factors influencing usage of transport services.

With various views on the measures of accessibility, one issue that is quite clear is the non-conformity of a single measure to all travellers. With this in mind, it is

necessary to examine the various characteristics that influence a traveller's choice of a transport facility if a suitable accessibility measure is to be attained. Madhuwanthi, Marasinghe, Rajapakse, Dharmawansa & Nomura (2015) claim that the characteristics of a trip maker, type or purpose of journey and transport facilities are the three key influencers of travel mode and by extension, the degree to which one participates in an activity.

Characteristics of trip maker

To Adjei (2013), one's ability to undertake a trip from an origin largely depends on his or her practical functionality. This refers to the ability to move across various transport modes and entails activities like walking to the bus stations, boarding or alighting from a bus as well as identifying the location of the right bus to board. These functions may not come at the same level of ease to all commuter groups especially those with mobility impairment. By this, identified body differences which may range from the absence of a body part to poor function of various sense organs like the eyes, nose, hands and legs may account for the extent to which some trips may be undertaken or not. Sawadsri (2010) further opines that skewed concept of self-imagery and poor recognition of individual differences accounts for the use of 'perfect or idle' body types by various media organisations for advertisement which influences the provision of services and products to meet the needs of such body types.

These observed or perceived body differences may further deter people from undertaking trips especially in societies where such PWDs are considered as misfits or deviants. Frye (2013) cites confidence as a key criterion for impaired

people's travel and without it, some basic movement like street crossing would never be undertaken. From a gender perspective, women with disability are deemed to have lower outcomes when it comes to engagement in economic, social or political activities (Solvoll & Hanssen, 2017; World Health Organization, 2011a). In places like India and other developing countries, the WHO further states that the combined effect of gender and disability may make it difficult for women to socially interact and even find a marriage companion while men with disability may find it less difficult to find a partner or even engage in any meaningful economic activity. Of course, other personal characteristics like income, household size, vehicle ownership and age also influence the general populations' ability to make a trip but the presence of a body variation exacerbates one's trip making opportunities (Liu, 2017).

Characteristic of journey

In Madhuwanthi et al.'s, (2015) view, the real motivation for undertaking a trip resides in the purpose and expected benefit derived from such a trip. It is in this light that people encounter trade-offs when deciding whether to go to a hospital or recreational centre. The choice of where to seek opportunities may be informed by past experiences or travellers' perceptions of the quality or availability of the services (Babinard et al., 2012). This idea is not different from the tenants of the gravity model which reveals the factors that pull or draw people to a specific location (Geurs & van Wee, 2004). For PWDs who are mostly represented in the poverty bracket, the main purpose of their trips hinges on the attainment of essential services like health care and education (Ghana Statistical Service, 2014d; Lucas,

2012). In fact, trips that are deemed as less important are the ones whose net effect offers little or no benefit to the traveller and these are trips which are always sacrificed when there is a need for a trade-off.

Having identified trip purpose as a leading factor influencing one's desire to travel or access an opportunity, Su, Schmöcker, & Bell (2009) also reveal that the time of travel also influences peoples' access to opportunities. For PWDs whose functional ability and travel needs may not be met by transport providers, peak times in an unregulated travel space may not be an ideal travelling period since this group of travellers may get little or no support when travelling (Karst & van Eck, 2003; Newmark, 2014). Of course, such considerations may be informed by PWDs' perceptions or lived experiences since these play a role in how society treats PWDs.

Aside from peak and off-peak periods, night travels have also received some attention from various transport disadvantaged groups. Perceptions of safety while travelling at night and the idea of potential harm from known and unknown persons have also been cited for causing fewer trips especially when such trips are unaccompanied (Oviedo Hernandez & Titheridge, 2016; Solvoll & Hanssen, 2017). Also, Frye (2013) cites harassment faced by female travellers at the hands of drunkards and other mischievous people as another factor that contributes to few trips undertaken by women who travel alone. For impaired people whose ability to respond to threats may be limited in many ways, the fear of hidden potential trip hazards and threats is even more dominant in this group (Imrie, 2000; Kotey, 2015; Park & Chowdhury, 2018).

Characteristics of transport facilities

The supply and characteristics of transport infrastructure constitute other factors that cannot be underestimated. This is clearly seen in the Janelle (2001) ‘‘Time and Space Convergence model’’ which shows how improvement in transport infrastructure reduces the impedance factor of distance and time, making it easier and cheaper for people to reach opportunities that were once deemed far or inaccessible. From discussions, Madhuwanthi et al. (2015) identify the monetary cost of travel, reliable transport scheduling, safety, availability of parking lots and supporting transport infrastructure as parameters that influence one’s use of transport facilities.

To begin with, the transport supply depends on the presence of suitable transport infrastructure which details the presence of facilities like roads, pedestrian facilities and vehicles. Regardless of the type of the facility present, the Centre for Universal Designs recommends that these facilities should be of a kind that recognises and makes it easy for all travel groups to use (Adhvaryu et al., 2019; Iwarsoon & Stahl, 2003). By this, transport facilities like vehicles and pedestrian pavement should require low physical effort in use, be simple, flexible, equitable to all users and tolerant of errors during accidents. Even with these recommendations, Frye (2013) indicates that developing countries fall behind when it comes to providing barrier-free transport services for commuters with disability.

In Venter & Rickert's (2002) view, reasons accounting for the lagging efforts of many developing countries may range from the huge cost associated with retrofitting existing vehicles or other transport facilities to the absence of space in

the built environment to accommodate such changes. Such limitations in the physical environment have been identified by Oliver (1996) as the real cause of disability. To him and other proponents, societies failure to provide the needed services to meet different functional abilities is the real cause of a disabling environment. To this effect, unaccommodating or disability unfriendly cars, roads, sidewalks and terminals account for low traffic generated among the disability community.

Additionally, intangible resources like travelling information has been identified by Frye (2013) to be critical to trip planning. The absence of proper information on trip scheduling, timely information on changes in transport fare and the availability of transport modes makes it a challenge to establish a proper trip. For impaired travellers, the difficulty in attaining such information reinforces their dependence on able-bodied persons which contradicts the dictates of the Concept of Universal Designs as indicated by Mitchell & Rickert (2010). To both Frye (2013) and Venter & Rickert (2002), the inconvenience associated with poor travel information is felt by the general population in general and disability population in particular and can easily be solved with the current pace of technology. This is typically seen in mobile technology innovation and other gadgets or programmes that offer travel information in various formats to different travel groups. Evidence from Zaney (2018) indicates that Ghana has a mobile penetration rate of about 119 per cent making it easier to establish platforms that can be reached by all commuter groups.

Disability in Ghana

Disability in Ghana is a complex socio-cultural phenomenon that differs in various settings and contexts across the country (Baffoe, 2013). With varied definitions and perspectives, the Ghana Statistical Service (2014) defines disability using three main approaches namely; impairment, activity limitation and restriction in one's ability to participate in any activity. By this definition, Ghana's disability groups range from persons who have lost body parts to those who have lost the functional ability of any part of their body due to health complications like mental disorders, old age, multiple sclerosis and birth defects. By this, 3 per cent of Ghana's population is estimated to be in the disability bracket but Slikker (2009) and Voice of People with Disability Ghana (2014) have estimated this number to be higher given some observed challenges in the enumeration efforts by the Ghana Statistical Services. To Gregorius, poor training given to enumerators on how to ask questions relating to disability and stigma attached to having a disability also account for the low output in disability population during the 2010 Population and Housing Census data. To this effect, the Voice of People with Disability Ghana (2014) estimates Ghana's disability population to be between 7 and 10 per cent of Ghana's population.

With no universally accepted approach to measure the prevalence of disability, the commonest approach adopted by most statistical organisations across the globe is the use of impairment types. In the case of Ghana, popular impairment types include visual, emotional, physical, hearing, speech, and intellectual. Comprising about 40 per cent of Ghana's disability population, the visually

impaired are known to be the largest disability group in Ghana (Ghana Statistical Service, 2014d). Visual impairment, in this case, relates to people who fall within the category of low or poor vision to those who are totally blind and cannot see any light. Scientifically these are people whose vision is 20/200 or worse. 20/200, in this case, means that a person should at least see an object at 20 feet just as a 'normal' person would see the same object at 200 feet. By this measure, anyone who fails to see a said object at the stipulated 20 feet is legally considered blind.

Having taken the lead, persons with physical impairment constitute the most visible form of disability and represent about 25.4 per cent of Ghana's disability population, making them the second largest disability group (Ghana Statistical Service, 2014d). Members of this group are known to lose an arm or limb or even endure a poor functioning of these organs even if such organs are present. This group largely comprises the cripple, wheelchair/skate or crutches users, and persons using any mobility assistive technology.

Also, people who are considered to have a hearing impairment are those who require about five to ten times the loudness of sound to hear what a 'normal' person would need. Specifically, the hearing impaired require at least 90 decibels of sound to interact with others and constitute about 15 per cent of Ghana's disability population (Ghana Statistical Service, 2014d).

In pursuance of the enactment of Ghana's Disability act, the need to remove all barriers to PWDs' movement equally saw the establishment of various national disability groups and civil service organisations (Adam, 2019). Among these is the Ghana Federation of Disability Organisations (GFD), which acts as the umbrella

group for all disability subgroups and serves as a reference point for other individuals who wish to engage any disability group. Aside from lobbying for the receipt and distribution of Three per cent of the District Assembly Common Fund for its members, this group also organises its members for the receipt of social welfare programmes like the cash transfer of 64 to 106 cedis from the Livelihood Empowerment Against Programme (LEAP) as well as other mass registration programmes under the National Health Insurance Scheme (Grace, 2017; Sackey, 2019). The various units of the GFD include the Ghana Society of the Physically Disabled (GSPD), the Ghana National Association of the Deaf (GNAD), the Ghana Association of Persons with Albinism (GAPA) and the Ghana Blind Union (GBU). It must be noted that membership to these groups is voluntary and does not come with any special privileges since non-members can easily access the aforementioned benefits.

Attitudes towards persons with disability

Across cultures and settings, the symbolic representation of disability in non-western societies, in particular, reference disability to deviance just like the case of murder or any other crime (Fiasorgbor & Ayagiyire, 2015; Naami & Hayashi, 2012). Backed by various cultural antecedents, such ideas, beliefs and views shape individuals' attitudes and influence PWDs' ability to integrate into mainstream opportunities. While evidence from non-Western literature reflects negative attitudes towards disability, there have been cases of some isolated settings that consider PWDs as humans who have valuable contributions to make in societies

(Fonu, 2015; Opoku et al., 2017). The preceding paragraphs shall offer a detailed explanation of factors that influence individuals' attitudes towards PWDs.

The belief in religion as a way of life has shaped society's representation of disability and the extent to which such representation influence attitudes towards PWDs. While all religions acknowledge the existence of a supreme deity as being just and merciful, evidence from these religions has given reason to consider disability as both a blessing and a curse in different contexts. In Treloar's (2002) view, the presence of disability in Christian text (particularly the Holy Bible) may be viewed not as a punishment but as a test of one's faith in God or an opportunity for God to reveal his miraculous ways to mankind. Al-Aoufi, Al-Zyoud, & Shahmina (2012) share a similar account of such a narrative in the Islamic world view.

While these religions are quick to point out disability in a positive way, a review of some portions of both Christian and Islamic manuscripts have given reason to believe otherwise as indicated by Blanks & Smith (2009). To Blanks and Smith, accounts of the book of Exodus and other sections of the Bible clearly paint disability as a product of one's or family's iniquity and an affirmation of God's wrath on mankind. A clear example may be seen when Jesus' disciples asked if the cause of a man's blindness was a result of his sins or that of his parent as seen in John 9 verse 2. Other examples may be seen in the actions of renowned Christian leaders like Martin Luther (the reformist) who relied on such Biblical text to endorse the killing of babies with disability since they were believed to be an incarnation of the devil (Kisanji, 1995). Similarly, accounts from Qur'an (48 vs 17)

also indicates the imposition of a painful punishment on people who do not obey Allah's commandment (Al-Aoufi et al., 2012). Deemed a religious country by the Ghana Statistical Service (2014), these dichotomous religious notions stand the chance of influencing peoples' perception and attitudes towards PWDs.

Another factor that informs attitude towards such reference groups is enshrined in commonly held beliefs and customs that define the disability and also accord them a place in society. The literature on African customs largely depicts disability in negative regard where disability is also seen as a confirmation of one's sins or a rejection from a deity (Munyi, 2012). In this regard, PWDs are either barred from occupying any position among traditional rulers or from interacting with any traditional ruler as seen among the Ashanti's in Ghana (Nyangweso, 2018). It is in this view that members of the Ghana Blind Union have complained of denied access to enter the Manhyia Palace (the official residence of Otumfuo - King of the Ashanti Kingdom) or even interact with Otumfuo at a different venue (Gadugah, 2011). While this belief is held by Otumfuo, it is quite easier for other subchiefs, residents of Kumasi and other Akan speaking tribes to reproduce such beliefs. On the other hand, the Ga consider PWDs as a reincarnation of the deceased and for that matter, PWDs occupy prestigious positions in their shrines and society (Slikker, 2009). Unfortunately, the Ga occupy just about Seven per cent of all ethnic groups in Ghana so this kindness may not be witnessed on a wider scale (Ghana Statistical Service, 2012a).

In addition, society's view of PWDs as a faulty group that requires welfare and charity also reveals our expectations of PWDs' ability to make meaningful

contributions to society. Here, the use of derogatory words like ‘*yarefor*’, ‘*woadi dem*’, ‘*apakye*’ (sick or faulty group) is commonly employed to represent such groups especially when it comes to persons with physical disability (Tetteh, 2018). Additionally, Slikker (2009) cites the use of words like ‘*Asotowo*’ and ‘*Buluus*’ by the Ewe and Ga to denote idiot, fool or persons with reduced mental abilities respectively. While such terms are used to depict people who have little to offer society, Kisanji (1995) and Nyangweso (2018) recount how such expectations have resulted in the mass extermination of PWDs by the Nazis and Idi Amin since this group was regarded as ‘useless’ when it comes to making a meaningful contribution to society.

Also, other mystical views like the contagious nature of disability have also fuelled society’s reaction towards PWDs especially regarding marriage and kinship (Acheampong et al., 2018). Evidence from literature indicates how fear of transmitting disability through childbirth has limited PWD’s ability to find marriage partners within local communities in Northern Ghana (Michael Baffoe, 2013). From a gender perspective, Grischow, Mfoafo-M’Carthy, Vermeyden, & Cammaert (2018) cite the combined effect of being a woman with disability and perceived thought of being unfit to carry out household chores as key factors that hamper women’s engagement in social activities as compared to their male counterparts. In addition to gender, the severity of one's disability is another factor that hampers social engagement and kinship as seen in news article revealing the visually impaired’s frustration in finding potential suitors for marriage (Dogbevi, 2008; Fiasorgbor & Ayagiyire, 2015).

While the aforementioned has portrayed negative attitudes toward PWDs, some societies on the other hand have treated PWDs with positive reception. According to Anastasiou and Kauffman (2013), such positive attitudes are attributed to adopting legislation and rights-based approaches like the United Nation's Convention on the Rights of Persons with Disability and other national legislations. While such positive attitudes are backed by a legal frameworks in some developed countries, Nyerere (2011) and Opoku-Boadi (2015) on the other hand attribute such positive attitudes to charity, piety or compassion shown on PWDs in most developing countries. Nyangweso (2018) indicates that such charity approach reflects in the language employed in raising funds to support disability projects and activities. Just as such initiatives contribute to the improvement of the lives of PWDs, the language and symbology that reference PWDs as a faulty group also gives room for PWDs to be seen and cared for rather than enjoying rights as other members of society.

Transport services for PWDs in Ghana

By law, the Ministry of Transport has the oversight responsibility of all transport activities in the road and marine sector (Hotor, 2016). Prior to Ghana's 2012 elections, the Ministry of Transport's mandate was extended to cover the aviation industry but this has since been detached and established as a new ministry on its own. For the purpose of this study, attention will be placed on the responsiveness of Ghana's road transport sector to the mobility needs of travellers with impairment.

Road Transport Sector in Ghana

Ghana's road transport sector is the largest transport mode, accounting for about 96 per cent of all freights and passengers (Ghana Investment Promotion Centre, 2012). The Ghana Investment Promotion Centre (GIPC) further states that this proportion is said to decline due to stiff competition from domestic aviation companies. Even in the face of this expected competition, available records from the GIPC from 1991 to 2011 indicate that the proportion of vehicles on our roads has increased at an exponential rate of about 828.2 per cent while the human population has risen only by 69.3 per cent.

This astronomical increase in the number of vehicles which comprises both private and commercially owned ones can be ascribed to a string of factors which includes the rise in the economically active and medium-class workers, increasing general population, prestige in owning private vehicles as well as readily available financial assistance to own a vehicle (Abane, 2011). In Abane's view, the rising desire to own a vehicle by the working population may be traced to Ghana's first president (Dr. Kwame Nkrumah) who used private cars as an enticement or a way of motivating graduates to work for the state during the post-independence era.

In the face of the rising vehicular population, other transport infrastructures like roads, transport terminals and crossing facilities are needed to keep up to the pace at which human and vehicular populations have risen. This can be seen in the rehabilitation and expansion of existing road infrastructure like the 14.1 kilometre Tetteh Quarshie-Mallam interchange in 2012 (Badu-Prah 2010) as well as the Kwame Nkrumah Circle interchange in 2016 (Ghana News Agency, 2016). Even

with these two large projects, the former faced stiff opposition from the Ghana Federation of Disability Organizations (GFD) which nearly resulted in a court injunction to stop its inauguration ceremony since the engineers of the facility failed to include any disability-friendly accessories in its construction (Ghanaweb, 2012). To avoid such opposition, the expansion of the Kwame Nkrumah interchange made room for a wide array of facilities like curb cuts, dedicated crossing points with traffic light as well as segregated routes for bicycles and pedestrians. Unfortunately, street hawkers have taken over these facilities, leaving PWDs to compete with vehicles for the walking space (Botchway, 2019).

From observations, these disability facilities in the road infrastructure are not available in rural areas where PWDs are dominant as reported by the Ghana Statistical Service (2014d). The idea of creating a universally accepted built environment began with activists like Dahl (2002), Driedger (1991), Iwarsoon & Stahl (2003), Lang (2007) and Reeve (2004). In their view, poor transport infrastructure accounts for low trips undertaken by the disability population which has a poor outlook on their social capital as well as their ability to be integrated into various economic ventures.

Review of Transport-related legislation for commuters with disability in Ghana.

Ghana is known to be the 119th country to ratify the United Nations Convention on the Rights of Persons with Disability (Ministry of Gender Children & Social Protection, 2006). Within the same year, Ghana's Disability Act of 2006 was enacted which was in synergy with the dictate of the UN declaration. Ghana's

Disability Act has eight broad objectives which are broken down into 60 sections bothering on different issues ranging from access to health care, transport, education, use of derogatory comments to the elimination of all forms of discrimination against the disability community (Adjei, 2013; Tudzi et al., 2017a).

The section 23 to 30 of the Disability Act details a series of transport-related issues that focus on easing mobility and accessibility for the disability community. Particularly, section 23 calls on public and private citizens to remain disability-focused when constructing or rehabilitating any part of the physical structure. By this, all institutions and individuals are found guilty of the law if their property does not guarantee self-autonomy of all persons with disability. This is typically the case of many road facilities including the 14.1km Mallam - Tetteh Quashie Interchange (Ghanaweb, 2012), many public transport vehicles (Odame, 2017) as well as public facilities like parliament house, schools and hospitals (Ashigbi et al., 2017; Danso et al., 2017).

Section 24, on the other hand, looks at the importation of non-conventional cars for use by PWDs. Here, the policy makes room for removing import duties on cars that are adaptive to one's disability type (Asante & Sasu, 2015). At the time of writing this thesis, less than one per cent of Ghana's disability population was estimated to have registered such adaptive cars. A major barrier to the importation of such adaptive vehicles is the cost of acquisition and though news of the government support in providing financial assistance was pelted by the Minister of Employment and Social Welfare, no evidence of its implementation is seen (GNA, 2012).

Section 25 also looks at crossing behaviour for PWDs and further issues warning to all motorists who do not give way for PWDs to cross the street when a clear intention is shown. In addition to this, Section 26 enjoins District Assemblies, individuals or owners of parking lots to reserve a designated space that PWDs will solely use. Studies by Tudzi et al. (2017) and Danso et al., (2009) indicate that key public facilities like the University of Ghana, Accra International Conference Centre (AICC), National Theatre, Black Star square, Parliament House and the Supreme Court in Ghana have not heeded to this call. In addition, such parking space should be well-labelled and closed to people with no disability.

Section 27 also looks at the procedure for acquiring a driver's license for PWDs especially those with audible impairment. As mandated by law, the Drivers and Vehicle Licensing Authority (DVLA) shall prescribe such a process and only issue a driver's licence if a prospective applicant with disability has met all the necessary requirement. In section 28, the focus is laid on the design and construction of port terminals. The act enjoins port authorities to ensure the inclusion of disability-friendly accessories in constructing such ports.

The final section under transport service provision hinges on booking and reserving dedicated seats or space for PWDs. Here, all operators of public transport services (regardless of the ownership – public or private) are enjoined to reserve at least two seats for PWDs and these seats will only be offered to the general population if PWDs do not claim these at the time of departure. In the wake of this, evidence from Odame (2017) indicates the non-compliance of this directive by key public facilities like the University of Cape Coast and most members of the Ghana

Private Road Transport Union who control over 80 per cent of freight and passenger movement (Ojo et al., 2014).

GPRTU and other private transport services for PWDs in Ghana.

With the increasing population and demand for transport services, GPRTU has positioned itself as a key stakeholder in Ghana's supply of transport services. Abane (2011) estimates that the GPRTU controls about 70 to 80 per cent of all public transport especially when it comes to intracity services. However, GPRTU also faces stiff competition from other providers like Metro Mass Transit (MMT) and State Transport Company Limited (STC) when it comes to providing intercity services. With its dominance in the supply of transport services and PWDs in mind, GPRTU is characterised by some important attributes.

First, trips undertaken by these operators are not scheduled making it difficult for commuters to estimate the departure time, time spent in traffic and time of arrival (Digber, 2012). Field observations from many GPRTU terminals reveals the difficulty in ascertaining travel time given the absence of a laid down planning or scheduling scheme. For instance, during rush hour (between 6 am to 9 am or between 4 to 8 pm), where most people are rushing to get to or return from various places of interest, both in and out vehicle waiting times are usually shorter than off-peak periods (News Ghana, 2016). Though Solvoll & Hanssen (2017) highlight a strong correlation between vehicle punctuality and bus satisfaction among commuters with disability, the realization of such a relationship may not be seen in Ghana during such rush hour.

During off-peak periods, where the patronage of vehicles may not be as high as the rush periods, commuters may have to endure relatively longer in-and-out vehicle waiting times (Abane, 2011; Oteng-Ababio & Agyemang, 2012). In some cases, these buses may depart from the terminal only if the last seat is occupied or paid for. While the road may not be busy at these times, the long period endured at the terminals may make such trips exhausting and also not ideal for emergencies. In cases where the vehicles leave the terminal partially full, transport operators may resort to making intermittent stops along the routes to pick up passengers who show interest in boarding the vehicles.

Second, transport services offered by the GPRTU are always a pay-as-you-go service where no concessions are given to any group of road users. Newmark (2014) and Rickert (2011) view travel concessions as any provision that offers a reduced fare or free ridership to specific road users like the aged and PWDs. This provision has proven to increase mobility options and make it easier for PWDs in the UK and Netherlands to travel more since these groups may not be economically engaged like the general population (Lucas, 2012). In the UK, this provision constitutes part of their social welfare programmes instituted to reduce social exclusion and increase participation levels among the disability community.

Third, Yobo (2013) reports the use of obsolete and outdated vehicles by the GPRTU as a feature which does not conform to current trends in transport supply. This is common in most urban suburbs like Kaneshie, Kwame Nkrumah Circle, and Accra-Central (Mensah, 2010). Previous experiences with such inconvenient buses have been identified as a factor in the declining preference for GPRTU services

among PWDs for intra-city trips (Addo, 2014). Additionally, Pyer & Tucker (2017) cite the difficulty in entering high-floor vehicles as another challenge confronting PWDs in the UK and other developing countries. Such challenges may be attributed to the absence of boarding platforms on such outdated cars or the narrow nature of a vehicle's entrance, especially for wheelchair users. In this light, Frye (2013) indicates that a growing trend in the acquisition of low-floor disability-friendly vehicles has increased trips by the transport-disadvantaged. This includes a near 100 per cent replacement of all public buses in the UK, Netherlands and Sweden (Butcher, 2018; Rickert, 2011; Venter, Rickert, et al., 2002). Unfortunately, such low buses are hardly seen in terminals that the GPRTU operates as compared to transport services provided by the state (Hotor, 2016). In defence of transport operators like the GPRTU, Frye's (2013) identifies the poor state of roads and transport operators' desire to reduce the cost or frequency of maintaining vehicles as the main factor that pushes transport operators to keep such obsolete and outdated vehicles.

In the face of all these challenges, there exist some private and public service providers who largely operate inter-city services and are also known to control the remaining 20 per cent of the transport market. These groups largely include private operators like the VIP/VVIP/DIPLOMATS and various Ford operators (Yobo, 2013). Aside from the fact that most of the buses owned by privately operated intercity companies are quite modern and possess some disability-friendly facilities, the state-owned transport agencies like the Metro Mass Transit (MMT) and the InterCity State Transport Cooperation (STC) have also

shown early indications of upgrading their vehicle fleet to modern standards that meet the needs of PWDs, attract potential customers and also increase their share of the market.

Here, such disability-oriented services give commuters an array of travel options since some operators have more convenient and technologically advanced vehicles. Just like the GPRTU-operated buses, services rendered by non-GPRTU members do not come with any concession and fares paid may even be higher than those charged by the GPRTU.

Transport provision for PWDs by the state

Following the challenges encountered by GPRTU, other private operators and earlier state transport schemes like the Omnibus Service Authority (OSA), the New Patriotic Party (NPP) in the 2000 general election promised to institute another mass transit programme whose aim was to deliver affordable and efficient transport services to the populace including those in the vulnerable population (Yobo, 2013). After their victory, the Metro Mass Transit Company Limited (MMT) was incorporated in 2003 as part of welfare packages to cushion the plight of Ghanaians (Akoto, 2017).

At present, the Government of Ghana (GoG) owns about 55 per cent of its shares while the other 45 per cent is owned by key institutions including the Social Security and National Insurance Trust (SSNIT), Agricultural Development Bank (ADB), Ghana Oil (GOIL), State Insurance Company (SIC), Prudential Bank Limited and National Investment Bank (NIB) (Adams, 2012). The proportion of shares owned by these institutions deemed to be profit-oriented has raised concerns

over the sustainability of the MMT's intended social welfare programme. Even in the face of these concerns and cheaper pricing (where the MMT charges 15 per cent less than the GPRTU), both Hotor (2016) and Akoto (2017) have raised concerns about the MMT's ability to recover its cost of operation and also maintain its vehicles. As though still in operation, a comparison of the vehicular fleet between 2013 and 2019 indicates a reduction from 1,781 (Yobo, 2013) to 1,217 (MMT, 2019). By this, a falling vehicular fleet in the face of increasing demand indicates failing cost recovery.

Aside current vehicular population, the lorry fares in various transport modes also limit the mobility options of vulnerable populations. In Newmark's (2014) assertion, government-sponsored travel concessions offer the best incentive to boost out-of-home travel as seen in many empirical studies in Chicago. Unfortunately, travel concession for the aged and disability populations does not form part of MMT operations even though it offers free ridership to uniformed school children who join such buses. This only applies to intra-city movements (MMT, 2019).

Aside from the monetary fare, the experience of vehicular conditions has also been known to hinder PWDs' access to public buses (Frye, 2013; Pyer & Tucker, 2017). In response, many countries like the US, UK and France have enacted local and national policies to respond to the mobility and travel needs of travellers with disabilities (Newmark, 2014; Wennberg et al., 2009). By this, the procurement of low-floor buses with contrasting colours and other disability facilities has been welcomed by the populace. In the case of Ghana, Peacefm (2012)

reports that the MMT has followed suit by procuring over 100 low floor buses with disability-friendly devices like contrasting colours, push bells and priority seats. Whether these facilities are available to PWDs is not certain since accounts of students with disability have proved otherwise (Odame, 2017).

Summary

This chapter sheds light on the measures of accessibility by factoring both subjective and objective measures. While the chapter highlights the importance of the subjective accessibility approach to the measure of social exclusion, the study also examined critical factors that influence the use of transport services. These factors include the trip maker's characteristics, the journey's conditions, and the nature of the transport facilities used. Any of the aforementioned variables were known to affect PWDs' mobility outcomes significantly, but these were only captured in quantitative units in many accessibility measures.

Also, the chapter explored social and cultural issues that confront PWDs in Ghana since these variables play a key role in the definition and connotation of disability. Poor perception and doubt about PWDs' capacity to live a meaningful life were identified as the primary factor that limits PWDs' ability to live a fulfilled life. While reviewing PWDs relations with society, Ghana's transport services' nature was also examined. This specifically looked at the responsiveness of all transport operators to the dictates of sections 23 to 30 of Ghana's disability act. Here, emphasis was placed not only on the physical conditions of public transport vehicles but also on other support services received at various terminals.

CHAPTER FOUR

METHODOLOGICAL ISSUES

Introduction

The method employed to answer the research questions is detailed in this section. The study focuses on how the provision of public transport services influences PWDs' social exclusion. While social exclusion is measured in terms of PWDs' access to transport services, efforts are also made to highlight empirical approaches that have been adopted to measure PWDs' usage of transport services. This chapter covers the research design, approach, target population, sample size and procedure, research instrument, data collection procedure, analysis, description of the study area and ethical issues that were upheld in the study.

Epistemology and research design

Epistemology

The debate on the best way to comprehend the lived experience of persons with disability never ends. With changing focus on the definition and concept of disability, attention to the traditional quantitative/objective research philosophy championed by the proponent of the medical model of disability is inadequate especially when it comes to amplifying PWDs voices (Gregorius, 2014). In this regard, the philosophy underpinning this study was informed by the reason that persons with disabilities and other social agents like transport operators could construct different meanings or realities to their lived experiences as in the case of their ease in using transport services.

For Costantino (2012), such a premise indicates a sharp contrast from the traditional natural sciences which focuses on using rigorous scientific processes to attain a single objective meaning to an event. Consistent with this view, the study adopted the interpretivist/constructivist approach since it offers the opportunity to take a deeper view of the meaning and interpretation of events rather than taking a snapshot of such events as done in the natural sciences. Bhattacharyya (2005) also adds that the desire to understand reality and meaning of life is the driving force that pushes researchers to adopt an interpretivist position since it relies on the use of interpretations rather than facts. Cheek (2012) also claims that knowledge created by people is heavily informed by their views, beliefs and language hence statements of facts cannot be decoupled from the values held by the proponents of such truths.

To Letherby, Scott, & Williams (2013), one's values in making truth claims cannot be overlooked since scientific knowledge may be informed by unscientific worldviews of researchers and their subject, especially when human-related topics are being discussed. Letherby et al., further conclude that there is no objective way of viewing reality and since all researchers are located in different sections of the world, knowledge produced will equally reflect the respective views of their world. Here, one can easily argue in favour of the belief in the plurality of reality as echoed by constructivists Keating & della Porta (2009). In view of the aforementioned, Addo (2014) observed that, social constructs like disability and people's lived experiences may possess multiple meanings to different people at different times

and that an interpretative approach becomes a more suitable platform to unravel the complex nature of people's lives.

In supporting the interpretivist position and downplaying the positivist, Liu (2017) claims that the complexity of the world does not make much sense when researchers attempt to control variables in their pursuit to attain a single objective reality to a phenomenon. This may certainly be the case for Danso, Atuahene, & Agyekum (2017), Green (2011) and Lättman, Olsson, & Friman (2016) whose studies only focused on the engineering aspect of the built environment while discussing PWDs accessibility. While constructivists thrive on subjectivity, Asamoah (2017) reiterates that participants' exposure to the researcher offers another opportunity that deepens the reality of one's life since it affords an extended platform to solicit stories that enumerate one's views of reality.

In all these, Searle (1995) identifies people's practical ability to engage in events as the basis for which constructivism thrives. In his words 'all knowledge and for that matter, all meaningful reality as such is contingent upon human practices' which can only be realised through social engagement between people and also propagated within a social context. In the midst of all these, Greene (2007) reveals that the constructivist philosophy is not just known to be the only legitimate stance for qualitative research but rather known to be the widely accepted concept among researchers who are qualitatively inclined like Lucas (2011), Porter et al., (2010) and Schwanen et al., (2015)

The main limitation associated with interpretivism for this study relates to the subjective nature of its approach and opportunity for bias on the researcher's

behalf. Data generated in interpretivist studies cannot be generalized since data is heavily impacted by personal viewpoints and values. Therefore, reliability and representativeness of data are undermined to a certain extent as well. Here various approaches may be adopted to validate the response gathered in the field

Research design

Having identified the advantages of the constructivist research philosophy, the study adopted an exploratory and phenomenological research design. In the view of Creswell (2015), a research design establishes a blueprint that guides the entire research process. This covers issues ranging from the selection of the target population to the collection and analysis of data. Creswell (2015) further opines that the choice of a research design depends on the responses needed to answer research questions. Based on these views, the study first adopted an exploratory research design as it offered the best platform to unearth new ideas, define a problem that was not clearly defined or seek understanding on issues that had received little attention as in the case of PWDs social exclusion through the provision and use of public transport services (Davies, 2011).

Shukla (2015) identifies key characteristics that make the exploratory design suitable for a study of this nature. First, a loosely defined problem or phenomenon becomes the starting point for an exploratory design. Here, clarity of a phenomenon like PWDs lived experiences in their use of public transport services has poorly been conceptualised as evidenced by the dominance of quantitative accessibility approaches. To this effect, the need for an approach to understanding

PWDs lived experiences through a qualitative approach will offer the best platform to demonstrate both behavioural, social and cultural perspectives that are critical to ones' trip making process and also inform the ease with which trips are undertaken.

Secondly, Shukla cites the relative flexibility, ease and unstructured nature of this approach as another feature of an exploratory research. While this may seem to be an advantage as seen among other qualitative research designs, Jajoo & Malu (2014) cites the lack of rigour and its 'unscientific nature' as weaknesses that dent the validity of the results attained by an exploratory approach. Provided that such comments are true, the qualitative approach from which PWDs lived experience will be explored does not subscribe to the belief in a single objective reality of peoples' lives hence the need for such rigorous scientific enquiry will not be required (Creswell, 2015; Payne & Payne, 2004). Concluding on the features, Shukla (2015) finally cited the use of a small sample for exploratory study as seen in most disability-related thesis in education (Addo, 2014), health (Mitra & Saphores, 2016) and community participation (Gregorius, 2014).

Focusing on PWDs lived experiences in their use of public transport services, the study additionally adopts a phenomenological research design since it highlights the heavy reliance on PWDs lived experiences and how they make sense of what they experience. As pioneered by Husserl, Heidegger, Gadamer and Merleau-Ponty, Usher & Jackson (2017), phenomenology is a careful and systematic reflection of one's life as well as his/her view of the world. It is the emphasis on lived experience that distinguishes phenomenology from other designs in the qualitative research area. At every point, the output of phenomenology is not

to establish a theory but to explain or understand the world through the eyes of participants which in this case are PWDs in Accra (Adams & van Manen, 2012; Crotty, 2003).

Consistent with the original tenets of transcendental phenomenology which focuses on only describing peoples' lived experiences of life events, this study rather assumes the position of the hermeneutic phenomenology which goes further to emphasise the interpretations PWDs assign to their lived experience of current public transport services in Accra (Ocran, 2017). While being qualitative inclined, Adams & van Manen, (2012) call for a closer review on how one's consciousness, cognitive and noncognitive sensibilities, language, as well as our preunderstandings and presuppositions, shape peoples' lived experiences.

Study area

As the national capital, Accra is located south of Ghana facing the Atlantic Ocean. Historically, Accra assumed the capital city of Ghana in 1877 because the British colonial administration admired its relatively flat nature, dry topography and the absence of tsetse flies which was good for the booming livestock trade (Grant & Yankson, 2003). To Grant and Yankson, the decision to relocate the capital from Cape Coast to Accra saw an exponential increase in the number of merchants, enhancing Accra's economic and political power. After four republics and 12 heads of state, Accra remains Ghana's national capital as seen in Figure 5. Being a capital city also means most administrative, political and service functionalities will be undertaken in this city as seen in the establishment of many co-operate

headquarters, most government ministries or agencies as well as top recreational destinations and business centres (Ghana Statistical Service, 2012a). A look at the administrative boundary of all regions in Ghana depicts Greater Accra as one of the smallest regions but Accra, on the other hand, is known to be the most populous city with about 2.3 million people (Ghana Statistical Service, 2014a; Sawe, 2018). By the local government structure, Accra’s population renders it a metropolitan status since current population figures exceed the 250,000 population benchmark (Ahwoi, 2010). This metropolitan area is bounded by three main sub-metros namely Ablekuma South, Ashiedu Keteke and Okaikoi South.

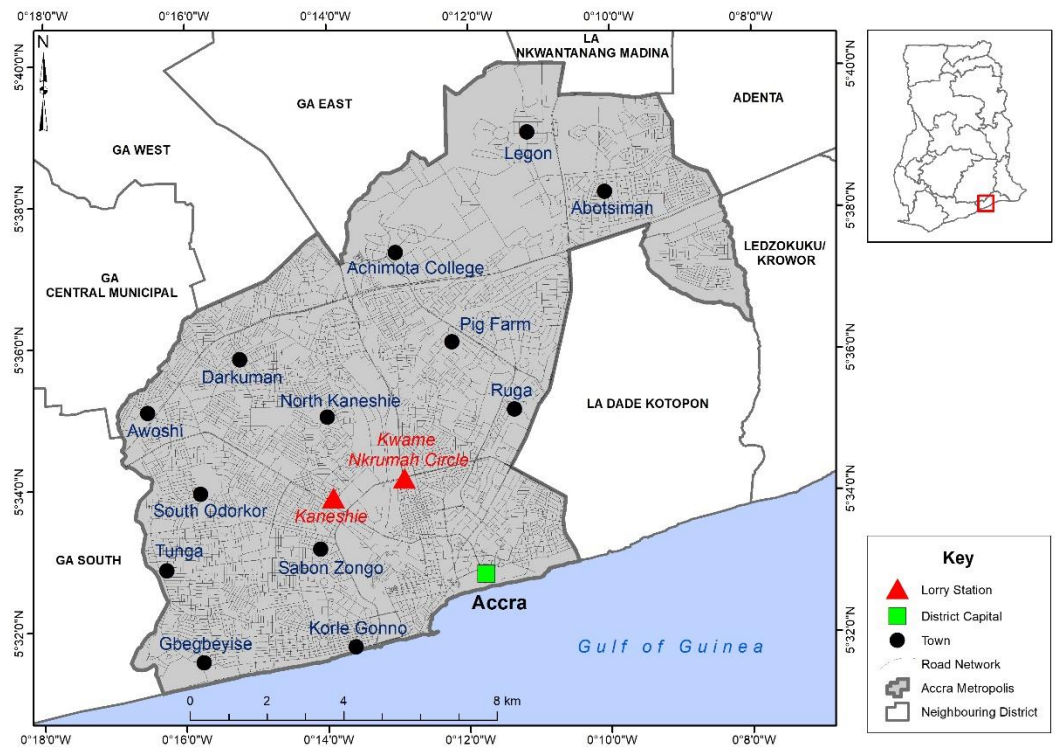


Figure 5: Map of the study area

Source: Cartographic Unit, Department of Geography and Regional Planning, 2022 (University of Cape Coast)

While enjoying the prestige of being the most populous city in Ghana, the transport sector is one area that seems to benefit from this increasing population as seen in the presence of a wide array of transport options, especially for the road transport sector (Yobo, 2013). Such diversity in transport options can also be seen in the expansion of fixed transport facilities like Mallam-Tetteh Quashie Highway, Kwame Nkrumah Circle interchange as well as the ongoing Pokuasi-Nsawan Highway. In addition to the rising human population and increased investment in fixed transport facilities, available records from 1991 to 2011 indicate that the proportion of vehicles in Ghana has increased at an exponential rate of about 828.2 per cent of which Accra has the greatest share (Ghana Investment Promotion Centre, 2012). With the increasing vehicular and human population, private cars and taxis take up 70 per cent of Ghana's' road space but only account for trips undertaken by 25 per cent of Ghana's travelling population (Hotor, 2016). The remaining 75 per cent of commuters who are mostly found in urban areas like Accra rely on shared buses (trotro) of which the Ghana Private Road Transport Union (GPRTU) dominates (Abane, 2011). Aside from the GPRTU, other transport operators in Accra include the State Transport Company Limited (STC), VVIP, Ford Stations and the Metro Mass Company Limited (MMT) (Hotor, 2016). The location and volume of traffic in Accra further renders Accra as a major transit point or a hub that easily connects to other parts of the country.

In the wake of a proportionate rise in transport options, the usage of transport service especially 'trotro' or publicly shared minivans cannot be said to be equal for all road users as claimed by members of Ghana Federation of Disability

Organization (GFD) through public demonstrations and other medium (Ghanaweb, 2012). The outcry is loudest in Accra since Accra has the largest urban disability population with 47,281 and also host the headquarters of the Ghana Federation of Disability Organization (GFD) as well as the home to a wide array of public transport options as enumerated by the Ghana Statistical Service (2014b, 2014c, 2014a). PWDs lamentation does not end with just the construction and design of the physical transport environment but also extends to support services offered by public transport operators and other commuters. From an ethnic and cultural point of view, evidence from the Ghana Statistical Service indicates that Accra is the only area in Ghana whose indigenous people constitute the minority (7 per cent) of its residents. This proportion highlights the cosmopolitan status of Accra, depicts Accra as a preferred destination for people from different backgrounds and also makes Accra a good site to undertake a study that considers attitudes towards a reference group like persons with disability.

Data and Information Sources

To seek answers to the research questions, primary and secondary data sources were sought. Primary data originated from two sources: the first from persons with physical disability on their level of ease as well as social interaction with public transport operators (trotro) and other commuters; and second from public transport operators (trotro) and stakeholders who are key to the provision and regulation of transport services in Accra. The emphasis in the latter was on the support services

offered to the disability community as well as public transport operators (trotro) views on the place of PWDs in various terminals.

Another source of data for this study constituted documents from Ghana Statistical Services. These include 'The 2010 Population and Housing Census data on Disability in Ghana (considering both the national and district reports) as well as the Second National Household Transport Survey Report – 2012. The data from these documents covered types of disability, sex, location of PWDs, travel options and other trip making characteristics. Additionally, data from the United Nations International Best Practices in Accessible Transport Services for Persons with Disability offered broad standards for which current facilities on vehicles and transport terminals were examined. Specifically, data on parameters like the design of ramp, push bell and other assistive technology at both the terminals and on vehicles were collected from the field. Finally, Ghana's Persons with disability Act also offered local guidelines for the operation of public transport services which includes the trotro services as well. The deficiency of all data from Ghana's Statistical Services stems from the age of the data and its ability to represent the current situations in 2020 in terms of age structure, sex and proportion of various disability types.

Target Population

The target population for the study comprised three categories of participants: persons with disability, public transport operators (trotro) and key stakeholders in the regulation of transport services in Accra. As much as Ghana Statistical Service

identifies the disability community to encompass many subgroups, only persons with physical and visual impairment were considered for this study. While Reynolds (2010), identifies these disability types as the most visible or clearly observable form of disability, the Ghana Statistical Service (2014d) also indicates that these disability groups represent about 65 per cent of Ghana's disability population hence a good choice for the study. Secondly, since their impairment does not affect their cognitive ability to construct their reality in any way, the ease of communication with this target population is another feature that distinguishes them from those with cognitive impairment (Addo, 2014; Adjei, 2013). Aside from the presence of a physical or sensory impairment, other selection criteria included the following;

1. Persons with disability should be Ghanaian.
2. Must be 16 years (which is the minimum age for consent) and above.
3. Must have used public transport (trotro) for at least once a month in the last year.
4. Must reside or work in Accra.

The second target population for the study was public transport operators who were key agents in the supply and management of transport modes. Though public transport supply in Ghana is dominated by the Ghana Private Road Transport Union (GPRTU) which comprises various transport options, the emphasis for this study was only on operators of minibuses or 'trotro'. The reason for the selection was that such minibuses control more than 70 per cent of intracity movements in Accra and are mostly preferred by low or middle-income earners of which PWDs

are well represented (Ghana Statistical Service, 2014d; Hotor, 2016). These trotro operators were selected from two of Accra's biggest and busiest terminals namely; Kwame Nkrumah Circle and Kaneshie Lorry station.

Finally, the last group considered for this study were key stakeholders in the regulations and management of transport or disability services in Accra. The emphasis at this point was on selecting a representative from the GPRTU, PWD, Department of Social Welfare and the Transport Director of the Accra Metropolitan Assembly.

Sample size

No sample size was known for this study since records from the Ghana Statistical Service was not detailed enough to develop a sample framework. A review of the enumeration sheet for the 2010 Population and Housing Census only captured data on disability types, PWDs ownership of mobile phones as well as their access to the internet. Such aggregated data only generalised Ghana's disability situation hence the decision to rely on the Ghana Federation of Disability Organisations (GFD) and other disability NGOs like the Ghana Society for the Socially Disadvantaged (GSSD) in Accra as the starting point for the data collection exercise.

The Ghana Federation of Disability Organisations (GFD) is the umbrella unit for all disability groups in Ghana but data from specific groups like Ghana Society of the Physically Disabled (GSPD) and the Ghana Blind Union (GBU) reveals a total membership of 45 and 23 members respectively for the Accra

Metropolitan Assembly. Reasons attributed to the low membership includes the fact that membership to both groups is purely voluntary and subject to the preference of each PWD. Just like PWDs in Kenya, membership to such disability groups do not come with any privilege since non-members can directly access their share of the District Assembly Disability Fund (DADF) or any other social welfare programmes such as cash transfers from the Livelihood Empowerment Against Poverty (LEAP) or free registration on the National Health Insurance Scheme (NHIS) (Adam, 2018; Edusei et al., 2015). Following the low membership of the GFD, the outfit of the Ghana Society for the Socially Disadvantaged (GSSD) was also visited since they were known to offer free residential vocational training for the physically challenged or cripples.

In this regard, a total of 50 participants comprising 28 visually and 22 physically impaired were reached for the study. Additionally, 10 trotro drivers comprising five from each of the two terminals were also engaged. Finally, only four stakeholders were also reached for interview sessions.

Sampling techniques

Convenient sampling was used to select PWDs' who met the selection criteria and showed interest to engage in the study. In the view of Daniel (2012), the success of this sampling method is based on three factors namely: the availability of participants, the convenience of the researcher and participants willingness to engage in the study. This sampling approach was executed when the researcher attended monthly disability meetings at the Accra Rehabilitation Centre. With low

turnouts, snowballing was applied using the social contact of previously engaged participants. Additionally, the researcher also leveraged on the social contact of a regional executive of the Greater Accra GFD in reaching out to non-members of the GFD as well.

To further expand the scope, the study resorted to the outfit of the Ghana Society for the Socially Disadvantaged at Kaneshie (GSSD) which was as a residential training facility for vulnerable populations including PWD. Here, the convenient sampling approach was also employed to reach participants who met the selection criteria. Additionally, snowballing was also adopted to reach old students and other beneficiaries of the GSSD who fit the selection criteria.

On the other hand, the trotro operators in the various lorry stations were also sampled conveniently. Finally, the GPRTU executive, representative of the PWD, Social Welfare as well as Transport Director of the AMA were all purposefully selected for the study. For Morse (2016), only people who possess key characteristics relating to the theories and research questions should be selected using this method. Thus, the identified stakeholders were found to be more knowledgeable on disability and/or transport issues in Accra and also known to be gatekeepers when it comes to the operation and management of transport services within Accra.

Research Instruments

Auditing scheme

The study adopted an auditing scheme to examine the current vehicular and physical conditions at the selected transport terminals. The United Nations International Best Practices for Accessible Transport for Persons with Disability was used as the standard to measure trotro operator's compliance to disability requirements for public transport services. While standards from different sources exist, this one was adopted because Ghana is already a signatory to the United Nations Convention on the Rights of Persons with disability. To contextualise the instrument, section 23 to 30 of Ghana's Disability Act was used to inform the choice of variables to be observed. Variables of interest at this level included the presence, conditions and dimensions of selected facilities like a ramp, dedicated seats or spaces, availability of travel concession as well as other audio-visual disability-friendly tools.

In-depth Interview

In-depth interviews were also conducted. The interviews were unstructured to offer flexibility in the data collection method as well as to provide an avenue for probing responses further. The instrument used was categorised into five different sections; the first focused on basic demographics which was intended to facilitate a smooth transition to other sections. The other sections covered definition of disability, an account of physical transport services available to PWDs as well as intangible support services which include drivers and commuters reception to PWDs. Of course, transport operators and other stakeholders also had a different

interview guide that constituted different sets of questions. In recounting peoples' lived experiences, Cook (2012) cautions researchers to exercise some level of discretion since information of this sort may be limited to participants ability to recall events as well as participants ability to articulate their experiences well.

While such conversations can be done via telephone, email, postal mail or virtual technology like the use of skype, this study primarily adopted a face to face approach since this was familiar with vulnerable populations daily experience, known to build stronger ties between researchers and participants as well as deliver a higher response rate when compared to other methods (Curtis & Curtis, 2017; Liu, 2017). However, restrictions in movement and social interactions during the height of COVID-19 cases in Accra resulted in a brief employment of telephone interviews with PWDs who had already been booked for interviews.

While the instrument was primarily drafted in English, the study relied on the use of local language (Twi) as the primary medium for communication since it was difficult for some PWDs to communicate well in English due to low educational attainment within this bracket (Kpobi & Swartz, 2019). Also, a provision was made to engage the service of translators when participants are identified to be familiar with other local languages like Ga, Ewe or Hausa.

An unstructured interview guide was also used to elicit responses from the trotro operators as well as key stakeholders identified in the target population. While in-depth interviews offer a great opportunity to explore participants activities and the construction of their world, a major setback identified by Morris (2018) has been researchers' difficulty in verifying the accuracy of some responses. To Morris,

the challenge of ascertaining whether a participants' account of an event reflects his/her reality will always exist, but researchers must find ways to verify the authenticity of some details by adopting other data collection methods. It was due to this regard that the study also adopted an observational checklist or auditing scheme to verify some of the participants' claims on the subject matter.

Pre-testing and Fieldwork

The instrument was pre-tested at the University of Cape Coast since it offered a suitable combination of vehicular, passenger and pedestrian environment. Additionally, the University of Cape Coast has a fair representation of students with disability who constitute a principal component of the study.

Using campus shuttle services, the auditing scheme was used to ascertain the level of compliance of transport models in terms of the presence, conditions and dimensions of selected disability-friendly facilities as enshrined in both the Ghana Disability Act and the United Nations prescriptions for accessible transport services. First, the auditing scheme was piloted on the 25th of January 2020 at the Metro Mass Terminal at Aboom in Cape Coast (at present, the MMT is the only shuttle service provider on campus). Another reason for the pre-testing exercise was to evaluate the efficacy of the Kobo Toolkit that was used in executing the auditing scheme. The Kobo toolkit is a mobile phone application that is designed for collecting data. The pre-testing exercise allowed the researcher to test the software's efficacy in terms of skip logic, ease and accuracy of taking geolocation

of each transport terminal as well as the efficiency of using this mobile platform as compared to the use of the traditional paper and pen.

Also, a shuttle driver of the University of Cape Coast was interviewed on 5th February 2020. Based on support services offered to PWDs, the connotation of disability and attitudes towards this reference group, the exercise resulted in the rewording, rearrangement and/or elimination of some questions.

The second phase involved the engagement of students with disability in the University of Cape Coast and this happened from 11th to 13th February 2020 where three visually impaired and two physically impaired students were interviewed. Again, the outcome of this discussion resulted in the re-wording of some questions especially when it came to topics that participants did not feel comfortable answering. Subsequently, such questions were either siphoned into other question(s) or asked indirectly. Finally, the outcome of the pretesting activity gave grounds for the researcher to appreciate the duration of the interviews and help develop strategies to promote shorter but effective interview sessions.

Methods of Data collection

With varied disability groups and NGOs across Accra, the first point of contact were some district executives of the Ghana Federation of Disability Association (GFS) who were reached through a visually impaired acquaintance that had a long-standing relationship with the executives. My first encounter with the executives was on 30th November, 2019 at the Accra Rehabilitation Centre. This meeting formed part of the monthly Greater Accra disability meeting where leaders of the

various districts gathered to deliberate on key issues affecting the conditions of PWDs in Ghana. The timing of this meeting was helpful since the ensuing week was earmarked for the celebration of the International Day of Persons with Disability (3rd December, 2019)

With such a major programme on the disability calendar, many executives of the various districts in Greater Accra were in attendance since issues relating to this celebration were tabled for discussions at the meeting. At the meeting, the executives of the Greater Accra GFD offered a moment to formally interact with the members present where some district executives sought clarity on issues. Upon satisfying their curiosity, a few districts executives present showed their eagerness to be interviewed since their transport issues had not received as much attention as they wished for. Unfortunately, the choice of Accra as the study site required the researcher to decline the interview requests from district executives outside AMA.

Here, details of all participants who showed interest were recorded with the help of the executives and research assistant. While such details were being gathered, the researcher engaged participants to schedule a date and venue that was convenient for both parties. The proposed venues for the data collection were the Accra Rehabilitation Centre, the respective venues for the district meetings and the residence of participants or any other venue suggested by a participant. For participants who preferred to meet at venues other than their residence, some amount of financial commitment (10 cedis) was made available to offset the cost of transportation. Such an incentive has been identified to increase the response rate and contribution during interviews among PWDs in Ghana (Gregorius, 2014).

Since this financial commitment was not intended to be payment for one's time or effort towards the study, participants were required to offer details on their travel chain from their residence to the interview site before the transport fare was paid.

While the district meetings offered a suitable starting point for the data collection, low numbers recorded required the researcher to expand the sampling frame and this was done in two ways; the first was to engage a research assistant who happened to be an executive of the Greater Accra GFD and also had a long-standing relationship with other disability NGOs that offered capacity building programmes for PWDs. The role of the research assistant was very crucial since she helped in reaching out to many PWDs who were not members of the GFD.

Secondly, efforts were made to visit the Ghana Society for the Socially Disadvantaged (GSSD) which offered residential vocational training for vulnerable people in Ghana. The first point of contact was the facility manager and after the introduction and reasons for visiting their facility, the manager also took turn to examine my school ID and other supporting documents including the research instrument before consenting to allow me to engage his students for this study. My first visit to the facility was on the 19th February 2020.

For persons with disability, the data collection period spanned from the 4th of March to the 28th of April 2020 but this was done in two phases. Phase one started from 4th to 12th March and required face-to-face interview sessions with participants. However, evidence of the first recorded cases of COVID-19 in Accra necessitated a switch to telephone interviews which stretched from the 12th of

March to the 28th of April. The duration of interview sessions ranged from 33 to 96 minutes.

For the two transport terminals: Kaneshie and Kwame Nkrumah Lorry station, an introductory letter was sent to the executives of the local GPRTU. In this letter, the purpose of the study was made clear and a copy of the instrument was also attached. Having identified trotro operators' preference to speak the local language, efforts were also made to explain the focus of the study in Twi or Ga which happened to be the widely spoken local languages in Accra. In as much as some drivers raised issues with timing and busy work schedules, the exercise was successful. Interview sessions were done in person (at the two terminals) and spanned from 11th to 28th of March and duration of the interview ranged from 27 to 43 minutes. While only 10 participants were engaged, the observed long period resulted from the restrictions in movement and social interaction during the COVID-19 pandemic.

Finally, an introductory letter and a copy of an interview guide was sent to key stakeholders who regulate and control transport service provision in Accra. Having perused the documents and given consent to participate in the study, a convenient date was scheduled for the interview to begin the data collection process. The duration of interview session ranged from 47 to 74 minutes.

Data processing and analysis

Just as Byrne (2017) noted, qualitative data analysis heavily entails the use of interpretation which requires the researcher to have a detailed account of all data

available to them. To this extent, pictures and annotations from the field had to be combined with the outcome of the auditing schemes both of which offered a detailed description of the facilities that were found in vehicles and transport terminals.

For the in-depth interviews with participants, the first step in the data analysis was transcribing the audio to text. In Kowal & O'Connell (2014), the accuracy of transcription is hinged on the ability of the researcher to rightly capture three main issues viz the words of the participants, the context of these words and non-verbal gestures that were displaced during the interview. In the wake of these, the researcher personally transcribed verbatim since this would avoid systemic errors that could potentially dilute the data gathered. In this regard, the study employed the use of MaxQDA transcription services which is a paid software that offers the flexibility in reducing the tempo or speed of the audiotapes as well as reduce background noise in the recording. To ensure clarity in the transcribed data, efforts were made to remove incomplete sentences, repetition of words/phrases or sentences as well as non-relevant contents that clustered or diluted the context or meaning of the text.

In analysing the data, common ideas were classified under discrete themes or categories, which was done using the MAXQDA software. The essence of coding was to facilitate two different forms of analysis: direct and relational content analysis. While the former draws its meaning by looking at the presence and number of occurring themes, the latter draws its meaning by exclusively considering the relationship that exists among various themes (Navenec & Hirst,

2012). In the case of direct content analysis, the focus was placed on variables like the word or phrase count as well as the number of times a concept or theme like assistive technology or priority seats is mentioned. At all times, this was done in a way as to offer readers a mental picture of transport issues that affect the daily living conditions of PWDs in Accra.

Ethical considerations

Ethics in research is very important when a researcher probes and publicises people's private issues. Adherence to ethical principles was therefore strictly upheld before, during and after the data collection process. While the study was done under the auspices of the Department of Geography and Regional Planning, University of Cape Coast, ethical clearance was sought from the Institutional Review Board of the University of Cape Coast. In pursuance of the Board's approval, all relevant documentation including the research instruments, informed consent forms and a copy of the study proposal were submitted to the Board for consideration and subsequent approval was obtained to begin the data collection process.

As explained by Sullivan (2014) in his book on *Philosophy, Ethics, and the Disability Community*, vulnerable population groups like persons with disability are one group of people who deserve protection and respect of dignity as research participants in particular and human beings in general. Thus, in contact with the potential participant(s), the researcher introduced himself and further presented a

school ID and an introductory letter from the Department of Geography and Regional Planning as further proof of identity.

Potential participants were then briefed on the purpose of the study as well as any physical, emotional or social benefits that could be gained from his or her participation in this study. This includes the receipt of 10 Cedis as transport fares to the interview site. Aside from such benefits, some unintended costs that could accrue from this study were made known to participants. This may require participants to recall unpleasant treatment meted by trotro operators and other agents. To reduce the effects of such uncomfortable situations the facility Manager for both the Accra Rehabilitation Centre and the Ghana Society for the Socially Disadvantaged were engaged to offer emotional support. Consistent with ethics in research work, all participants who agreed to be engaged in this study were requested to sign a consent form to validate their claim. Before such validation was made, participants were also made aware of their right to terminate an interview decline a request to use an audio recorder during the interview session.

Issues of anonymity were also stressed and that no part of the study would offer any indication that may be linked to participants. To attain anonymity, participants were assured of the use of pseudo-names unless participants explicitly requested the use of their real identity. In such cases, participants were requested to sign an authorization form. This form would provide proof to insulate the researcher from any allegation of breaching such ethical value. In addition, other principles like confidentiality and privacy were made clear to participants.

With the view of addressing participants concerns and interest, all interviews were conducted in a safe and convenient place. Also, the estimated duration for the interview was made clear ahead of each session since this allowed both parties to plan and reschedule a different day and time if the current engagement was not concluded or deemed inappropriate.

To encourage participants to speak freely and openly, the interview was conducted in a language that best suited their needs. With the expectation of avoiding any emotional or psychological harm to participants, interviews were conducted light-heartedly so that all would be relaxed and have no hesitations to contribute effectively to the discussions.

Challenges from the field

Different challenges were encountered with different target populations and highlights of these challenges are enumerated below. Firstly, access to persons with disability proved to be quite difficult since the membership of the Ghana Blind Union and the Ghana Association of the Physically Challenged was less than 20 per cent of the estimated disability population as recorded by the Ghana Statistical Service. Even with the low membership, entry into these groups proved to be another challenge since the leadership of these groups highlighted their displeasure with which previous research work had failed to provide the needed result especially in areas that matter to their livelihoods. On further interaction, the novelty of this research in highlighting PWDs transport and mobility needs served as a major catalyst in winning their interest since most participants had not engaged

in a study of this nature. The confidence of the gatekeepers also played a key role in reducing the rate of non-participation among members. To expand the scope of participants, the gatekeepers also served as valuable contacts in reaching out to many PWDs who were not members of any disability association.

In the case of the transport operators, busy scheduling of their operations played a key role in influencing their commitment to the study nonetheless, they still appeared to be interested in the research. To get the needed response, all interviews were conducted during off-peak hours where demand for trotro services were considerably low. This offered all trotro operators ample time to share their experience and knowledge relating to the delivery of transport services to the disability community. In all cases, a common denominator between transport operators and some PWDs was the language for expression and communication since most participants preferred to speak local languages like Twi and Ga. Despite the researcher's proficiency in these languages, the ability to offer an accurate translation, interpretation and transcription might have influenced the accuracy of the data despite efforts made to engage experts in these languages.

Also, the change in the preferred mode of data collection from in-person interview to the use of telephone calls and other digital platforms like zoom hindered the extent of data collection. As much as this change of approach was in response to COVID-19 protocols, it denied the research of nonverbal responses and gestures that appeared to be valuable to the data collection. Other challenges encountered related to the financial constraints relating to accommodation, feeding and transportation especially when no external fund was available to the researcher.

Finally, the researcher did not have any disability and this could potentially hamper his ability to fully contextualize some ideas and opinions of participants.



CHAPTER FIVE

PROFILE OF PARTICIPANTS AND VIEWS ON THE CONCEPT OF DISABILITY

Introduction

This chapter begins with an outline of the study participants' socio-demographic characteristics and their understanding of the concept of disability. Though none of the study objectives directly targeted participant's socio-demographics, there was still the need to examine their background traits as these influence their identity as well as interaction and attitudes towards the use of facilities in their environment (Adam, 2013; Gregorius, 2014). Also, the literature on transport mode choices and travel concerns have been identified to be influenced by PWDs' perception of their society's connotation and acceptance of disability (Frye, 2013).

In pursuance of the conceptual framework (Figure 4), the social model of disability offers a platform to examine varied positions on the definition, connotation and cause of disability. This model situates disability in the context of a wider society and also serves as an avenue to highlight various cultural, social, economic and political factors that shape the concept and imagery of disability. By this analogy, emphasis was also placed on PWDs' views on the definition and characteristics of disability, causes (personal and general), comparison of PWDs' status with the general population, advantages or disadvantages of living with a disability as well as society's' connotation on the ability and status of PWDs.

Socio Demographic Characteristics

From Table 2, out of the 50 PWDs engaged, 67 per cent were males. Though data from the Ghana Statistical Service (2014d) proved the opposite, the difference in results stemmed from the nature of the research as well as the selection criteria adopted for the study. Indeed, Accra has the highest urban disability population and a lot of women with disability were encountered but most of these women did not fit the inclusion criteria which categorically focused on people with extensive travel history via public transport (trotro). Unlike men, Slikker (2009) further indicates that cultural and social setting disadvantages women with disability in two-fold: their sex and disability make them the least likely candidates to engage at all levels of society including education, social, kinship and economic. With low economic prospect comes low propensity to engage public transport regularly hence the lower representation of women in this study.

With regards to age distribution, most participants (46%) were within the age cohort of 18 to 28 years. Participants' age distribution suggests that most PWDs were in the age cohort of 18 to 39, representing the active and mobile population who might require transport services as a conduit to reach various opportunities. The age range was 50 years while the modal age was 32 years.

While pursuing the dictates of the Social model of disability, impairment at this level describes the limitations in one's body that prevents one from engaging or participating in any activity of his or her choice (World Health Organization, 2011b). On this score, the visually impaired dominated the study with 56 per cent while the physically challenged represented 44 per cent. This component of the data

conforms with the GSS Census report on Disability in Ghana that estimates Ghana's' disability population to be Three per cent with the visually impaired being the dominant disability type. While this is set to be true, other researchers like Gregorius (2014) and the World Health Organization (2011) have challenged the GSS report on Ghana's disability outlook and even cited higher values (between 10 to 15%). These agencies claim that the measurement approach for Ghana's census only targeted people with severe impairment who are known to be in the minority of the disability population. Additionally, Gregorius (2014) opines that stigma and cultural factors attached to having an impairment did not permit families to report the presence of persons with disability in their homes. It must also be known that the visually impaired group for this study did not only comprise the totally blind since the legal definition of blindness in Ghana is hinged on a person's inability to see an object at 20 feet clearly. In particular, the totally blind constitutes 38 per cent of participants and these were people who had lost their visual ability to see light while the partially blind accounted for 18 per cent of the sample.

The other key impairment type recorded for this study was the physically impaired, representing 44 per cent of participants. Ranked the second-highest impairment type in Ghana, physical impairment is best described as a physiological condition ranging from skeletal disfiguring to a loss in one's body except for the eye (Ghana Statistical Service, 2014d). This definition, therefore, qualifies people who have lost functionality of their arms or limbs as well as the hunch backs and amputees. While accounting for the extent of their impairment, the study found that 27 per cent of participants were wheelchair users and these were people who had

lost complete functionality of their limbs or found it extremely difficult to walk. Also, participants who had some level of control over the functionality of their limbs reported using crutches (8%) and calipers (4%). Finally, participants with skeletal disfiguring like displaced hip and hunchback also accounted for Four per cent of the sample.

With the focus on the travelling population, the study further assessed participants' highest level of education since it influences the likelihood of traveling and/or engage in economic activity. Table 2 indicates that 44 per cent of participants had attained some tertiary level of education which ranged from teacher training colleges to technical or mainstream universities. Participants who attained basic school education (primary and Junior High) also accounted for 36 per cent, while those who had not received formal education represented 15 per cent. The least recorded educational level was at the Senior High school which accounted for Five per cent. Data from both the Ghana Statistical Service and the Voice of People with Disability Ghana (2014) appear to suggest that most PWDs in Ghana have little or no formal education, however, the study's focus on engaging the travelling population among the PWD community makes the difference in this case. This focus offered the platform to concentrate on only PWDs who engaged trotro services regularly and this happened to be people who had some level of active economic and/or educational need hence a fair representation of PWDs with tertiary education. Another reason for engaging PWDs with higher educational level stems from the Ghana Statistical Service (2013) report on Household Transport Survey

which identifies trips to school and/or work as the frequently made trips by Ghanaians.

Table 2: Social Demographic Characteristics

Social demographic variable	Percentage
Sex	
Male	67
Female	33
Age	
18-28 years	46
29-39 years	42
40-50 years	6
51-61 years	4
61 years and above	2
Types of impairment	
Visual	56
Physically	44
Extent of impairment	
Total Blind	38
Wheelchair	27
Partially Blind	19
Crutches	8
Skeletal deformation	4

Calliper	4
Profession	
Private formal	8
Private informal	17
Public formal	33
Public informal	4
Other	13
Unemployed	25
Marital Status	
Single	83
Married	17
Highest Level of education	
Tertiary	44
Basic	36
None	15
Secondary	5

Source: Field Work, 2020.

From the data, 37 per cent of participants were employed by the state and this includes PWDs who were engaged in the formal sector (33%) as against those engaged in the informal sector (4%). Those found in the public formal sector worked as librarians, teachers, civil/public servants as well as national service personnel (who undergo a mandatory one-year employment program after completing tertiary education). On the other hand, those engaged in the private

sector, (8%) were engaged in the private formal sector while the remaining (17%) were in the private informal sector. Identified occupations in the private informal sector included self-employment as local craftsmen, barbers and tailors. Other informal sector employments included basketball coach, shop attendants and sales representatives. On the part of the private formal sector, the only job positions encountered were administrators and radio presenters. The unemployed group in this subset represented 25 per cent of participants while participants who identified themselves as students represented 13 per cent. The need to highlight the student group was because this group could not be included in the unemployment bracket as they were not looking for jobs at the time of the study.

On participants marital status, Table 2 further reveals that 83 per cent had never been married while the remaining 17 per cent were married. This finding seems to deviate from the GSS data on PWD marital status which indicated the opposite. Though the GSS data suggest a higher proportion of marriages among PWDs in Ghana, a critical look at the GSS data revealed that most of such marriages were contracted in the rural areas as compared to those in the urban areas like Accra where the study was carried out. According to Nyangweso (2018), misconception and poor knowledge on the place of PWD in society may account for the low marriage rate among them in urban areas. This may range from the perceived fear of transmitting the disability to other family members or unborn baby as well as the perceived challenges associated with caring for a person with disability (Nyame & Hague, 2013).

PWDs' Knowledge on the Concept of Disability

This section explores participants' view on the definition and connotation of disability as well as their notion of society's position on the status of persons with disability. The section also sets the template to offer a general picture of the outlook of disability in Ghana, identify the various schools of thought relating to the concept of disability as well as examine the living conditions of PWDs in Accra.

Definition of Disability

Throughout the study, participants displayed varied opinions on what disability means to them though the United Nations and other Disability movements have established their positions on the validity of each definition or concept. In all, both the social and the medical model (definition of disability) were represented in the data but the medical model which defines disability as a personal tragedy became more obvious in the participants narrative. When asked to define disability the following gained prominence:

It means a situation where one has lost one or sometimes more senses. Disability means a part of someone's body is not functional. I'll say the person cannot walk, he or she is in a wheelchair. So, when you see such an individual you will notice that he or she is disabled [32-year-old unemployed male wheelchair user].

Disability is being disadvantaged. You can do a whole lot with the part of the body but if one part does not function, you are being disadvantaged because you cannot do something without it. It also means that you are handicapped and that is how I understand it. [33-year-old female visually impaired teacher]

The word disability is in one way or the other a human being who has a deformity. He is not like Adam (specifically) in the Bible. [48-year-old male wheelchair user, basketball coach]

Hinging on the medical model of disability, the emphasis on the loss or malfunctioning of a body part became the obvious factor in participants definition of disability. Though observed body difference is true for people with an impairment, the assignment of this definition to disability only creates the impression of different classes of people within the wider society. This perceived differences in society is further made clearer when a participant compared himself to the Biblical illustration of Adam. For that participant, the story of Adam did not give any account of an impairment hence any human being whose bodily features do not fit this description is simply branded as having a disability. To Deb (2017) and Anastasiou & Kauffman (2013) such notions only reinforce the ideas of seeing an impairment or persons with disability as a sick and unproductive group who are to be seen and cared for but not considered as a ‘useful’ group that can make a meaningful contribution to society. Additionally, this definition may further place ‘unwarranted’ power in the hands of doctors, physicians and other medical

professionals who may be tasked to establish various interventions to help integrate PWDs into society since disability is equated to sickness and also inherent in a person (Grischow, 2011).

To verify the claims of participants on the definition of disability, the study employed word cloud (Figure 6) to identify the first 30 words used to describe a person with disability. One word that stood out was ‘cannot’ or ‘not’ which were related to the human senses and usually followed with other action words like see, walk, run and hear. To further establish the context, these keywords were even preceded with other negative connotations or adjectives like deformity, different, deform, lack and defect. According to Shapiro (2012) and Sawadsri (2010), such emphasis on seeing PWD as ‘different’ also represents society’s poor appreciation of varying functional ability and how the subject of an ideal or standardised body figure has been made appealing. Again, Hughes & Paterson (2006) postulates that the position of seeing disability as an inherent feature of an individual further poses a threat to PWDs’ quality of life since it absolves society from taking responsibility in creating an environment that meets the needs of all people including those with disability.



Figure 6: Word cloud of participants' definition of disability

Source: Fieldwork, 2020.

While reviewing the background characteristics of participants in relation to their responses on the definition of disability, the data revealed that the notion of considering disability as an inherent characteristic was popular among those with no or little formal education while participants with tertiary education mostly identified with the social model of disability that considered disability not as an attribute of themselves but seen in their interaction with society. These views are represented in the following remarks:

Disability to me means barriers society has put in place to limit my social interaction. Disability is a social construct. Disability only comes in when I can't do something I should be able to do in

the society. [28-year-old male visually impaired University graduate]

I think that disability is a concept. I will say that it is a situation that makes one perform a certain activity that everyone will perform in a different way but achieve same results as everybody and sometimes even do better than what others will achieve. [24-year-old male visually impaired university graduate]

Well, that is a contextual thing. What people will call a disability, I see it as differently abled people. I will see it as being tailored towards doing a particular thing differently rather than how normally it would have been done. For example, people will read with their eyes but naturally, I will read with my ears or fingers. And so, I am differently abled and not disabled. [28-year-old male visually impaired law student]

In all of the narratives, the deviation from the medical model of disability lies in the focus on achieving a task using different approaches. By these views, it is the barriers in society that limit the participation of people in various activities and not simply that these people do not possess a body part or witness a malfunctioning in any part of their body. This approach has caught the attention of contemporary disability activist like Oliver (2013) who raises concerns for the need to create an environment that acknowledges different functional ability and makes

room to accommodate the uniqueness of every person. Levitt (2017) and Jackson (2018) opine that the social model also comes with a political approach that has caught the attention of the United Nations (UN), World Bank (WB) and some national governments. It is in this view that many accessibility and disability inclined legislations have been enacted to protect PWDs and ensure their full participation in all aspects of society. Among these is Ghana's Disability Act (517) and the Nigerians with Disability Decree (1993).

Disability as a sickness

Having explored the definition of disability, one key issue that stood out was the reference to disability as a sickness though having a disability does not necessarily translate into an ailment. This section, therefore, offers insight into PWDs' subjective assessment of this notion, examines PWD responses or reactions when such terms are used as well as an assessment of the overall attitudes of the society towards PWDs. Inasmuch participants held different views on the definition of disability, all participants refuted the claim that persons with disability are also sick. This can be seen in the following remarks:

No. In fact, someone once called me a sick person and I warned him not to call me that again. I am not sick since the sick people are rather in the hospital and cannot do anything for themselves. Those people are at Korle Bu with oxygen masks for support as well as those in pains hoping to get better. For me, I can do

anything I want to do hence I am not sick ... [42-year-old female unemployed wheelchair user]

In fact, I hear that a lot of the time and when I hear that, it breaks and really kills my spirit. I ask myself if I am really sick and the answer is no. At first, it was bad (I felt bad) when I lost my sight in the beginning but now, I will just tell you that I am not a sick person. The fact that I can't see doesn't mean that I am sick because I do everything normally (I eat, drink and do everything normally). It is just the eyes that are not there so it doesn't mean that I am sick. I am not! [26-year-old female visually impaired Administrator]

We are not sick people. Those that are sick are those at Korle Bu who cannot do anything and require some form of assistance in doing things like eating, bathing or other things. Those are sick people. I am not sick. [32-year-old female physically impaired trader]

From the narratives, participants rejection of this claim was based on the reasoning that sickness is usually temporary, inflicts some level of pain and discomfort as well as require medical assistance to restore an individual to normalcy. For the participants, the main difference between a PWD and sick people is the degree to which daily activities are executed. In this regard, participants considered

themselves as capable of independently executing their daily living tasks like eating, bathing and walking while those considered as sick may require some level of assistance in executing the same activities. Indeed, the World Health Organization (2011) acknowledges the relationship between sickness and disability since disease-causing organisms like bacteria and viruses have resulted in blindness, deafness and other physical impairment. However, once the state of disability is reached, such condition is no longer accompanied by pain and do not usually require any medical assistance to restore one to their usual state.

On the back of refuting any notion of equating disability to sickness, one factor that fuelled society's notion in this regard is the deficiency of our local languages to adequately differentiate disability from sickness or precisely describe each disability type (Slikker, 2009). While language and diction offer an opportunity for people to express their worldviews on various issues, it also affords the chance to measure one's level of understanding of the issues relating to various sectors of our society. In the case of disability, Ocran (2017) and Mensah et al., (2008) purport that this deficiency can be seen in the use of generic and derogatory terms like 'yarefor' (sick person) by the Akans and 'bulubulu' (mentally retarded) by the Ga as some of the commonest terms that are used to describe persons with disability. This was best captured by one participant:

Our language is based on our culture and the way we view things is from a cultural perspective. And that is why I said that I will agree with someone when it comes to the cultural basis since this is based on linguistic. Maybe the English might

have a different connotation for disability but the Twi, Ewe, or Ga have their own connotation since there is no word to differentiate disability from sickness [28-year-old male visually impaired Civil Servant].

Having expressed their rejection of such derogatory references, the study further examined participants' reactions when such terms are used to describe them. This was needed to ascertain the extent to which PWDs were willing to change the connotation of disability as well as offer society a different outlook on their status or ability. Generally, participants recalled that most of their intended reactions might not necessarily be executed since the opportunity to do so may not be available. When referred to as sick persons, two key reactions became apparent in the submission of participants. The first of such is the outright considerations of society as myopic and ignorant and while these thoughts are always internalised, the second line of action was expressed in the following responses:

I will assume that the person does not know anything about disability and I will take the time to educate such people on why they should not refer to PWDs as sick people. Referring to us as sick people is derogatory and we do not want to be referenced as such. Earlier on, people used to refer to us as sick people but now, we keep correcting them on the need to refrain from such reference terms. [36-year-old female physically impaired trader]

I will say the person is ignorant of the word disability. So, in this case, I will educate the person about it. But before I do that, I would have to understand the person's meaning of yarifo. If it means that I am sick simply because I cannot see as he or she can see, then I think it would be very difficult for me to educate the person since people do not like to be corrected that much. [25-year-old visually impaired male National Service person]

From the aforementioned narratives, the most preferred action among participants was to educate members of their community on the need to have a positive outlook on what constitutes disability. This course of action was needed since such reference was not only deemed derogatory but also failed to offer the right representation of the concept of disability. In the wake of offering such education, participants also expressed their fear of appearing rude or 'too knowing' since people might unknowingly misinterpret their intention to correct them.

In situations where participants observed early warning signs of a hostile environment or unfriendly confrontation as in the case of public transport or any other public gathering, the next best option was to ignore the situation and let the person go with his or her ignorance. This action was usually undertaken to avoid further embarrassment since such confrontations often happen in public scenes. Further analysis of the data also revealed that most participants resorted to ignoring people who referenced them as sick people although they expressed interest in educating such people to refrain from calling them sick people.

Causes of disability

Having reviewed participants' perception of the definition and imagery of disability, the cause of one's impairment also offers an opportunity to reveal how people have lost functionality of their body parts. Though the literature on causes of impairment seems to have some predetermined factors, Reynolds (2010) purports that socio-cultural factors also influence society's narrative in this regard. Collecting data on this topic was one of the delicate issues for some participants since it required them to recall the painful processes of how they lost functionality of some parts of their bodies. Even in the face of a friendly environment and some support from the various caregivers at each interview ground, a few participants were hesitant to narrate the full history of their impairment since it brought back memories of events that were meant to be forgotten.

For the visually impaired, the commonest cause of impairment was through ailments acquired after birth. The identified ailments included glaucoma, measles, cataracts and other congenital conditions like retinitis pigmentosa. Not all participants in this bracket were totally blind since some participants seemed to retain some level of vision but were mainly limited to seeing flashes of light and the outline and little details of objects. Participants' accounts of how they lost their vision included the following:

I lost my sight in the year 1976. I was not born blind. One time, I was lying down and I don't know what happened, I decided to test my eyes. I closed one eye, waved my hand and didn't see my hand very well. I went to hospital and I was operated on and that was

1976. The doctor said it was glaucoma. So that was the cause of my blindness. [51-year-old male visually impaired local craftsman]

Mine was a congenital issue where I had a cataract which was removed through surgery and I never regained sight. It's been 10 years since I lost both sights. September 2020 will be 10 years. [26-year-old female visually impaired administrator]

While identifying glaucoma, cataract and other medical conditions as the leading cause of participants' impairment, data from Nuerthey et al. (2019) and Boadi-Kusi et al. (2017) also confirm the study's findings. To Nuerthey et al, the onset of these medical conditions do not usually come with clear symptoms and since regular medical check-up is not a functional habit of most low and middle-income households, such conditions are not detected early enough. Even when these conditions are detected, the delay in seeking early medical care might aggravate the extent of damage beyond repair or may require a considerable amount of money to correct (Gyasi et al., 2007).

Just as participants attributed known factors as the cause of their impairment, the study also identified other unfamiliar conditions like the Stevens-Johnson Syndrome (SJS) which is a rare genetic disorder that affects the top layers of one's skin but for the participant in question, this was triggered by an allergic reaction to Sulphur. The onset of this condition led to a forceful shut of participant's eyes which saw the intervention of medical officers who had to forcefully open his

eyes. For the participant, the seemingly strange outlook of his situation fuelled speculations and heightened his belief in superstition but subsequent tests offered clarity on the cause of his impairment.

Aside the identified medical conditions, another key cause of visual impairment was domestic accidents that largely resulted from children's play activities. This took the form of fistfights, parental negligence of potential hazards in children's play as well as children's desire for adventure such as demonstrating the account of David slinging a stone at Goliath in the Bible. Such accounts confirm the World Health Organization's (2004) narrative on how children's environment plays a key role in the occurrence and severity of injuries. Additionally, the WHO further states that 20 per cent of deaths and disability may even be caused by unintentional injuries associated with children's play. Further interrogation of the data revealed that only males in the study recorded an impairment through this means which also emphasise the WHO (2004) statistics on how males are twice more likely to sustain unintentional injuries in their play environment than females.

While such accidents set the tone for the discussions, other participants also shared accounts of how the negligence of medical officers in providing adequate eye care aggravated their impairment from blurred to totally blind in both eyes or from losing one eye to losing both eyes. Some examples of these accounts can be seen in the following narrative:

I was playing with kids around and they used a lid to hit my eye that is the right one. I went to the hospital in 2004/5 and I was still able to see with the left one. Later on, I had a severe headache

and went to the hospital and was told that they should have done something to maintain the left one. Since they couldn't do that, it has affected the left one as well which caused me to be blind in both eyes. And so, the causes could be through accident and doctor's negligence as well. [25-year-old male visually impaired National Service Personnel].

Despite the occurrence of medical negligence in the account of the visually impaired, this factor was more pronounced among the physically challenged but was not preceded with the onset of an accident as in the case of the visually impaired. Here, key ailments like measles and poliomyelitis were identified to be the leading causes of impairment among the physically challenged. In all cases, such ailments were encountered after birth and participants did not see any significant improvement in their health status although they had sought medical treatment. The following are some accounts of how medical errors resulted in the loss of participants functionality:

My mother told me that I wasn't born with the disability. While I went about my thing as a child, I fell sick and she sent me to the hospital and the nurse attending to me made some errors and she injected me with the wrong injection. [35-year-old unemployed physically challenged male]

There are many causes. Taking myself for example, I wasn't born this way. It manifested at about age 10. According to my mother,

I had measles and received an injection for its treatment. It was through this treatment that I got disabled. [26-year-old unemployed physically challenged male]

In citing the receipt of injections and other medical services after the onset of various ailment, the literature support the view of participants who attributed injections received from hospitals as the cause of their impairment. While describing injection-induced disability as ‘post-injection paralysis’, both Alves et al. (2018) and Kakati et al., (2013) also cite inappropriate injection practices among health workers, the proliferation of private hospitals with poor medicines and unqualified staff as well as lack of awareness of options for parents to choose alternative medicine over injections. Another reason why injection-induced disability is common in children under 5 is that buttocks injection exposes children to sever their sciatic nerve which connects children's hip to their legs. By the tenderness of children's muscles, Ovetchkine (2001) purports that any injections in this region (buttock) exposes such children to the risk of losing the connective ligament that holds the legs to the hips and this ranks high among the factors that cause paralysis in children. Having explored the reasons why injections may lead to physical impairment, the Ghana Statistical Service Report on disability in Ghana also indicates a shift to the use of oral Polio and Malaria vaccines since this has proven to be effective in Ghana’s’ effort in reducing the tendency of causing paralysis among children under the age of 5 (Ghana Statistical Service, 2012b).

Belief in Mysticism, Superstition and Witchcraft

While empirical and science-based approaches have been used to ascertain the causes of impairments, participants also recalled instances where medical officers could not properly diagnose their impairment, leaving them confused. With such confusion, an identifiable factor in explaining the cause of one's impairment is the belief in superstition, curses, witchcraft and other mystical powers whose existence cannot be proven with certainty. This section was deemed necessary for the study since differences in cultural and religious positions on the subject of disability have been highlighted to influence society's perception on the causes of one's impairment as well as the attitudes or status accorded PWDs even in the transport space (Fiasorgbor & Ayagiyire, 2015; Naami & Hayashi, 2012). In offering explanations on participants belief in the role of superstition and witchcraft, the following affirmative remarks were made:

It is true that witchcraft has a role. To me, the fact that you have not encountered one (witchcraft) doesn't mean they don't exist. Some tribes believe that if you give birth to a child and fail to uphold traditions by refusing to allow your grandmother to blow air over the child's face, that child may become blind and people may attribute your refusal to do such things to be the cause of the disability. [24-year-old male visually impaired National Service Person]

My junior in SHS said when she was developing her eye problem, they went to a prayer camp and the leader of the camp told her mother that her eyes couldn't be good any longer. The reason is that witches have taken out the eye and have fried it and so she can't see any longer. [25-year-old male visually impaired student]

In our parts of the world, definitely, that belief (in witchcraft) will be there, since you can't explain it. There is a scenario I heard, a man was going to bed and he just wished good night to his children. The next morning, all the children in the room had their legs not functioning. They couldn't walk. Every single one of the children. So, since it is not explainable, you can associate it to the spiritual maybe as a result of a curse or something. [28-year-old unemployed visually impaired female]

The narratives do not only represent the views of participants who could not ascertain the cause of their impairment but also participants who had some explanation of what caused their impairment. The belief in the role of superstition in this regard seems to have a cultural and religious underpinning where strange and inexplicable events are attributed to a deity's disapproval of its subject. As revealed in the data, such a strange occurrence may result from people's refusal to observe long-held traditions as seen in the case of a participant whose father refused

to observe their traditional naming ceremony protocol. Aside from a deity to human relationship, the data further revealed how humans have invoked curses or resorted to witchcraft as a way of seeking revenge for wrongs done to a person, deprive someone of an opportunity or even bring disgrace to one's family. In the traditional chieftaincy setting among the Ashanti, Gadugah (2011) reiterates how belief in superstition disqualifies a person with an impairment from ascending to any chieftaincy title and in respect of that, Ashanti Chiefs like Kusi Obodum was dethroned after going blind (Kyerematen, 1969). While checking the background of participants, the study found that the belief in superstition was common to all irrespective of their educational background but more so among females (80%) than males (64%) who supported this claim.

No participants provided any concrete evidence to prove the role of superstition and witchcraft in causing their impairment but only claimed that their belief in the role of superstition and witchcraft was fuelled by the representations and portrayal of witchcraft activities by the media as seen in Nigerian and local movies. To these participants, such movies portray a reality of the society that is not known to many people and that they do not necessarily need empirical evidence to believe it. Additionally, folktales and mystical traditional stories on how deities have invoked curses on people also fuelled such perception.

Another factor that has fuelled society's belief in superstition is religious leaders who claim to communicate with the 'Almighty God' and have powers to overcome evil spirits and see beyond the physical realm. Here participants cited popular and renowned men of God who made claims of family curses or witches

that have played a significant role in causing an impairment. In one case, a participant recounted a pastors' claims to have seen witches fry someone's eyes or use another person's leg as a chopping board during a witchcraft meeting. Though such claims are known to be made on television and other media, none of the participants who sought the services of these men of God has been made whole as promised. At a point, a participant revealed how a man of God promised to quit his practice if he was unsuccessful in 'curing' the participant of her impairment. Unfortunately, this promise was not realised and the so-called man of God did not quit his career as a Pastor as promised.

Another religious factor that fuelled participants' belief in superstition and witchcraft is the assumption that everything that happens on earth is willed or destined by God to happen. For such participants, their impairment was just an opportunity for God to reveal his power, exhibit his dominance over evil and also display his potency in rescuing the sick, rejected and outcast. With such ideas, some participants even held the belief of either regaining their sight or overcoming their current impairment to live a life beyond the expectations of society. Narratives of such claims can be seen in the following:

I am a Christian, and when I study the Bible, I learn that Jesus Christ healed the blind, and his disciples asked, is it the fault of the mum or the dad, so they were thinking of spiritual issues but Jesus said it's not the fault of any but God's glory to manifest. So maybe for God's own glory to be manifested. That is the only aspect I believe in and it can be manifested in any dimension, maybe I will

be an inspirational person for somebody if the person sees me as a visually impaired doing marvellous things. [35-year-old male visually impaired Radio Presenter].

I believe in it (witchcraft and curses) but I'm a Muslim and my belief says whatever happens to a human being is a decree of Allah. So, Allah can permit some witchcraft to do something like that. [30-year-old physically impaired male tollbooth collector].

Comparison with the Abled Population

Self-assessment of one's image and capacity play a key role in evaluating an individual's conclusion over what society's make of his or her existence. A common term attributed to such assessment is 'body image', which largely looks at people's psychological experience in dealing with their own body (Taleporos & McCabe, 2002). For persons with disability, Sawadsri (2010) opines that the basis for such comparison largely lies on the physical characteristics between PWDs and the general population as well as the perception or connotation assigned to each party. Here, the differences in physical characteristics as seen in terms of size, appearance, capacity and functioning inform society's conceptualisation of a standardized body as seen in the 'Modular Man' concept. To Cohen (2014), the Modular man reveals the standardised measurement of a human being deemed to have no impairment and is considered appealing on all fronts. Though such perceptions seem to exist, PWDs' interpretation and acknowledgement of such

differences have been established to influence their response, motivation and ability to engage facilities that are easily enjoyed by the general population (Liu, 2017). When asked whether they saw themselves to be different from the general population, responses from participants did not show any indications of observed difference but this was along the subject of executing assigned tasks or activity.

Below are some of the examples:

I feel ok. Because for example, if a man proposes to a woman and the woman refuses his proposal but accept that of a blind person, why should you be worried? [68-year-old male visually impaired retired teacher]

We can all engage in activities. For instance, when it comes to sweeping, we can all sweep, when it comes to cooking, we can all cook. There are individuals who have no forms of physical challenges but if we are asked to prepare a meal, mine would be better than them. I believe we are all the same. [38-year-old female unemployed wheelchair user]

When this assistive device is provided for me to be able to execute a task, then I think I'm not different from them. By so doing, you have enabled me to do something that in other cases I wouldn't have been able to do. In this case, we are all on the same pedestal. [24-year-old male visually impaired National Service Person]

While most participants claimed to be no different from the general population, the basis for this posture was hinged on the belief in their ability to engage in the same activities as the general population. This argument draws the social model of disability into the equation since it downplays observed bodily difference as a leading factor in restricting an individual from enjoying an opportunity (Reddy, 2011; Soffer & Chew, 2015). Just like participants position, the social model of disability also believes in the heterogeneous society that appreciates the existence of people with varying functional abilities and do not consider any subset as faulty, unproductive or useless. To further demonstrate how participant's bodily difference has not constrained them in the pursuit of activities considered to be the preserve of the general population, participants engaged the researcher in sporting games like basketball, mini-golf and goalball as seen in Figure 7 A,C and D.

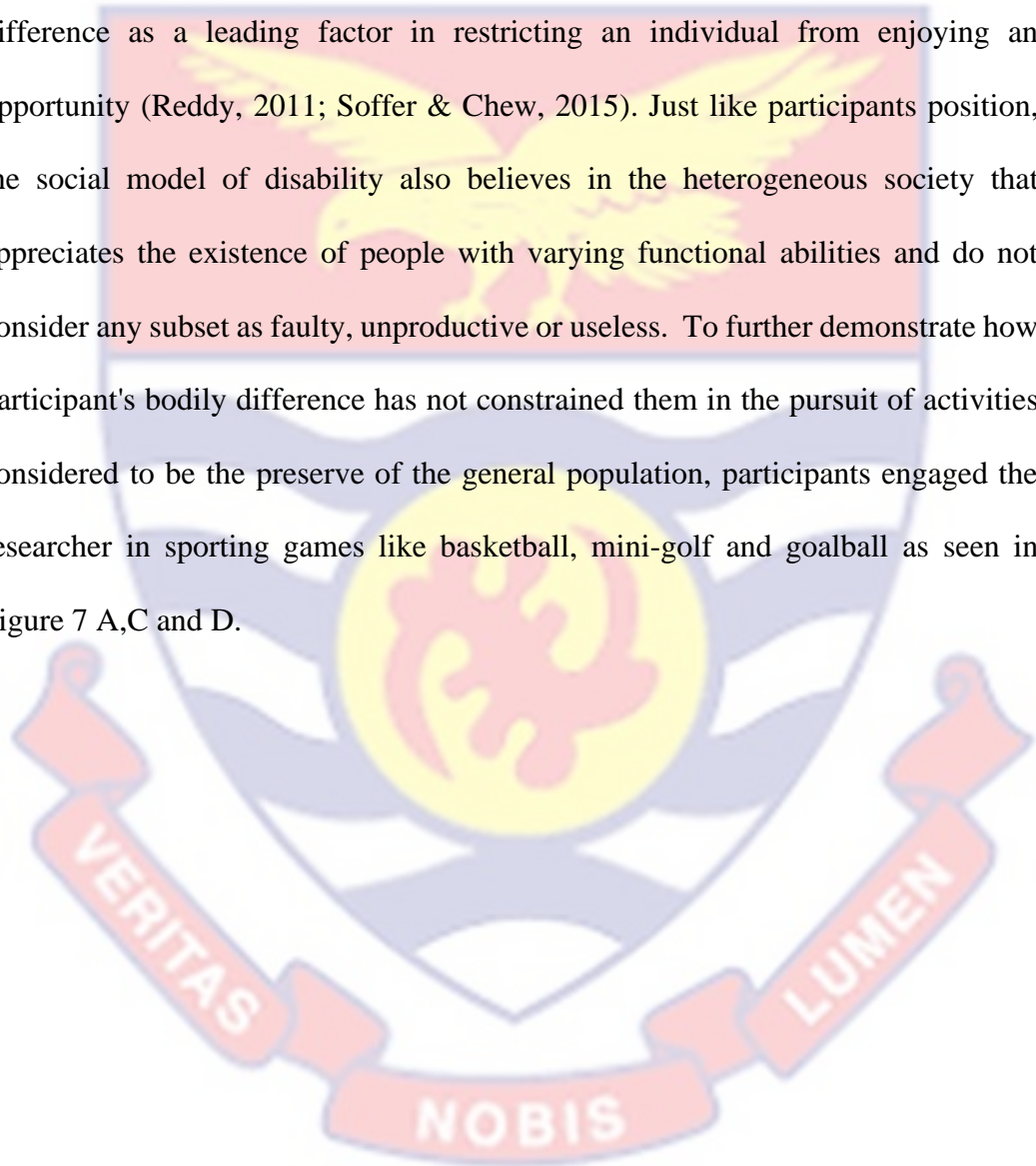




Figure 7: (A) Mini golf (B) Computing class (C) Basketball (D) Goal Ball

Source: Fieldwork, 2020

Aside from the use of physical strength in executing various tasks, another factor that fuelled participants' claim is the reliance on technology in augmenting their impairment. This was seen in how disability-friendly mobile and desktop applications, as well as other mobility assistive aids, supported participants in undertaking varying tasks like walking, typing letters and ordering ride-hailing services like Uber, Taxify, Bolt and Yango. To further prove their ability in this regard, the researcher was given a tour of the computer laboratory of the Ghana Blind Union where some visually impaired students were going through basic ICT classes in Microsoft office as seen in Figure 7(B). Taleporos & McCabe (2002) cite the usefulness of such programmes in bridging the performance gap which could make persons with disability more competitive in the job market but the failure to fully execute such inclusive educational policy has made ICT training less accessible to persons with disability in basic and secondary schools in Ghana (Nkansah & Unwin, 2010).

Indeed, while participants claimed to attain activities in ways that are different from the general population and do not see themselves to be different in any regard, more female participants shared their expectations on how a restoration of their sight or limbs could have made their life easier since they still have to depend on the general population for some level of assistance. For the visually impaired, such assistance may range from requiring help to navigate unfamiliar places, booking appointments and getting tasks done quickly. At a point, a visually impaired participant shared his frustrations on how the failure of an aid (a person who accompanies a visually impaired) to show up on time nearly cost him an

interview opportunity. Another physically impaired female participant also revealed her frustration on how her condition makes it difficult for her to find a public bus during rush hours since transport operators consider her to be a nuisance since she takes a longer time to join and alight from buses.

Perceived Advantages/Privileges of Living with an Impairment

Just like the general population, the status and conditions of an individual may predispose him/her to some degree of advantages or privileges that may not be available to the other population group. For PWDs, Bates (2012) indicates that such privileges may materialise through a realignment of senses where PWDs may develop extra sensitivity in other parts of the body hence the account of famous musicians like Steve Wonder and Ray Charles whose visual impairments are credited with giving them increasing audible and motor functions that have propelled them into stardom. Aside the biological abilities, Nyangweso (2018) also cites how society and cultural organisation offers some privileges or advantages for identified groups like those with impairment. Though this study is focused on the delivery and usage of transport services, participants' perceived advantages may also offer insights into the general living conditions of persons with disability which is crucial to the engagement of transport services. In confirming their claim of enjoying some privileges or advantages, the following remarks were made:

Having lost my sight, I have been to a lot of places I wouldn't have had the opportunity if I had my sight. We attend meetings at big hotels in Kumasi so many times. In 2016 for instance, we met

(former president) John Mahama several times and also went to the Conference Centre for meetings several times. If I want to see Akuffo Addo (current president), I will have access but you will go through several processes. So, me I have an advantage over you. [34-year-old male visually impaired craftsman]

Everything that happens to you as a human being has pros and cons and so I cannot say that it has not brought any advantages. If it had not been the visual impairment, I don't think I would have even completed Senior High school. Well, when I was young and was seeing, I didn't have the interest of going to school since I wanted to become a taxi driver. So when the visual impairment came, it changed my life and also changed my orientation and many other things. [28-year-old male visually impaired civil servant]

There are a lot. I don't join queues if we are going to vote during elections. I will vote before any other able-bodied and this has happened to me. Once I get to the voting ground and there is a queue, the election officials will ask me to come and vote without joining the queue. The same happens when I visit the hospital. The hospital officials will ask me to skip the queue since I have a disability. [33-year-old female unemployed wheelchair user]

Among the various responses, the dominant perceived advantage enjoyed by participants was the privilege of skipping queues at various locations like banks, hospitals, registration for National Health Insurance and/or Ghana Card. Though skipping queues seemed to be religiously observed in private and organised institutions like the banks, embassies and churches, responses towards public facilities were mixed. State institutions like the Electoral Commission (EC), the National Health Insurance Authority (NHIA) and the National Identification Authority (NIA) ranked high among few organizations that offered such privileges to participants. By this, a person with disability is exempted from joining queues during state and local election as well as registration for National Health Insurance card or the Ghana card. To enforce this regulation, these public institutions put up campaigns to educate the public on this provision as well as sensitise all staff to observe such provision. Unfortunately, not every PWD gets to enjoy this provision since 19 per cent of PWDs engaged in a survey by Voice Ghana (2013) claimed to have joined queues during Ghana's 2012 general election

Aside these agencies, other public facilities like hospitals and lorry stations ranked low in public installations that offer such privilege to PWDs. According to some participants, the seemingly busy nature of hospitals, as well as focus on emergency and higher risk medical cases, deny them from enjoying the privilege of skipping queues though they looked forward to it. This view is not new to the study since Ahoto et al. (2018) and Abdul Karimu (2018) have enumerated how queuing at hospitals has contributed in a decline in satisfaction for health care services by persons with disability in Ghana and Uganda respectively. It must be noted that

these cases were very few since hospital attendance was one of the few trips participants undertake regularly. The account of the lorry station was also known to be no different from hospital attendance.

Another key advantage enjoyed by participants was the rediscovery of life purpose and the opportunity to chart a new life path. Dominant among participants was the attainment of secondary and tertiary education. To participants, their impairment also offered the needed opportunity to concentrate on life goals and skills that would have been lost if they had not lost functionality of any part of their bodies. Other participants shared similar views and enumerated how their impairment kept them grounded in becoming lawyers, teachers or bankers. For participants who did not follow an education ladder, their impairment also enabled them to discover and concentrate on their sporting or artistic abilities, resulting in the composition of songs and participation in international disability sports competitions that have seen them travel worldwide.

Inasmuch as participants' impairment helped redirect their life path, many participants in the group also highlighted the enjoyment of various educational scholarship schemes from benevolent organisations and individuals. These were enjoyed at various levels of their education, from primary to university. For those at the tertiary level, the enjoyment of student's bursary from the state also reduced the financial stress of being in school with disability (Government of Ghana, 2019). In addition, the University of Ghana and other public universities were known to offer dedicated services like accommodation for persons with disability throughout

their undergraduate programmes on campus. For the general population, such accommodation policy was only made available in their first year of university life.

While helping to alter the course of participants life, another observed advantage was the enjoyment of the District Assembly Disability Fund (DADF). Though DADF represents only Three percent of budgetary allocation to each District Assembly (Edusei et al., 2015), participants who engaged in trade and the unemployed revealed how this fund helped to meet some daily life expenses though the disbursement does not come on schedule (Adamtey et al., 2018). One financial support that sparked controversy among respondents was the receipt of gifts and donations from the general public. While some participants (usually the unemployed) saw nothing wrong with this act or gesture and even considered it as their source of blessing, luck or God's way of meeting their needs, most well educated disabled persons did not agree to such assertion since these donations were considered as an act of charity and not a real advantage or privilege that was due them.

The final perceived advantage that was mentioned by participants was the exposure or opportunity to meet high profile political and business personalities. This was revealed in participants attendance to state and international functions that border on disability and vulnerability issues. At one time, some participants boasted about their personal interaction with both present and immediate past presidents of Ghana as well as their expectations of meeting such people again since the 2020 general elections was scheduled to be held in December. Other high-profile dignitaries mentioned include Ambassadors, High Commissioners, Heads of state

from other countries as well representatives from other world and regional bodies like the United Nations, UNICEF and World Bank. For some participants, the opportunity of meeting such personalities further boosted their confidence, rekindled their sense of self-worth and even opened career opportunities for them. To further shed light on how their impairment has been of a blessing, the following statements were made by a couple of them:

As I am talking to you now, I have enjoyed a lot of opportunities and met big people. I know more than Ghana and have patrolled almost all the countries in Africa. Beyond that, I have been to the US, France, Italy, Spain, Australia and the rest. My father has 10 children but among them, I am the well-travelled. So, I am enjoying my disability. [48-year-old male physically impaired basketball coach]

I had a quiet and lonely life and only went to my work aside from being at home. Now, I am able to engage in many disability games including basketball and even go out to events. Am sure many abled persons will not even have the opportunity to attend the calibre of programmes and also meet the kind of dignitaries I have. I look at myself and thank God for such opportunities. I have met the president and other ministers of state at functions and this just happened last year. Attendance to this programme

was only by invitation and I got invited. [33-year-old unemployed physically impaired female]

Perceived Disadvantages of Impairment

Having explored advantages of living with an impairment, participants were more vocal on their perceived disadvantages associated with their impairment. At one point, some expressed their wish of living without any impairment. They felt society's connotation and structures have heightened the barrier in accepting PWDs and creating a system that easily reflects their needs. Some of the disadvantages associated with living with an impairment in Accra were indicated as follows:

First of all, in our African perspective, the first impression someone has about you as a person with disability is pettiness. They will tell you that you look pitiful and you are worse off. As a matter of fact, personally, this has weakened a lot of persons with disability who could have stood out there and challenged society to rise to its status or maybe cause a difference in society. [21-year-old male visually impaired student]

My mates in school have all progressed in life; getting married and even owning their business but my disability has made it difficult for me to attain such feat. As we speak, my mum still takes care of me. I am sure I would have been able to reach where they have gotten to if not for my disability. I am sure I would have been

able to provide for myself and not depend on my mother. Now, I can't provide for myself and look up to my mother. [38-year-old unemployed physically challenged female]

I can remember a while back. After my father passed, there was a gentleman who wanted to take care of me and marry me in the long run. He wanted me to go to school and afterwards learn a trade but his people wouldn't accept me due to my disability. So, he had to stop seeing me and went to look for someone else to marry and he also stopped caring for me. That experience really left me miserable. [33-year-old unemployed physically challenged female].

The first narrative highlights society's poor knowledge on the capability and contributions of PWDs to society. This posture can be traced to socio-cultural factors that consider impairment as a curse or indication of one's inability to perform an expected function. According to Adam (2013) and Eseta (2017), such ideas render PWDs as targets for charity as seen in local and international fundraising appeals. This creates the notion that PWDs are to be seen and cared for rather than encouraged to exhibit their potentials. In some cases, participants even expressed their thoughts on how doctors, bank staff and other service providers have sought their views or permission through family members or friends. This includes asking family members for participant's personal information for bank transactions or asking family members to describe participant's health conditions even though

participants were capable of doing so by themselves. In other cases, participants described how family members did not engage them when discussing issues relating to their personal welfare.

A heightened level of such notions is also reflected in cases where members of the society likened disability to social deviancy, indeed like outcasts. From participants, such notions are seen in people's reluctance to make bodily contact or personally engage PWDs in any other activity. Participants shared experiences of how the fear of contracting an impairment had made them unattractive to transport operators, hospital staff, teachers and even some family members.

Another way through which the wrongful notion of disability had affected PWDs' life was through marriage, kingship and relationships. Whether a potential bride or groom, family opposition had halted PWDs' plans of seeking affection from the general population since most people consider PWD as ineligible to represent a family or incapable of discharging any meaningful family duties. Though this cuts across both sexes, the male participants in the study were able to overcome such family opposition to marry their prospective spouses but the females in this study did not have that privilege. To a female participant, the stanch disapproval from the male's family is usually so severe that it pushes the prospective male suitors to find other potential ladies who do not have an impairment. This assertion is in line with the World Health Organisation's (2011b) position on how gender and disability influence women's chance of marriage and other opportunities. To the WHO, the combined effect of being a woman and having a disability paint an impression of

one's inability to undertake house chores, give birth and manage a home hence women's difficulty in finding a marriage partner among the general population.

Participants further shared their frustrations on how their impairment has stagnated their growth and progress when compared to their peers and age cohorts. Popular among participants with little or no formal education, their disadvantage in this regard can be seen in two main ways. Firstly, family preference to educate other members without disability seems to be a sound investment due to the ill conception of the capabilities of persons with disability. Additionally, poor design of the educational facilities and the incompatibility of educational resources to PWDs need make it difficult for most of them to enjoy inclusive education. Even for those who were able to enjoy some level of education, ridiculing, bullying and fear of contracting disability among other students further affected participants' ability to enjoy school hence the decision to quit schooling. Also, participants who sought to attain a higher level of education, revealed how their impairment was used as a basis to discourage them from enrolling for some programmes. For instance, participants had to settle for humanities and art-based programmes since Ghana's educational system makes it difficult for them to enrol on science and mathematics programmes. This situation implies that participants had to sacrifice their hopes of establishing careers in science-based programmes and settle for careers in the humanities. In some cases, participants shared views on how the non-performance of previously admitted PWDs in some educational institutions was used as a basis to discourage them from reading law and other specialised programmes.

Aside from access to education, the difficulty in attaining job opportunities was also a dominant challenge. The underlining factor here was the perceived inability of PWDs to execute assigned tasks in their respective workplaces. Among participants who had attained tertiary education, concerns raised in this regard related to employers' discomfort in hiring them since it seemed expensive to do so. These expenses may arise from the need to make physical modifications to the current workspace, the cost of acquiring special gadgets as well as the extra cost in training PWDs to fit into an organisation. At one point, a participant shared his view on how he was not offered a job even though he had indications of his outstanding performance during an interview session.

For participants with little or no formal education, the search for employment opportunities was mostly unsuccessful since their options in the job market was quite limited. Though some participants claimed to have acquired vocational and technical training, the absence of capital to establish their own trade or business kept them out of work. Even when a participant made efforts to seek a loan facility, the loan application was declined though he/she had met all criteria established by the microfinance company. In the case of one participant, the decision to decline a loan request was made known after he had gone to the bank to complete his loan application process. To him, the basis of the decision was simply on his disability since the bank staff deemed him incapable of settling the loan. Surprisingly, other colleagues in his line of business were granted the loan. On the other hand, for participants who sought apprenticeship, entry requirement and basic tools needed were out of their reach leaving them unemployed. Even for those who

could gain such apprenticeship, some of these opportunities did not come with salaries or regular incomes, making it difficult for them to meet their daily life needs.

Chapter Summary

This section presented an overview of the general living conditions of persons with disability in Accra. It started by outlining participants' socio-demographic characteristics and examining their definition of disability. The findings reveal that the inadequacy of Ghanaian languages in defining disability has contributed to the use of generic words like '*yarefour*' which loosely translates to sick people. However, PWDs refused the claim that living with a disability makes them sick since their disability does not cause any discomfort or bodily pain. Participants enumerated various causes of disability which ranged from medical errors or conditions to accidents although some could not easily verify the cause of their disability.

While participants claimed to be different from the general population when it comes to the difference in appearance, they were fast to also indicate the lack of differences when it comes to fulfilling activities or life goals. However, participants revealed some advantages associated with their disability though the disadvantages seemed to be more.

CHAPTER SIX

PWD USAGE OF PUBLIC TRANSPORT

Introduction

This chapter explores PWDs' lived experiences in using trotro services in Accra. The discussions begin with a review of their mode choice and emphasises their interactions with trotro operators as well as the usage of disability-friendly facilities like priority seats, designated spaces, travel concessions and assistive technology. Extant literature on travel mode for vulnerable populations cites these facilities as crucial for continuous use of transport services. In all these, trotro services in Accra will be the subject for critical interrogation. The information here offers a suitable platform to ascertain the status of Ghana's disability population in planning, designing and using trotro services.

Mode Choice

An increasing rate of development in cities and changes in people's lifestyle have made it difficult for most urban dwellers to live and work or school in the same location as compared to many rural settings (Obeng-Odoom, 2010; Sietchiping et al., 2012). As a result, the choice of a transport mode in connecting people to life-enhancing opportunities become essential in ascertaining the quality of life among different travelling population. Unfortunately, this study gives little room to explore different transport modes since the selection criteria for participants hinged on their use of trotro services. However, key issues worth discussing would still include the factors influencing participants' choice of trotro services amid many options. When

asked why they prefer to travel by trotro services, the following were some remarks that were gathered:

The cost of travel for trotro is cheaper and better for my pocket. I can use the difference to attain other things that are of importance to me [34-year-old unemployed female wheelchair user].

I would still go by trotro. This is because I heard that disabled people are the prime target for most ritualists and kidnapping. I don't know what will happen to me when I sit in a taxi and for that matter, I would think of my safety and rather opt for trotro. [41-year-old unemployed physically challenged female]

Sometimes it is really fun to be in a trotro, you get to hear things that can make you laugh since there may be arguments, misunderstandings and other interesting events. The insults and laughter among passengers make it fun to be in a trotro. In such a case, being in a trotro really makes your day. [26-year-old female visually impaired administrator]

To participants, the relatively cheaper cost of engaging trotro services was found to be the prime reason that attracted them to use this service and this revelation does not come as a surprise since Ghana's disability population has been

identified to be well represented in the poverty bracket (Ghana Statistical Service, 2014d). While the factors that influence the choice of a transport mode differs in context, participants' decision to settle on cost as the main determinant may also translate to a sacrifice of other factors like their comfort and convenience as indicated by Adom-Asamoah et al (2015). In perusing the data, this decision was seen to be popular among the unemployed participants and those with little or no formal education. When asked to rate their frequency of engaging trotro services, participants cited 80 to 90 per cent since trotro services were their only transport option except in cases where they travelled in groups for religious or other functions or were given lifts or running late for an appointment. Additionally, Yobo (2013) purports that higher fees charged for other transport options like taxis and the absence of travel concessions for the vulnerable populations further increases their dependency on publicly shared buses like trotro. On the other hand, the economically active participants rated their frequency of using trotro services at 70 to 80 per cent and this usually exclude weekends and some occasions where trotro services were either unavailable or when access becomes a challenge. Here, participants resort to other transport options like taxis or ordered Uber.

Another variable that informed participants choice for trotro service was the sense of community and social engagement that comes with being in a trotro. The environment in a trotro offers the opportunity to witness the daily living situations of the low and middle-income class which would otherwise be eluded in other modes of transport such as taxi or e-hailing services like Uber. Just as Amoako-Sakyi (2017) cited in her study on school children walkability in Cape Coast, the

communal atmosphere in group trips also fuels interactions since trip makers are free to pick on issues that meet their interest. For participants, these issues may range from a driver or conductor's attitude, sermons from preachers on the bus as well as arguments on politics, sports and other social issues. Additionally, participants revealed that, the display of thoughts on such subjects exposed them to unfamiliar reality of life and even opened avenues to expand their social network through new friends and acquaintances. Inasmuch as Johansson et al. (2017) and other transport experts have unanimously identified the holistic benefits of transport services in improving one's quality of life, the literature on such benefits has shown very little interest in the evaluation of the social benefits that accrue from the use of transport services. In the views of Stjernborg & Mattisson (2016) and Litman (2019), such disinterest stems from researchers inability to objectively quantify social indicators related to emotions and feelings though they both agree that social benefits accrued may even outweigh economic and other objectively measured indicators.

The final variable that informed participants mode choice was the perceived sense of personal safety or security that comes with trotro services. Participants safety concerns emanated from reported cases of robbery and/or ritual killings of some factions of the disability community namely persons with albinism and mentally retarded. As observed by Bayat (2015), these killings are usually motivated by the belief in the potency of PWDs' body part in the preparation of potions believed to bring good fortunes and wealth to people. Indeed, very little has been heard on the kidnapping and ritual murder of the visually and physically

impaired in Ghana but participants still expressed their fear of being victims of such crimes which might extend to armed robbery. It was therefore in this regard that trotro services were found to be the safest intra-city transport mode since the presence of other passengers offered a safe net and reduced the likelihood of being kidnapped or robbed.

Support Services for PWDs at Transport Terminals

Transport support services refer to a range of facilities offered to reduce the effort and time required to engage a particular travel mode. The World Bank (2015) sees these facilities as promoting inclusiveness in the transport arena and also bridging the gap in usage for the disability population since most services in developing countries are traditionally inclined to facilitate the movement of the general population who do not have a disability. While such services may include physical facilities like a ramp, dedicated or priority seats and assistive technology, other support services may also be intangible such as a friendly reception accorded to PWDs at terminals, concessionary services or legislative instrument that purports to ensure the enjoyment of rights ascribed to the disability community. The following sub-sections will review participants' experience with regards to the use of support services at various terminals in Accra. The choice of variables in these sections was informed by the United Nations Review of International Best Practice in Accessible Public Transportation for Persons with Disabilities (Mitchell & Rickert, 2010) as well as section 23 to 30 of Ghana's Disability Act (Government of Ghana, 2006).

Access to Information and Identifying the Right Bus

For most participants, the use of transport terminals as the first reference point for trips appeared to be an ideal thought since they perceived transport terminals to offer some level of security especially when it comes to tracing missing items as well as seeking redress from transport operators who misconduct themselves in their line of duty. Geurs & van Wee (2004) and Kadir & Jamaludin (2013) argue that a key component of the seven principles of Universal Designs is the need to ensure the independence of all travellers when it comes to making transport decision. In such a case, a critical factor that influences the independence of participants is their access to information with regards to the location of the right vehicle, time of movement and changes in the fare system. This issue was deemed critical among the visually impaired group though the physically challenged also expressed their concerns about relying on the general population to find the right vehicles to join. When asked how they identify the right vehicles to join, the following were some participants' responses:

At Madina station, the first trotros lined up are going to Accra, the ones following are going to Botwe and other places. When you are fortunate, you will hear them (the mates) calling out the places. So, you follow (the voice) and ask him (the mate) where exactly the car is located. Here, the mate will hold your hand and take you there. [35-year-old male visually impaired radio presenter]

In most cases, you hear shouts from the mates and these are usually an indication of the vehicle that is loading at the station. It is from here I get to identify the right vehicle to join. Sometimes, when I get to the station, I am quizzed by some mates and drivers on where I am going and once I mention my destination, they offer the right direction to the bus heading to my destination. Though some people do this, I think only Two out of Five drivers and mates do such things. [32-year-old unemployed male wheelchair user]

The aforementioned remarks highlight the visually impaired dependence on transport operators as a sure way of finding the right vehicles to join. Though Frye (2013) indicates the use of knowledge from previous trips in identifying the right vehicles, this approach was deemed inadequate for visually impaired participants since the design of the terminal and haphazard arrangement of vehicles makes it difficult to assign a dedicated loading bay for each destination as seen in Figure 8 and Figure 9. In the face of the absence of any information portal or any assistive technology, the primary indicator in locating the right vehicle is the reliance on callout or shouts from various conductors. Unfortunately, this approach was identified by the study to pose some level of confusion for the visually impaired who travelled alone since the proximity of different conductors made it difficult for participants to hear and follow in the direction of the right vehicle.



Figure 8: Kaneshie Lorry Station

Source: Odame, 2020



Figure 9: Kwame Nkrumah Lorry Station

Source: Odame, 2020

Of course, knowing the location of the moving vehicle was not sufficient to ensure entry and for the visually impaired who sometimes travelled alone, the most

preferred option in reaching their intended bus was to seek the support of bystanders, hawkers, drivers, conductors and bookmen. When asked if the aforementioned human aids also initiate efforts to offer such wayfinding services, One in Seven visually impaired responded in the affirmative but could not tell the designation of the people who offer such assistance. On the other hand, some visually impaired who came to the terminals with known aids like family and friends cited their decision to avoid engaging strangers or soliciting for wrong responses as prime reasons why they preferred to rely on such known people.

Unfortunately, the case of wheelchair users was different since their quest to seek assistance in locating the right vehicle was sometimes interpreted as an attempt to ask for alms or beg for money. Even when wheelchair users were given audience, participants revealed that the strenuous effort required in pushing the wheelchair also made them unattractive to conductors who preferred to channel their efforts into looking for passengers to fill their vehicles. To the wheelchair users, this misconception created the impression of considering them as burdensome since the general population was not subjected to such treatment if they tried to seek direction and information. The study found participants' remarks to confirm observations by Munyi (2012) and Nyame & Hague (2013) on how society's position in equating disability to burden culminates in poor services and treatment meted out to PWDs. It must be noted that most participants with higher education level did not cite such ill-treatment and attributed this to their conscious effort to look and dress smartly anytime they go out. The need to dress to look smart

further confirmed Sawadsri (2010) position on how bias social standard induces ‘misfits’ like PWDs to assume different personalities if they wish to be accepted.

Queues at Terminals

While enroute to the terminal, another support service that ensures PWDs’ access to various life-enhancing opportunities is their exemption from joining queues and getting other preferential services (Taylor, 2019). Earlier discussions with participants revealed that such exemptions were easily enjoyed in facilities like banks and embassies, but transport terminals seemed quite different. For the selected terminals, queues were an everyday phenomenon especially during peak times. When asked if participants joined queues at various terminals, the following remarks were made:

I join queues because on days I try to skip, there are some ‘hard’ people, they will tell you we are all human beings and they don’t see you to be somebody they should feel for. Others will tell you all these especially if the bookmen are not there. Your fellow passengers will be standing there but will not allow you to skip the queue at all. [51-year-old male visually impaired craftsman]

Like when you go and meet a long queue, you can’t skip because you are visually impaired. You know, with all fairness, this idea of first come, first served, really makes human beings feel better about themselves. So, you don’t come and because

you are a visually impaired, you jump the queue and just go, leaving those who have been standing there for ages. I mean, it makes it feel like you are better than them. [24-year-old male visually impaired National Service person]

The able persons want to join the bus since they were there before I got to the station. The only time I get to skip the queues is during the general election and even when I get to the polling station late, the officials will make room for me to cast my vote and skip the queue. This does not happen when I join the trotro station. There are rare cases where I get some drivers who come to my rescue but most of them are always in a hurry and do not have the time for me. [38-year-old unemployed female wheelchair user]

Remarks from participants indicate that queuing for trotro vehicles formed part of their daily living experience though some participants expressed their wish to be exempted from queuing. While commonly observed at banks and other state agencies like the Electoral Commission, reasons for queuing at various terminals include participants conviction on how their exemption reinforces the negative connotation of PWDs' as a special group that needs pitied as highlighted in the medical model of disability. This view was found not to be unique to participants only since Grey-Thompson (2005) reveals a similar assertion among PWDs' in the UK and how their exemptions distort PWDs' drive to enjoy equal treatment and

protection of their rights. From the data, this position was found to be common among participants with a higher level of education who did not see their impairment as a reason to be excused from joining queues. Just like their counterparts in the UK, these participants also raised concerns on how the call for an exemption would hamper their crusade for equal rights and recognition since they perceived themselves capable of queuing especially when there is no emergency.

Additionally, participants claimed that their decision to join queues was borne out of the fear of distorting peoples' movement since such exemption may affect other passengers' punctuality to events and cause these passengers to miss opportunities or appointments. In their defence, the visually impaired claimed to be comfortable joining queues and called for such exemption for persons with severe disability like sclerosis. In perusing research articles and policy documents on public transport services in Ghana, no mention of queuing or any exemptions of that sort was cited for PWDs despite being a signatory to the United Nations Convention on the right of persons with disability. Also, Hotor (2016) indicates that the absence of a clear agenda on queuing at various terminals leaves passengers to the discretion of transport operators which further pushes PWDs down the power ladder.

The second factor that induced queuing for participants was the attitude of other passengers even when such support services were offered by transport operators. This narrative was quite common among female participants and those with little or no education who looked forward to such services. In participants'

hope to skip queues, transport operators who had a long-standing relationship with participants were identified as the primary avenue through which such exemptions were obtained. However, during peak periods where queues became obvious, other passengers were found not to comply with transport operators' directives especially when they doubted the disability status of a person or when they considered PWDs' exemptions to be needless. While conducting the interview, participants shared their experiences of how other passengers resorted to insults and the use of physical force to obstruct them from skipping queues. In such cases, participants whose disabilities were doubted resorted to joining the queues since this would avoid any further embarrassment arising from any attempts to prove their disability. Unlike participants' narratives, Taylor (2019) cites the issuance of 'Blue Badges' in the UK as an approach to easily earmark PWDs for such preferred services. Perhaps, the absence of a similar approach in Ghana is what has worsened the challenges of participants with mild or less observable disability leading to the recorded cases of insults and heckling.

Boarding Platform

On getting to the right vehicle, the conditions of the vehicles in many developing countries have also been identified to be critical in limiting PWDs' ability to join public transport (Frye, 2013; Mitchell & Rickert, 2010). Primary among these conditions is the floor height of the vehicle. The floor height is the vertical distance from the ground on which the vehicle stands to the first level of entry into the bus. While Mitchell & Rickert recommends a minimum floor height of about 250 millimetres for PWDs', observed height among vehicles ranged from 320 to 520

millimetres with Toyota ‘Fish’ Haice, Nissan Urvan, Hyundai Grace and the Mercedes Benz Sprinter 207 being the commonly used buses for trotro services in Accra (Figure 10).



Figure 10: Toyota Hiace (A) and Mercedes Benz 207 Sprinter (B).

Source: Odame, 2020

Just as the dimension of the floor height seemed to have breached recommended standards, Frye (2013) reports that pothole laden roads and other poor road conditions induce drivers preference for such high-floor vehicles since this would reduce the frequency of repair and cost of operation. In spite of the high floor vehicles, visually impaired participants did not consider this as a challenge given their years of experience of using such vehicles. This remark also confirms Odame's (2017) observation that visually impaired students in the University of Cape Coast rely on their experience in using campus shuttles with high floor heights. Aside from the use of experience, they also pointed out to the ease with which the use of the white cane or an aid facilitates their seamless entry into the trotro buses. Though the visually impaired participants seemed to have no challenge with the height of the vehicles, the physically challenged had a different story.

When asked how they find their way into the vehicles, the following responses were made:

I have one problem with the Benz buses. Yes, if I'm in the wheelchair and I want to climb, I have to get down and crawl on it. The wheelchair cannot go inside and the step leading into the car is also another issue for me since I have to crawl on it with my neat dress. This will not even encourage you to even pick a trotro because I will leave my wheelchair behind and crawl. [45-year-old male wheelchair user, Teacher]

Sometimes the height is too much so while climbing, you have to put in too much energy and if the energy is not up to the limit or the level you want, then wahala! Especially the 207 buses are too high. So, when you are coming, you have to climb from the ground and struggle to enter the car. [26-year-old physically impaired unemployed male].

I sit in the wheelchair and propel myself into the car. I hardly get assistance in getting into the car and don't even like that. I even feel shy when people lift me into the car. It creates a lot of attention and I prefer to get into the car by myself. I may not get people to assist me at all times and would be better if I learn to

get things done by myself. [35-year-old unemployed male wheelchair user]

For the physically challenged and wheelchair users in particular, the absence of a ramp in boarding these vehicles compel participants to resort to the use of crude techniques like propelling or crawling from the ground into the vehicles. Although crawling seemed to be a primary tool for users of the Mercedes Benz 207 Sprinter buses, issues raised by participants centred on the tendency of soiling their dress with dirt since the first level of entry and the floor of most trotro buses are always dirty. In some cases, participants resorted to commonly shared taxis when they wear their best clothes or have to attend important occasions though they also complained of the higher cost associated with these other means of transport. Regarding high floor buses and the absence of ramps, Zhou et al. (2012) calls on transport owners to resort to the use of simple tools like wooden ramps or pallets since these may also be of use to other travelling population like pregnant women, children and the aged. Frye (2013), also recounts how local transport operators have disregarded this recommendation since they consider it as an extra cost to their operations.

As a way of reducing the stress in joining trotro services, participants cited some strategies adopted by trotro operators in facilitating their entry into the bus. Unfortunately, these strategies take the form of physically lifting participants into buses which participants branded as embarrassing and dehumanizing. To participants, the public display and unnecessary attention that accompanies such assistance create a feeling of shyness and even perpetuate the negative stereotyping of PWDs as a group that is deemed to be incapable of undertaking simple activities

like boarding buses. Such embarrassing moments have also been identified by Nyaupane & Andereck (2008) to demoralise self-confidence and even make it difficult for PWDs to enjoy public services.

During the interview, an elderly female wheelchair user who seemed to have gained considerable weight shared her frustrations on how the combined effect of the absence of ramps and her weight made her unattractive to transport operators due to her constant request for assistance in getting into or disembarking from trotro buses. The alternative is to reduce her dependency on trotro to avoid the embarrassment of being lifted onto a bus, which could translate to more expensive travel options.

Priority Seats and Designated Spaces

The role of public transport services in meeting the needs of the low and middle-income earners cannot be overestimated but for persons with disability, access to public transport is deemed more crucial due to limitations in the ownership of private cars as well as higher costs associated with other transport options like Uber and Taxis (Stjernborg, 2019). In ensuring easy access, Luiu et al. (2018) and Mitchell & Rickert (2010) have identified the need to offer dedicated services like priority seats for the visually impaired, pregnant women and the aged. Additionally, both authors called for the provision of dedicated or exclusive spots for wheelchair users since this would allow them to join public transport while seated in the wheelchair. To ascertain their enjoyment of such facilities on trotro services, participants were first asked to identify where they sit when they join trotro buses and the following are some of the responses gathered:

Anywhere! Where there is an available seat, I sit there. But it's good you don't sit at a place where they will be asking you to get down and so forth. So, I mostly prefer the seat behind the driver. You are safe there and won't be asked to get up and down. [34-year-old visually impaired male craftsman].

I sit in front, just by the driver but when the front seats are occupied, I just move to other seats. This could be at the back or any other seats in the car. Usually, if I am not in a hurry, I wait for the next car hoping to get the front seat. [32-year-old female wheelchair user, Tailor]

I like the front seat which is closer to the driver. If I don't get that seat, I will have to go further into the bus and those are uncomfortable moments. What makes it discomfoting is having to alight or adjust myself anytime someone behind me wants to alight. [30-year-old physically challenged male Toll collector]

The responses from participants indicate the absence of a prescribed seating area for both the wheelchair user and the visually impaired though participants identified their preferred seating area. Preferred seating positions include the seat directly behind or adjacent the drivers' seat. The choice of these seats was informed by the fact that, these preferred seats spared participants the trouble of intermittently

alighting anytime other passengers had to alight or board the bus. Additionally, Wong et al., (2018) and Wong et al., (2017) indicate that the provision of priority seats facilitates communication between transport operators and PWDs as well as reduce the time and effort required to join or alight. In this regard, the absence of these dedicated services further increased PWDs dependence on other travellers which was also a direct contradiction of the principles of Universal Design as postulated by Geurs & van Wee (2004).

Though participants expressed their desire to avoid the discomfort associated with being on other seats, the 'first come first served' approach at various terminals made it difficult to escape this reality. The only time participants were sure of getting their preferred seats was when they arrived early at the station. At one time, a participant narrated how this desire to get the front seat induced him to get to the station as early as 4:00 AM since such preferred seats might not be available during 6:00 AM peak time. While not in a hurry, other participants also indicated their decision to skip vehicles until they found an available seat of their choice on a bus.

Another identified method of getting participants preferred seats was the reliance on the discretion or goodwill of transport operators and bookmen but these were seldomly experienced except for participants who had long-standing relationships with specific transport operators. While some transport operators were seen to offer such discretionary support, participants also cited other passengers' desire to occupy such seats as a prime factor that hindered transport operators' intention to offer such preferential treatment. To participants, the relatively

comfortable and ideal position of these seats also made them targets for other passengers who wished to escape the trouble of alighting intermittently for others to join or alight. Even though some passengers occupy the front seats without any knowledge of a visually or physically impaired on board, participants cited some passengers' outright refusal when asked to vacate their seat for PWDs on board. On the other hand, joining trotro at the bus stop presented the biggest challenge in getting a preferred seat since the combined effect of the drivers' hastiness and passengers' insistence on retaining the front seat gave little hope in getting such preferred seats.

The absence of priority seats was found to be contradictory to the dictates of Ghana's Disability Act which categorically enjoins transport operators to reserve two seats for PWDs at all times (Government of Ghana, 2006). These two seats are only permitted to be given to the general population if no PWD boards the bus before leaving the station. Also, the case of designated space for wheelchair users was not realised since the height of the ceiling and internal dimensions of the Mercedes Benz 207 Sprinter, Toyota Fish, Nissan Urvan, Hyundai Grace and other commonly used vehicles made it impossible for such designated spaces to be created for wheelchair users (Odame, 2017). In this regard, wheelchair users, persons with crutches and other assistive mobility aids had no option than to resort to the seating space available to the general travelling population. Fortunately, no wheelchair user made claims of paying a fee when their wheelchair was placed in the trunk of trotros.

Fares and Travel Concessions

Just like other developing countries, demand for trotro services in Ghana is strictly based on commuters ability to pay for the service (Hotor, 2016). While PWDs' have been identified to be well represented in Ghana's poverty bracket (Ghana Statistical Service, 2012a), the emphasis on the ability to pay has been identified as a key factor that influences vulnerable peoples' travel options and contributes to their social exclusion since limited transport options translate into limited ability to engage in various life-enhancing opportunities (Lucas, 2011, 2012). It is in this regard that travel concessions have been identified as a crucial tool in reducing the financial burden associated with vulnerable commuter populations. Even though practised in different formats across different jurisdictions, the practice of concession provision is an indication of policymakers' and transport operators attempt in meeting the travel needs of PWDs hence the decision to analyse the situation in relation to the provision of trotro services in Accra.

When asked whether participants pay the same fare as other passengers, the responses from all 50 participants were in the affirmative and included the following:

I pay the full fare and don't get any exemptions. [24-year-old male visually impaired, National Service Person]

I always pay in full. I don't get a reduction and the drivers never offer me free ridership. Since I started joining trotro, no

driver or mate has offered me free ridership. Rather, other passengers on board have paid my fare for me before. I am always charged the same fare as other abled persons. [26-year-old unemployed male wheelchair user]

I pay exactly what others pay. Even if I don't have the exact same fare, I have to beg the mate for leniency before I join the bus. Sometimes too, some drivers instruct their mates to exempt me from paying the fare. [32-year-old female wheelchair user, Seamstress]

Indications from all 50 participants revealed the total absence of any travel concession and their subsequent full payment of approved lorry fare. Whereas the literature on the travel concessions in Ghana cites the enjoyment of free ridership for school children when they join the Metro Mass Transit (MMT) in their uniform (Yobo, 2013), there are no known records of such extension to other vulnerable groups who join privately operated public transport services. In the case of GPRTU where trotro services thrive, concessionary services were seen to be based on the discretion of transport operators since there are no known regulations that compel transport operators to do so. To participants, such concessions might manifest in their request for leniency when PWDs could not afford the full fare. These requests for leniency are usually made before the trip commences. This is based on participants' previous experiences where some transport operators have forcefully removed passengers who joined their vehicles without having the required fare.

Even though no participant in the study expressed worry over the payment of lorry fare, the motion to support a call for their exemption in the payment of fare was met with mixed response.

For participants who seemed to have a higher level of education, the call for a reduction or enjoyment of free ridership was deemed unnecessary since this act would make them unattractive to trotro drivers whose business operations are profit oriented. With a profit-oriented motive, any attempt that threatens a transport operator's income is likely to be contested since the purchase of fuel and payment of other statutory charges like income and vehicle tax are found to be independent of such travel concessions. Additionally, participants with international travel history shared their experiences on how they enjoyed such free or reduced services when they visited the US or UK but were also quick to add that these services were offered by the state and not private operators as in the case of Ghana. This confirms Kett et al., (2020) assertion on how European governments in countries like Sweden and Norway have used such concessionary services as a welfare package to broaden travel options among the vulnerable populations. In Ghana, the dominance of the GPRTU in the delivery of transport services makes it difficult to undertake such measures especially in times where Ghana has no database for all PWDs as well as government' inability to provide severance package due to competing financial commitments from different sectors of the economy.

Another factor that informed participants' refusal to support the call for free ridership or a reduction in transport fare was hinged on the desire to change the stereotype or impression of seeing PWDs as a needy group. Participants were of the

view that the fight for equal rights may be significantly hampered if the disability community in Ghana was seen to support persistent calls for exemptions. While making a case, participants also revealed that the cost of most intra-city movements in Accra was affordable (as low as 1.5 Cedis) and also considered this to be within the budget of most members of the disability community since some PWDs had jobs while others enjoyed financial support from the Livelihood Empowerment Against Poverty (LEAP) and District Assembly Disability Fund (DADF) (Sackey, 2019). In view of the aforementioned, participants rather called for empowerment programmes and opportunity avenues that could propel them to break all negative stereotypes or connotation of disability.

Having stated the position of the participants who seemed to have higher educational levels, other participants with lower educational levels and the unemployed expressed their excitement on how the implementation of such concessions would expand their travel options. However, some expressed concerns about the feasibility of this provision since some trotro drivers did not like to pick them up by the street even if participants had money to pay for their services. To such participants, the surest way to achieve this service was to enact strict laws that would compel trotro operators to comply with this directive. When asked how travel concessions would benefit participants, the issues raised included savings that could be channelled into meeting other life needs as well as the general increase in travel options for PWDs to enjoy various life-enhancing opportunities.

Wayfinding Aids on Public Transport

As indicated earlier, the principle of independence in the usage of transport facilities does not only lie with identifying the right vehicle but making travel decisions while the vehicle is enroute. For PWDs such independence may be exhibited through the provision of wayfinding devices on buses as well as the presence of assistive technology that allowed PWDs to relay their travel decisions to transport operators without having to depend on fellow passengers for assistance. Though these issues were pertinent to all, wayfinding aids were found to be more crucial to the visually impaired since other disability types had the sight to easily identify their locations. As a measure of the presence of such facilities, the study enquired about how participants ascertain their locations while journeying from one point to the other. The following are some of the responses:

I just know where I have gotten to based on the call out from the mates. Some mates, when approaching 37, they call out 37 as the next destination and so if there are people on board who want to alight, they inform the mate and it is through this (avenue) that I get to know where I have gotten to. [25-year-old visually impaired male, National Service Person]

I've been on this road since 1992, so as I go on the street every day, I know where I am since I am observant. You don't just sit in like that otherwise one day they will take you to a place you don't know. So, if I sit in the vehicle, I always make sure I

observe the curves, the roughness of the road, the overheads, the sloping and even the speed rumps. Sometimes I count the speed rumps. [51-year-old male visually impaired local craftsman]

Sometimes I use Google Maps but this is not all the time. I can even say that it is less than Five per cent of the time. I really want to use it, but network challenges become the biggest hindrance in using Google Maps. The internet works whenever it wants to work and so that one is not reliable. I just depend on the mate. [28-year-old male visually impaired Civil servant]

While focusing on the assertion of only the visually impaired, the leading tool employed in ascertaining participants location was their reliance on call out from conductors or mates. This approach is not new since Frye (2013) identifies the use of such method in other African countries like Uganda and Tanzania. To participants, the frequency of call out was higher if the moving bus had many vacant seats since this was also a strategy to get prospective passengers to fill such vacant seats. On the other hand, call outs from conductors were seldomly heard if the moving vehicle was full though doing this would have aided strangers and other passengers who were not familiar with the route.

While the use of call out seemed to be a normal routine in the operations of trotro, participants identified some potential risk associated with this approach. To some participants, forgetfulness on the part of mates or disruption from their duty

could result in participants missing their destination even though they could have already informed conductors of their intended destinations. This situation has also been confirmed by Odame (2017) to affect travelling decisions of impaired students since their reliance on campus shuttle drivers ended up with them alighting at wrong destinations. To ensure compliance with their travel needs, participants resorted to issuing constant reminders since this reduced the tendency of forgetfulness on the part of the conductors. The World Bank (2016) and Wu et al. (2018) indicates, that wayfinding aids come in various levels of sophistication and prices. Indeed, a preliminary interview session with trotro operators in the study area revealed their reluctance to adopt these tools since they considered them to increase the cost of their operations. This is similar to Odame (2017) findings among private shuttle operators in the University of Cape Coast.

Aside participants reliance on conductors, another approach is the reliance on participants lived experiences or local knowledge of the route. This source of knowledge was identified to be crucial in equipping persons with disability to make life choices without reference to the general population. While Corburn (2003) identifies numerous sources of such knowledge, the visually impaired participants cited the use of known landmarks and personal intuition as a key source in ascertaining their location on familiar routes. Some of these landmarks include the presence or number of roundabouts, speed rumps, the slope or roughness of road as well as twist and turns along a route. Aside the known physical structures, participants also claimed to rely on the voices of vendors, unique stench and busy settings of places like the Kwame Nkrumah Circle as indicators of their location.

Despite its usefulness, it also merged that a disruption to one’s attention may impair a person’s ability to make on the spot decisions, hence the need for support services that complement human abilities.

In view of the popularity of the aforementioned approaches, participants with higher educational levels revealed the use of disability-friendly mobile navigation applications such as ‘Google maps’, ‘Lazarillo’ and ‘Be my eyes’ (Figure 11). In specific terms, only 3 in 7 visually impaired participants cited the use of these apps but none of them claimed to use the apps regularly. Reasons attributed to the low use of these mobile apps include the occasional wrong directions given, the unreliable nature of Ghana’s internet connectivity (since all these apps require internet connections), as well as the uncomfortable position of having to concentrate on the phone throughout the trip.

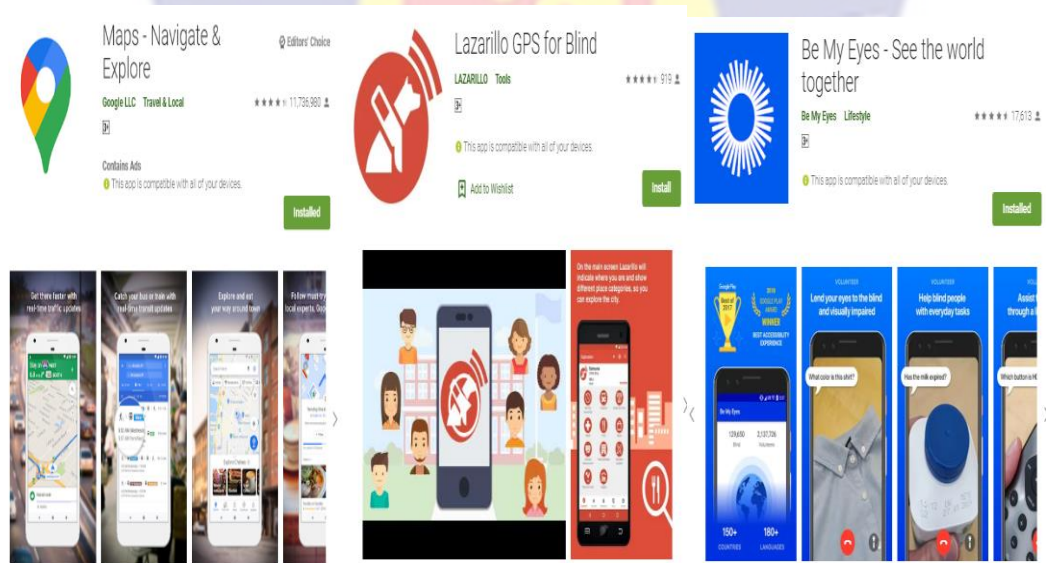


Figure 11: Way finding mobile applications used by visually impaired participants

Source: Google Play Store, 2020

Attitudes of Transport Operators

While physical barriers in the delivery of transport services limit participants' movement, attitudes and postures of the general population including transport operators have been identified to offer a much greater opposition to PWDs' ability to engage any part of the built environment (Etieyibo & Omiegbe, 2016; Michailakis, 2003). This study observed the attitudes of trotro drivers and their conductors and this is because any attempt to provide the best disability-friendly facilities will fail if these two agents are not receptive to travellers with disability. Throughout the interview sessions, participants with disabilities made a lot of remarks about the conduct of conductors since a lot of interaction in most intra-city trips involve the conductors and not drivers. While some participants shared good remarks about the general behaviour of the conductors, others were more vocal about the ill-treatment received from them. It must be noted that some of these conducts were peculiar to specific disability types and for that reason, the study will begin with a review of the visually impaired observations about the attitudes of these conductors:

I think that in the beginning of this month, I was going to Teshie from Accra Central. So, my colleague who led me to the bus stop prompted the mate that I was the one to board. Immediately, the mate said there was no way he would want to have me on board. The mate kept asking how I will manage to find my way home if I alight from his car but I kept assuring him not to worry since I was capable of going home.

Eventually, he agreed but the experience was humiliating. [26-year-old male visually impaired law student]

On the negative side, some would even try to cheat you. If you show them your money and ask them to tell you how much it is, and let's say it is Gh¢10, they will tell you it's Gh¢5. So, at one time, I showed the money to someone around me, the person said it's 10 Cedis (instead of the 5 cedis quoted by the mate). When I alighted at where I was going to, I told the mate that since he wanted to cheat me, I was going to cheat him for him to know that it's not fair to cheat. And so, I refused to pay. [25-year-old visually impaired male National Service Person]

One time I was coming from Madina and I told the mate of where I would alight since any other place will be uncomfortable for me. Unfortunately, the mate did not tell the driver anything and where he feels that I should alight, he told me that that is where I told him I wanted to alight. And so, he dropped me off at the wrong place and gave me the picture that that is where I asked him to alight me. As if it is a joke, immediately I got out of the car, they left. And that is why when I say they are heartless, people don't understand. [36-year-old visually impaired female teacher]

Just as other members of society, Nyangueso (2006) identified staunch cultural beliefs as a principal factor that increases doubt on the ability of PWDs to accomplish tasks that are deemed to be the preserve of the general population. Such beliefs were evident in the conductor's hesitation to allow the visually impaired to join their bus. In most cases, visually impaired participants cited their reliance on family and friends' support in joining trotro by the roadside or at the bus stop but upon entry, the mates were seen to always refer to the aid for the bus fares instead of asking the visually impaired on board. Additionally, the fear of visually impaired participants inability to find their way home after alighting from a bus was seen to contribute to the hesitation of conductors to allow some visually impaired to join their bus even though participants had shown evidence of their ability to pay the full cost of transport. Such acts may be done out of ignorance but the embarrassment and negative connotation that portrays PWDs as always dependent on the abled population further makes it difficult for participants to enjoy trotro services just like other travelling groups. Such situations confirmed Nyangwesio (2018) and Sawadsri's (2010) position on how lower expectations of PWDs' ability in undertaking simple tasks like locating ones' home reinforces the negative stereotype of seeing PWD as 'useless' and dependent on the abled or 'productive' population group.

Even though the aforementioned seemed to be done out of ignorance, participants also cited deliberate attempts of conductors to use their visual impairment as the basis to cheat them in paying more than the required fare or under-declaring the value of a currency note issued to the conductor. While the

fixed fares system at various terminals or lorry stations does not allow mates to charge in excess, Burchardt (2015) cites the possibility of paying in excess when travellers join public transport at bus stops and other undesignated spots. Here, the absence of a standardised price determination system leaves it to the discretion of conductors and this may result in different fares charged for the same distance. To participants, their insistence on not paying unnecessary higher fares resulted in the use of abusive or derogatory words by conductors and in some cases, participants cited the use of their visual impairment as the basis to pass such derogatory comments. Principal among such comments is the generalisation that PWDs are difficult to handle simply because they do not allow the conductors to charge them in excess.

Aside from charging higher fares, participants also cited other deliberate attempts like misquoting the value of a currency note when visually impaired participants sought the conductors' assistance in making payment. For instance, a conductor may lie that a visually impaired person paid with a 5 Cedis note instead of correctly stating the actual higher denomination used in making the payment. To a participant, this tactic was just an attempt by morally bankrupt conductors who had no reservations about cheating their customers. Inasmuch as participants sometimes fell prey to such tactics, some participants also resorted to other passengers for clarification when they were not certain of the conductors' response.

Finally, the belief in seeing the trotro service as the 'office' or place of dominion of transport operators also influenced their negative attitude towards the disability community. This bossy attitude was said to have resulted in missing

participant's destination, especially in the rush hour when competition for passengers was at its peak. Agyemang (2015) has observed that transport operators' decision to miss passengers' destination may not always be intentional since some request from passengers may fall within unauthorised bus stops. When prompted of this possibility, most participants also questioned this explanation since transport operators willingly stop at such 'unauthorised' places for other passengers to join. Further interrogation of the data showed that transport operators decision to miss participants designation was influenced by their quest to outwit other drivers in getting passengers especially during peak times where demand for transport services outweigh supply. Here, the pressure to fill vacant seats also made it difficult for conductors to offer the needed support when visually impaired users were joining or alighting. This reflected in the way conductors compelled participants to hurriedly join their vehicles as well as the haste in which the conductors instructed their drivers to speed off without even considering other support services like helping participants to cross the street or find another vehicle to their destination.

Despite the uniqueness of the aforementioned narratives to the visually impaired, traces of common issues were also present in the lives of the physically challenged. These included conductor's unwillingness to allow wheelchair users to join at bus stops since it took considerable time for them to do so. Additionally, the absence of a dedicated space and assistive technology also resulted in participants constant request for assistance in joining the bus as well as finding a place for their wheelchairs. For wheelchair users, the constant request for support and tedious task

involved made them unattractive to conductors since they openly referred to such participants as troublesome and difficult to satisfy. Also, finding a place for the wheelchair was seen to heighten conductor's hostility towards wheelchair users. Participants noted that the trunk of most trotro buses were usually reserved for cargo which also came at a fee but their refusal to pay such fee or buy an extra seat on board for the wheelchair made them unattractive clients.

At all levels, participants claimed to have had more bad experiences with conductors than drivers but when asked to rate the attitudes of both drivers and conductors on a scale of 0 to 100 (where 0 is worse and 100 is best), the outcome surprisingly revealed an average score (63%) for conductors as compared to 58 percent for drivers. While pursuing this difference, participants revealed that whereas they often interact with the conductors, the conductors were seen to be under the supervision of drivers hence the failure of drivers to publicly reprimand their mates is evident of their approval of conductors' actions. Other reasons for this rating include the fact that, even when the conductors had shown signs of offering assistance in crossing the street or allowing wheelchair users to join the bus, the drivers were also seen to overrule conductors' intention hence the lower average score for drivers.

Attitudes of Other Passengers

Despite the role of transport operators in influencing PWDs usage of trotro services, the study also found that the barriers encountered by PWDs were also attributable to other passengers who shared the same space with PWDs in trotro.

This is in line with the theory of planned behaviour which purports that attitudes towards a behaviour may be influenced by society's approval of an action or a concept (Ajzen, 1991). In this case, socio-cultural inclination and poor representation of the concept of disability were identified to reduce PWDs' access to public transport. While analysing the attitudes of other passengers, responses from participants were mixed but the poor treatment meted out to PWDs seemed to have had a long-lasting impression than the good ones.

Participants' account of other passengers' good deeds includes the payment of fares even though the well-educated ones perceived such gestures as needless and believed that such payment reinforced the negative connotation of seeing PWDs as needy. After all, other abled passengers on board do not get their fares paid. However, participants with lower levels of education seemed to care less about the identity of the people who made such payments and even considered it a sign of goodwill or empathy since they did not request it. Other good deeds include support in finding a suitable seat, reminding transport operators of participants' destination, offering to help participants with their luggage as well as assistance in crossing streets, getting another vehicle to continue their journey as well as walking participants to their home.

Beyond the aforementioned good deeds, participants were more vocal on the negative attitudes displayed by other passengers. The following remarks illustrates their claim:

I remember I've sat in a car and the moment I sat down, my body touched a lady and the lady started cleaning herself. Am

telling you. I don't know but maybe it's (my disability) airborne so as I'm walking around, it's flapping around and everybody is getting it. I wonder why a lot of people have not been disabled today. But she had to clean herself. [25-year-old male visually impaired National Service Person]

There are certain things that if you haven't really done disability studies, you wouldn't know. Some of the people, I don't know how they see persons with disability especially the vision impaired. They can be saying somethings, (discussing myths about disability) in your presence, and although they know you are there, they are saying these things as if you are a deaf person instead of being vision impairment. [24-year-old male visually impaired National service Person]

Some people are very foolish, they believe that once a PWD approaches them, they presume we are coming to ask for something like money. Its stupidity especially when we appear well dressed. Once you open your mouth to talk to them, the first thing that comes out of their mouth is 'today I don't have money to give you'. To me, this has not happened, but I have witnessed circumstances where my friends have been mistaken

for beggars in a car and at other public places. [Male Visually Impaired Teacher]

Just as seats on trotro buses are not assigned to specific population groups, participants revealed other passengers' preference to resist any conditions that expose them to a PWD. To participants, such attitudes were typical of young ladies who resort to funny behaviour to register their displeasure or discomfort about the presence of a PWD around them. These include attempts to avoid all forms of bodily contact with participants. Even in cases where such contacts were accidentally made, the young ladies tried to clean or wipe the part of their body that made such contact. Ndlovu (2016) and Daruwalla & Darcy (2005) observed that such discriminatory attitude is influenced by society's fear of contracting disability or desire to abstain from social outcast. When asked how totally blind participants were able to identify female passengers, participants said they smelled perfume and used voice recognition when such passengers talk to the mate or other passengers. A partially impaired participant even shared an account of how a young lady quickly moved to another vacant seat to reduce her perceived risk of contracting a disability. In all of these, participants revealed that the extent of such hostility was found to be higher for persons with severe disability like skeletal deformation, cripple or the totally blind, as compared to those with a mild or less observable physical disability like the partially blind.

Secondly, another issue of worry to participants was the gossip and unsolicited comments that were sometimes made with ill-informed facts while in trotro buses. The focus of such gossips centred on questions relating to the cause of

participants' disability as well as the extent to which participants could accomplish life goals as compared to the rest of the population. It is in such public settings that strange stories of how people acquire various disability were heard though participants' considered most of these stories to be untrue and an exaggeration of reality. Adam (2019) sees such strange stories as being informed by cultural inclinations that perceive disability as a punishment for one's transgression as well as a sign of a deity's disapproval of one's action. Despite participants' desire to accost other passengers and demystify their ill-informed thoughts, the fear of being considered rude and 'too known' resulted in their silence.

When asked to rate the friendliness of other passengers to PWDs, the average rating yielded a score of 44 per cent, which was even lower than those accorded conductors and trotto drivers. Factors that accounted for this low score from participants included the general perception that PWDs are beggars and in this regard, participants cited attempts by other passengers to handout tokens of money even though participants did not ask for such. One participant recalled how his quest to seek direction from another passenger was misinterpreted to be an attempt to seek alms. Ironically, the said participant perceived himself to be richer than the passenger. Kassah (2008) and Mfoafo-M'Carthy et al., (2020) indicate that such erroneous impressions of considering PWDs as beggars may be informed by the presence of many disabled beggars along the street of most city centres. Gauci & Callus (2015) also observed that the long-term effect of such impressions is evident in the near absence of opportunities for PWDs in developing countries since the account of celebrated PWDs like Stephen Hawking offers a good example for one

to appreciate the effect of a positive environment for PWDs in the developed countries.

Perception of Driver Education on Disability

Following participants' narration of support services received at various terminals and their accessibility issues regarding the use of trotro services, the final section examined participants' perception on the extent of disability education among various trotro operators in Accra. The following statements were made by participants:

What you experience with mates or drivers trying to give you a place to sit is a general willingness to assist a visually impaired person because they feel that he or she is disadvantaged. It has nothing to do with the fact that they even learn these from a driving school. Even if they are taught at driving schools, I don't think they follow what they are taught.

Those that would know would be owners of private cars. But for trotro drivers, No! Very few of them know about disability issues. [32-year-old unemployed male visually impaired]

And as I said, some mates would blatantly tell you that they are not picking you but will rather pick someone just beside me, it is enough to tell me that they are discriminating against PWDs. And if they are being taken through some training, they

wouldn't have done that (refusing to pick a PWD). [25-year-old male visually impaired National Service Person]

Oh, with the drivers there are some that I think have not even been to school before. Those who do that (treat PWDs with hostility) mostly are the ones who have not also been to any training at all. Even with driving schools, I doubt. The drivers who do that (treat PWD with hostility) are mostly the aged. The ones who are grown, do not have patience. The aged do not have compassion but the young ones have compassion.

[24-year-old female physically challenged shop attendant]

Most participants concluded that trotro drivers in Accra had little or no training on disability issues. Their position was that many trotro drivers in Accra did not even go through the required training to acquire a driver's licence, a view asserted by Abane (2011) who claimed that 80 per cent of commercial vehicle drivers in Accra do not attend driving schools. Participants were also of the view that the friendly attitudes from trotro operators were informed by operators' conviction and reliance on their goodwill and not because they have received some training on these issues. Also, participants who had received some level of positive attitudes identified these to have originated from drivers who have a lived experience with a PWD or have a long-standing relationship with members of the disability community.

Participants claimed that drivers who even attended driving schools and knew about disability issues also treated them with malice. Of course, knowledge

of a concept does not automatically translate into practice. In any case, a review of the training manual from the Drivers and Vehicle Licence Authority (DVLA) did not show any disability-related road sign or teaching model that offers any disability-related education to prospective drivers. Also, no specialised training model relating to customer services, business etiquette and other operational skills were found for trotro drivers except for the road safety awareness programme that seemed to be the focus for government agencies like the National Road Safety Authority (NRSA) and other corporate bodies that regularly engage trotro drivers.

Chapter Summary

This chapter analysed the support services offered to PWDs in their use of trotro services in Accra. Specifically, it looked at both physical and intangible services offered by transport operators to persons with disability. Physical support services entailed participants' access to information in locating the right vehicle, joining queues at terminals, use of priority space, enjoyment of travel concessions as well as the use of assistive technology in trotro. Intangible support services covered drivers' reception and interaction with the disability community. The Chapter also drew specific lessons that relate to how persons with visual and physical impairment access trotro services in Accra. The chapter ends with participants' perception of disability education among trotro drivers in Accra.

CHAPTER SEVEN

STRATEGIES TO OVERCOME SOCIAL EXCLUSION

Introduction

In conformity with the conceptual framework, the challenges associated with the usage of trotro services by PWDs can best be described as an adversary which requires the introduction of coping strategies to enable them to enjoy the kind of transport services they look forward to. The literature on the resilient theory identifies factors that may help to mitigate the stress PWDs go through in engaging trotro services. These mediating factors range from economic through spatial, temporal and personal to physical characteristics. Of course, modifying one's physical characteristics may be difficult for PWDs in developing countries since most impairments are permanent. Aside from this, other identified mediating factors are discussed in this chapter.

Choice of alternative transport mode

Amid the barriers inherent in PWDs' use of trotro services, the choice of an alternative mode of travel offers a suitable platform to escape the daily perceived hazards. The data showed that, participants' choice of an alternative mode could be made through an examination of the commuters' level of satisfaction derived from each transport mode. A common term usually attributed to this concept is service quality (SERVQUAL) where both Mensah & Ankomah (2018) and Ojo et al. (2014) in their respective studies identified tangibility, cost, reliability, assurance, empathy and responsiveness as variables that inform travellers' choice of a given

transport service. While these studies were mostly quantitatively inclined, this study adopted a qualitative approach in ascertaining the factors that inform PWDs' choice of an alternative means of transport. To set the premises for the discussion, emphasis was not placed on the cost of travel since most participants have already cited low fares as a prime reason for their preference for trotro services.

Among the different transport options in Accra, participants were more vocal on their preference for both e-hailing services like Uber, Bolt and Yango as well as the chartering of taxi services. When asked to clarify the reasons that informed their choices, the following remarks were made:

The Uber drivers are polite, quite professional and since you have to rate them at the end of the trip, they are mindful of what they do. I think that the drivers are supposed to get some bonuses with regards to their ratings. By this, they try to be professional and all that is just because of these little checks. [28-year-old visually impaired Male Public Servant]

The taxis and Ubers are most of the time convenient. Whatever happens, you know that they are taking me to wherever I am going to. For the trotro, you can't tell the driver to move at your pace and also do what you want. The trotro driver wouldn't have that time for you because there are other passengers on board but with the taxi and Uber driver, you get to tell the driver what you want

since I am the one paying for the services. [32-year-old visually impaired male radio presenter]

It would bring me peace and comfort. It would put my heart to rest because the trotro is difficult for me when boarding but the taxi and Uber are different. Also, the taxi takes fewer passengers but trotros are not comfortable for me since one seat takes about 4 to 5 people making it difficult to enjoy some comfort. Additionally, you may meet annoying people who may make the journey a little more frustrating since some people do not want to have any bodily contact with you, as a person with disability. [32-year-old male unemployed wheelchair user]

Participants identified chartered taxis and Uber services as being suitable alternative. A leading factor that prompted this choice was the demeanour or attitude of Uber drivers. Unlike the trotro operators, participants cited politeness and respectfulness as common traits that characterised the delivery of services among Uber and taxi drivers. Emphasis of such attitudes were laid on the delivery of support services which ranged from driver's eagerness to ensure the safety of PWDs' by personally helping them to board the vehicle as well as the delivery of same services when participants disembarked from such vehicles. Disembarking services in this regard include the assistance given to participants to cross the street, find other vehicles to continue their journeys as well as walking PWDs to their homes. Here, participants attributed perceived higher level of education among

Uber drivers as what influences their positive outlook and demeanour. This remark confirmed Mensah's (2018) assertion on how higher educational attainment among Uber drivers in Accra translates to the display of good business etiquettes. Though educational attainment seemed to influence positive attitudes, Nyame & Hague (2013) purports that knowledge of a concept does not always translate to practice though no case of a hostile Uber driver was recorded in the study.

With Ubers' aggressive marketing scheme to dominate the travel space, participants however likened observed positive attitudes from taxi drivers' as a way to keep loyal customers since the market share of these taxi drivers was heavily competed with other service providers like the motorised tricycles (Jing et al., 2019) and e-hailing services (Mensah, 2018). For Uber drivers, participants also indicated that positive attitudes received from drivers were informed by drivers' desire to get a good rating and review for the quality of service rendered. This assertion was confirmed by Chan (2019) and Athey et al. (2019) who identified Uber rating system as a key indicator of drivers employability since Uber terminates the services of drivers who consistently record lower ratings and also have poor reviews for their services. To Marquis et al. (2018), this behavioural control measure has induced drivers to offer the best business etiquettes and increased Uber services' attractiveness in the face of competition from other companies.

Inasmuch as Hotor (2016) and Yobo (2013) cited unregulated competition for passengers among trotro operators as a factor that accounted for poor delivery of support services, the operation model of Uber services appeared to influence participants' preference since it focused on providing a rider centred service. A

review of trotro operations indicates that profitability of trotro operations hinged on getting more passengers to fill empty seats and not necessarily on the number of trips made. In this regard, participants were of the view that competition for passengers during peak times rendered them unattractive to trotro operators since they were deemed to waste time in boarding or disembarking. For Uber services on the other hand, Adebayo (2019), observed that the use of distance and time algorithm focused the profitability of Uber services on getting a passenger to stay longer or travel further. By extension, the profitability of Uber services was seen to hinge on the number of trips made and not necessarily on the number of passengers on board. At this level, participants revealed that the absence of competition for passengers yielded benefits in two folds: the first benefit was a considerable reduction in travel time since the incidence of intermittent stops for other passengers to alight or join was eliminated. By this, Uber became a faster travel option for various trips, but this narrative did not take into account the required time to get an Uber after a passenger made an order.

Another factor that informed participants' choice of Uber and taxi services was the relative convenience associated with using these transport services. For Uber, both the physically and visually impaired cited the convenience of ordering a ride from home through mobile technology as its key advantage. This innovation prevented participants from the strenuous task of walking to transport stations, queuing for buses or being refused entry by trotro operators at bus stops. These views also confirmed the position of Kett et al. (2020) on how the use of technology has increased PWDs travel independence as witnessed in the popularity of Uber

services in the US and UK. Again, the exclusive services offered by Uber and taxi chartering services further extended the level of convenience to include flexibility in choosing a preferred route, engaging the services of a transport operator for a specific period as well as enjoying extra services like air conditioners since trotro services did not offer these additional services. As stated earlier, Uber thrives on keeping passengers for longer periods and though the Uber app always selects the shortest path connecting an origin to a destination, any request from passengers to divert from a predetermined route would always be welcomed since this would translate into higher sales for drivers (Kufuor, 2018).

Even though participants cited the ease of getting Uber services as a key advantage, another benefit of this service extended to its ability to reach participants' final destinations which included the doorstep of one's home or entrance of many cooperate premises that prohibited the entry of commercial vehicles like taxi and trotro. To participants, this advantage reduced the time spent in walking to a destination since Frye (2013) identifies the visually and physically impaired to have a much slower walking. Coincidentally, some participants cited this exclusive service as a source of worry since their personal safety could not always be assured. Issues raised in this regard included the perceived fear of being kidnapped, robbed or used for ritual killings as commonly heard on various media platforms and news outlets. Fortunately, none of the participants recounted having such an experience whether personally or as happened to a known PWD.

Another key issue that attracted participants to these services was the condition of the cars used for both Uber and taxi services. To participants, Uber

operators mostly used private saloon cars that were in better conditions compared to the trotro. These conditions manifested in spacious seats, good condition of vehicle interior which included the absence of protruding objects and rusty metals. Though using private cars for Uber services was popular in Accra, Nyarko (2019) and Penu (2018) considered this situation an anomaly since using private cars for commercial purposes was a breach of Ghana's Road Traffic Act 2012. This law specifically requires taxis to be identified by approved taxi identification colours and pay statutory fees and taxes. Unfortunately, the non-payment of these fees and use of unprescribed colours were considered an unfair advantage for Uber operators since their cost of operations was relatively lower than those of traditional taxi operators (Adotey, 2017). Concerns about such unfair advantages have been cited as the cause of scuffles and violent clashes between traditional taxi and Uber operators in Pretoria, Nairobi and Accra (Kuo & Mohammed, 2016; Simmons et al., 2019).

Another coping strategy identified by the study was participants' reliance on prayer or faith in meeting transport operators who would offer a conducive travel environment by exhibiting friendly mannerisms. This view was common among participants with lower incomes and females but the expected answers to such prayers were sometimes not met since participants' accounts of transport operators' behaviour were generally negative.

Also, some participants resorted to skipping buses that were deemed to pose challenges to participants' entry, comfort or safety. Wheelchair users particularly mentioned Mercedes Benz 207 Sprinter bus as those they commonly skipped since

their high floor necessitated the assistance of transport operators in either keeping the wheelchair in the trunk or helping participants to board the bus. It must also be noted that skipping such disability unfriendly vehicles was commonly done at various bus stops since participants did not want to draw unnecessary attention to themselves as they were being lifted into or from the trotro.

Aside from relying on prayer and skipping vehicles, the final approach adopted to reduce the stress of joining trotro includes blacklisting specific transport operators identified as hostile to them. Popular among wheelchair users, the success of this approach was hinged on using identifiable features like vehicle licence plates, vehicles' colour as well as stickers or inscriptions on the cars. For transport operators, participants cited the use of complexion and other identifiable features like tribal marks to blacklist them. Unfortunately, tying drivers to specific cars was problematic since some trotro drivers did not own the vehicle they used hence the likelihood of switching vehicles without being recognised by participants.

Frequency of using transport modes

Having identified participants' alternative mode choice, the study further examined the frequency with which PWDs enjoyed Uber and Taxi services. The focus on frequency was based on participants' weekly account of how often they board Uber or taxis. The following are remarks from participants in this regard:

It shouldn't be more than once a week. There are some of the times, I don't pick a taxi or Uber in 2 or 3 weeks. The trotro is my

favourite due to my financial standing. [38-year-old male visual Impaired Civil Servant]

It depends on the occasion. If I have to go somewhere and I need to get there on time, I will use an Uber. Or probably, if trotro doesn't pass through my destination, then I will decide to take Uber or taxi. [25-year-old male visually impaired National Service Person]

In a week, I don't remember the last time I took some. If I remember, since this month (June, 2020), I will say I picked Uber once. The other trips have been with trotro. [30-year-old unemployed male visually impaired]

Remarks from participants indicated low weekly patronage of Uber or taxi services. The data showed that some participants could go a month or two without ordering Uber services, chartering a taxi or joining a shared taxi. This was common among both sexes but more prevalent among participants with lower educational backgrounds. Despite the desire to enjoy such services, a common denominator that affected participants' usage of Uber or taxi was the relatively higher fares charged for such services. In the case of Taxi services, Mensah & Ankomah (2018) and Simmons et al., (2019) purport that the absence of a standardised mechanism to determine the cost of taxi chartering services also worsened PWDs plight due to the difficulty in budgeting for their trips. This is because, the actual fare for

chartered taxi services was always determined by the negotiation skill between service providers and commuters. This was found to have resulted in varying prices charged for the same distance hence participants' account for their low frequency of usage even though they wished to enjoy it more.

Though Uber offered a standardised procedure for determining transport fares, the use of distance and time-based algorithm in determining such fares also presented some challenges to participants. To begin with, the estimated fare for a trip is known to comprise some variables. Uber sets a base fare of GH¢1.70 and this charge is incurred immediately a driver accepts a request from a prospective rider. In essence, the base fare is incurred even before the commuter joins the ride. Secondly, a charge of GH¢1.30 per kilometre and GH¢0.19 per minute is also imposed for every trip made but if a prospective rider cancels a trip, an automatic cancellation fee of GH¢5 will be incurred and added to the actual cost of a rider's next patronage (Mensah, 2018; Slavulj et al., 2016). Though this arithmetic informs the price build up for Uber services, concerns from participants were eminent in the study. This was seen in the observed discrepancy between the fare at the onset of a trip and those disclosed at the end of the same trip. While the distance always remained constant, participants complained that traffic congestions, road accidents and other incidents that increased travel time also resulted in a disproportionate increase in fares.

Additionally, participants also complained of higher prices even though distance and duration of a trip remained the same. This remark confirms Cachon & Daniels (2017) and Zha et al. (2017) notion on how ride sharing services like Uber

offer differential pricing schemes for the same distance and time without considering the plights of its users. Such a situation is termed price surging or dynamic pricing and is known to comply with the economic principles of demand and supply where Uber charges higher prices when demand for its services exceed supply and vice versa. These uncertainties were also cited in increasing participants' difficulty in planning for trips. Given the uncertainties in determining fares, participants preferred to use Uber services when attending important and high-profile meetings since they intended to get to such events on time and in comfort.

Other travel modes identified in the study was the use of private cars, which was common among visually impaired participants from higher income households. Here, participants cited the opportunity of being driven to various destinations but also expressed their desire to resort to the use of Uber and taxi services due to the unavailability of private cars at certain times.

Decision to decline a trip due to barriers in the transport environment

Having explored alternative transport options and frequency of usage, the Resilient Theory does not only offer an indication of hope or resilience but also an opportunity to examine the extent to which barriers or adversaries had resulted in limiting a person's ability to undertake an activity. Therefore, the study sought to examine if participants had ever declined or rescinded a trip making process due to barriers encountered in the transport environment. The outcome of this finding would offer a platform to ascertain the context of social exclusion among members of the disability community in Accra.

When asked if participants had ever cancelled a trip or declined to visit a facility due to challenges in the transport system, the following responses were gathered:

No, not at all. Where I have to go is important so, even if I do not have money for a taxi, I still have to go using any other means available even though I am not happy with those means. [32-year-old male unemployed Wheelchair user]

I really get discouraged and sometimes ponder on my travel plans especially if I do not have the money to hire a taxi. What I do is to pray I meet a good driver and mate who will be more friendly and helpful because though I have money to pay for the fare, they still treat us like people who do not matter. In all, these challenges had never deterred me from enjoying key services like hospitals though I sometimes get there late or have to incur more cost for traveling. [26-year-old male unemployed wheelchair user]

No! Never! I need to accomplish what I am going to do and for that reason, I have to endure the challenges that come along my way. What I rather do is to blacklist some vehicles from my travel plans. I take notice of the car license plate and also take particular notice of the driver and mate. [37-year-old physically challenged female Librarian]

Remarks from all 50 participants indicated their interest in not letting the barriers prevent them from enjoying a particular facility or service. To participants, various life enhancing facilities like hospitals, schools and workplaces required transport services in reaching them hence the decision to decline a trip making process would also deny them from enjoying these services. However, on some occasions, participants with lower education cited how the cost of travel induced them to make a trade-off between their wants and needs. Here, the outcome of such trade-offs was rather the result of low funds and not necessarily related to other barriers inherent in the transport environment since they had become accustomed to these barriers.

Unlike the visually impaired who resorted to trotro services in most cases, the wheelchair users cited using their wheelchair as an alternative mobility aid for shorter trips and also in cases where they do not have the needed funds to join trotro or charter a taxi. This remark also confirmed the observation by Williams et al., (2017) and Chiwandire & Vincent (2017) that the physically challenged sometimes resort to mobility aids like wheelchairs and skates as a cost effective means of transport partly due to their lower income status and unresponsive nature of public transport services in Kenya, South Africa and the Philippines.

Transport services expected

The final section of this chapter examined participants' aspirations of the type of transport services they hoped for. Responses in this regard will offer further insights into their built environment and also offer a platform to identify local solutions intended to reduce the barriers to using trotro services in Accra. The need for local

solutions have been identified by Deb (2017) to be crucial in addressing the needs of the disability community since different societies have different connotation and context on disability issues. In recounting the type of transport services hoped for, the following remarks were made:

The awareness of disability issues is very key. We should sensitise the drivers and conductors of trotro to be aware of the needs of PWDs. By this PWDs' shouldn't be treated or judged by the cover of the book. The mere fact that I have a disability does not mean that I am nothing to write home about, so awareness is key. [24-year-old male visually impaired National Service Person]

I think that most of our trotro are old and we need to take steps to phase them out and bring in new cars. So that at least if we want to join trotro, we may not end up hurting ourselves. They should also have a place of comfort and should ensure that they will not modify any other car to suit our trotro system. [28-year-old male visually impaired public servant]

I do not think it will be realistic to want an Uber kind of thing for us. What I think is more realistic is having government buses that make provision for the visually impaired or people with disability. Since it is a government bus, these things are easy to adhere to

instead of a private person with his own 207 Sprinter buses. [32-year-old male visually impaired public servant]

Principal among participants' expectations was the need to overhaul the attitude of transport operators and other passengers. An identified area of interest to participants was their desire to witness a significant reduction in the use of derogatory words by both transport operators and other passengers. Consequently, participants wished for the needed education to change societal perception of considering the disability community as needy or unproductive.

Aside from the use of derogatory words, participants also called on transport operators to be more receptive and not refuse PWDs' who wish to join their vehicles, especially when such decisions are based on their perceived fear of PWDs' inability to find their way home or transport operators' desire to find passengers who require little or no assistance. Though the aforementioned was common to both disability groups, the visually impaired also expressed their desire for conductors to desist using gestures and hand signals as a way of indicating their destination or drawing the attention of prospective passengers since this did not auger well for them. The wheelchair users on the other hand also called for measures to restrain transport operators from collecting a fee when wheelchairs are placed in the trunk of public buses. To participants, such fees unnecessarily increase the movement cost, hence their social exclusion.

Additionally, participants called for a change in attitudes and friendly outlook among passengers especially young ladies who refuse to sit by PWDs' in trotto. When education for a change in attitudes is properly executed, participants

indicated that such action stood the chance of reducing petty gossip and unsolicited comments about PWDs in trotro. This would project PWDs as a productive group and not branded as '*yarefoɔ*' or other derogatory terms. Again, participants called for increased education by various state, religious, educational and social outfits given the decades of negative socio-cultural inclination on the status of PWDs (Adam, 2019). The call for a change of attitude did not come as a surprise as Sackey (2015) and Mfoafo-M'Carthy & Sossou (2017) in earlier studies identified the human behaviour as a single variable that stands to hamper PWDs' engagement even if all physical facilities are made available.

The second identified expectation of participants was their need for a complete overhauling of the vehicles used by trotro operators in Accra. This begins with policies to induce transport operators to replace all dilapidated and disability unfriendly vehicles with modern ones that offer some level of ease to PWDs. This call was needed since protruding or rusted sharp objects and poorly fitted seats have caused injury and also resulted in tearing some participants' outfits. The call for modern transport buses specifically entailed the provision of vehicles with 'kneeling effect' and ramps that facilitate the movement of wheelchair users. Though some participants hoped for such services, others were sceptical about the reality of this call since trotro operators may be forced to charge a higher fare for their services. As a result of this, some participants rather called on trotro operators to resort to improvised mechanisms like the use of locally made ramps and the provision of push bells that are cheaper to acquire and significantly reduces PWDs dependence on other travellers when it comes to making a travel decision.

With regards to the interior of the vehicle, participants expressed their wish for stakeholders like the Driver and Vehicle Licence Authority (DVLA) to re-examine the seating capacity of the Mercedes Benz 207 bus since the relatively smaller leg room space seemed to suggest an alteration of the vehicles' seating capacity. This assertion was also made by Tetteh et al. (2017) who pointed out that most trotros are usually imported into Ghana as goods carrying vehicles. By this, local fabricators are known to design seats which usually leave very little room for manoeuvrability since vehicle owners intend to maximise profit or sales.

Participants' final expectation of their ideal transport services was to witness an increased level of participation from the state regarding the provision of intra-city movement. Though the Metro Mass Transit services (MMT) was identified to offer such services on behalf of the state, the GPRTUs' use of low occupancy vehicles makes its services a preferred option for many commuters since both in and out vehicle waiting times were shorter than Metro Mass Transit.

Chapter Summary

This chapter outlined various coping strategies adopted by participants in addressing the barriers encountered in accessing trotro services. Employing an aspect of the resilient theory, the chapter specifically focused on alternative transport modes for participants as well as examined the factors that inform such decisions. Additionally, the chapter discussed participants' frequency of using alternative transport services by focusing on their weekly travel since this was easier for participants to recall. The chapter further discussed the extent to which

barriers in participants' use of trotro services may have induced PWDs to decline a trip making process. Narratives from this section offered a basis to explore participants' degree of social exclusion by examining unreachable places or unmet travel plans. The chapter ended with an exploration of participants' expectations of their ideal transport services, forming the basis of unearthing local solutions to meet their travel needs.



CHAPTER EIGHT

TRANSPORT OPERATORS SUPPORT SERVICES TO PWDs'

Introduction

This section presents findings on interactions with transport operators from the Kwame Nkrumah Circle and Kaneshie lorry stations. Unlike PWDs who constitute the user group, trotro operators supply the needed transport services which comprises both physical and intangible facilities like vehicles and customer services. As seen in studies on service providers in health and education, the imagery or connotation of disability has played a key role in influencing the design, nature and quality of services available to PWDs in Ghana and other parts of the world (Adam et al., 2017; Baart & Taaka, 2017). The chapter therefore analyses drivers' knowledge on existing transport related disability policies and further extends to examine support services offered to travellers with disability in Accra. It also examines trotro operators' willingness to integrate disability facilities or concessions into their operations.

Socio-demographic characteristics of trotro drivers

All the transport operators engaged for this study were males and this was found to confirm Amoako-Sakyi's (2017a) position on how gendered roles, unpaid labour, poor education and lack of access to resources have contributed to the dominance of males in the transport sector. Even though this study was conducted in Accra, Amoako-Sakyi (2017a) further indicated that female's participation in the transport value chain is worse for rural areas since urban areas like Accra record

some level of negligible participation from females. Though the study found no female trotto driver, Stacey Knott (2016) sheds light on ‘Ms Esenam Nyador’, who is known to be the first or one of the few female taxi drivers to break the gender stereotype in the transport business in Accra.

Just as demand for transport services is known to be derived, higher travelling population was found to influence transport owners’ desire to acquire higher occupancy buses and this reflected in how the Mercedes Benz 207 Sprinter was found to be the dominant mode of transport among participants. Participants’ need to acquire higher occupancy buses and also offer rapid response to increasing demand was found to be consistent with Claybornes’ (2012) assertion on how public transport operators in Accra were increasing their effort to improve the quality of service and also ensure diversity in the service rendered. From the study, the choice for Mercedes Bens 207 sprinter was seen in two-fold. Firstly, it has a relatively higher seating capacity of 21 compared to both the Nissan Urvan and the Toyota ‘Fish’ Hiace and this also implies higher sales target for owners of the Mercedes Benz 207 sprinter. Secondly, operators also divulged that, the high floor height of the Mercedes Benz 207 Sprinter buses reduces the frequency of maintenance since it is easier to navigate poor road conditions with such vehicles.

While only two study sites (Kwame Nkrumah Circle and Kaneshie) were used in the study, operators driving experience ranged from 4 to 33 years. This data only centred on years spent for intra city trips since some drivers were known to occasionally engage in long distance or intercity trips. Additionally, the data presented did not factor years spent as a mate or conductor since most of the drivers

had already indicated their progression from being a mate to a substantive driver. Further examination of the data indicates that 50 per cent of participants had at least 20 years driving experience, and these were older drivers who mainly operated the Mercedes Benz 207 buses. Unfortunately, 90 per cent of participants did not own the vehicles they drove and had to meet a daily/weekly sales target set by their respective employers who are mostly in the middle-income group.

The data further showed that, the highest educational level attained by operators were Junior High School (60%), Primary school (30%) and A-Level (10%). Just as Treffner et al., (2002) identifies driving as a skill for life, driving schools have also been identified as a suitable avenue for the acquisition of knowledge and skill in driving. From the study, 90 per cent of participants claimed not to have attended a driving school despite possessing a valid driver's licence. Only one participant was found to have attended one and he had driven for only 4 years. This finding confirms the DVLA's (2009) assertion that most commercial drivers in Ghana do not attend any driving school but still go ahead to offer driving lessons to other prospective drivers. To the DVLA, the skill of driving goes beyond the hand and feet coordination but also includes critical knowledge on traffic conditions that are mostly overlooked among commercial drivers who acquire their skill through apprenticeship.

The final socio-demographic variable examined in this study was participants' religion, which was found to play a significant role in trotro operators' perspectives on support services offered to the disability community. From the data, 80 per cent of participants identified as Christians and the rest were Muslims.

Knowledge of Disability Regulations

The study sought to examine trotro drivers' knowledge of state or local legislation related to meeting the transport needs of PWDs. Specifically, the study focused on transport operators' knowledge of Ghana's Disability Act as well as any local GPRTU legislation that offers the needed support service to PWDs. This section was deemed critical since enlightenment on such provisions may equally help reduce the challenges associated with PWDs usage of trotro services. When asked if trotro drivers have ever heard of Ghana's Disability Law, the following remarks were gathered:

So far, I haven't heard of any law like that, I do not know of any law like that. If it is available, then I do not know about it.

[28-year-old Mercedes Benz Sprinter driver at Kwame Nkrumah Circle]

Was it announced on the radio? Maybe when they said it, I did not hear about it. Perhaps, they should go station by station to educate us on such issues. [35-year-old Mercedes Benz driver at Kwame Nkrumah Circle]

No, I have not heard of any such law. I also don't know of any other law on disability in Ghana. The only disability provision I know is the provision of dedicated spots on Metro Mass Buses. [30-year-old Nissan Urvan driver at Kaneshie]

None of the trotro drivers alluded to knowing about Ghana's Disability Law and its transport provision even though Ghana's Parliament passed this law in 2006. Having informed participants that Ghana's Disability law has been in existence for over 14 years, they rather cited the failure of state institutions to increase awareness on these legal provisions on PWDs. In the course of the interview session, the researcher took time to enlighten participants on the call for the provision of dedicated seats but all the participants did not seem to agree to this provision and even indicated the non-applicability of this provision to privately owned transport services like theirs. A key reason that occasioned this thought was the observed compliance by government transport services like the Metro Mass Transit (MMT) and the Ayalolo services.

Having indicated their lack of knowledge on Ghana's Disability Law and its transport provision, the study further examined if trotro operators in various study sites had instituted local regulations that offer dedicated services to PWDs and other vulnerable travelling groups. Again, participants indicated the lack of such provisions but rather indicated the use of their subjective discretion as a key instrument that informed the services rendered. At present, such discretionary services include friendly reception accorded to PWDs, exemptions from the payment of fares as well as the provision of dedicated seats. Just as various transport terminals were headed by local GPRTU representatives, participants indicated that, the focus of these executives was on the collection of booking fee or ticketing money but not necessarily caring about travellers with disability. With little provision to the disability community, further interaction with participants revealed

that the booking fee was considered as an internally generated fund that was purposefully used for the daily upkeep of the station as well as a form of welfare package for events like marriage, death or child naming ceremony. To many trotro drivers, this study was the first time they had heard of any transport related legislation for the disability community and even wondered why it had taken them this long to hear of such a provision.

Another identified factor that might have accounted for the absence of knowledge on the disability law was the nature of driver educational programmes offered to participants. As indicated earlier, all but one trotro driver claimed to have attended a driving school before acquiring his licence and though some participants claimed to have driven for more than 25 years, identified educational programmes and driver refresher courses offered at the respective stations largely centred on road safety awareness leaving participants to always fall on their intuition when interacting with PWDs and other vulnerable commuters.

Support Services Offered at the Station

With little information on the transport provision for the disability community, this section examines current transport services or facilities available at the study sites and highlights trotro operators' willingness to adopt disability friendly accessories into their operations. The emphasis for this section is in the physical facilities such as the floor height and conditions of vehicles, way finding aids, priority seats, services for wheelchair users and travel concessions. It must be noted that the choice of variables for this section were informed by section 23 to 30 of Ghana's

Disability Act as well as the United Nations recommendations on acceptable transport services for PWDs' (Mitchell & Rickert, 2010).

Vehicle Floor Height

On visiting the study sites, the floor height of the trotro buses became the first variable of enquiry since it determined the ease with which wheelchair users in particular enter such means of transport. By definition, the floor height is the vertical distance between the ground on which the vehicle sits and the first level of entry into a vehicle. As seen in Figure 12, participants had a mixed reaction in acknowledging the challenges associated with the floor height of their buses even though all observed buses were above the maximum recommended height of 250 millimetres (Mitchell & Rickert, 2010). However, for participants who acknowledged the effect of the higher floor heights on entry, very little was seen in their willingness to offer remedies to make it easier for wheelchair users to enjoy their transport services. Some of the reasons used to justify trotro operators' unwillingness to offer support services like ramps included the following:

The reason why the Mercedes Benz 207 is high for PWDs is that the Ghanaian roads are not good. Also, old women complain about the height of my car and so I am not surprised about the cripple. The vehicle already has a point of entry and so I don't see why I should get a ramp or step. [52-year-old Mercedes Benz driver at the Kwame Nkrumah Circle]

The person is already a cripple and so even if you provide a ramp, it won't solve anything. The only thing is for the mate to help them. He will climb one step and the mate will assist them in sitting down. [27-year-old Mercedes Benz driver at the Kwame Nkrumah Circle]

It's true that our trotros are high but the government cannot also instruct us to change our cars simply because it does not meet the requirement of PWDs. Our cars will always remain the same and they just have to endure. Some aged people who cannot join our cars due to its height just find other cars on their own and it has always been like that. [60-year-old Mercedes Benz driver at the Kaneshie]

Though all drivers of the Mercedes Benz 207 buses agreed that the floor height of their vehicles were relatively higher than other buses like the Nissan Urvan and Toyota Haice, none of the drivers considered this to be a challenge that needed to be addressed (Figure 12). For such drivers, complaints from the disability community will not induce them to make changes to their vehicles since a fraction of the able population (the aged) have made earlier complaints and seen no result. It is clear from the data that trotro drivers appeared less concerned about the plight of the disability community and in participants' opinion, the relatively low population of the disability group was identified to be a major setback to the provision of such a facility. Indeed, the Ghana Statistical Service (2012b) confirms

the low disability population of Ghana but the primary role of health or medical conditions in causing disability has seen calls for the modification of the physical environment since anyone from the general population stand the risk of joining the disability community. Unfortunately, such modifications seem to be opposed by trotro drivers engaged in the study.



Figure 12: Floor Height of Mercedes Benz 207(A) and Toyota Haice (B)

Source: Fieldwork, 2020.

Another identified factor that informed participants' position on refusing to provide ramps to reduce the stress of entry was the cost element associated with providing such facilities. Most participants did not own the vehicles they handled and even made it known that the provision of such ramps required the approval of their respective employers who were adamant about incurring the extra cost of operation. Additionally, participants also made it known that stiff competition from other transport providers had reduced patronage and even made it difficult to meet daily or weekly sales targets hence the request for such cost element would not be tolerated by owners. When asked of the possibility of using the booking fee to acquire such facilities for drivers, participants were also adamant since they considered this to be an unnecessary expenditure, though they admitted that anyone could end up in a wheelchair or become blind at any time.

The final reason that influenced trotro drivers to resist the acquisition of ramps was the dependence on their conductors in assisting wheelchair users and other disability groups in boarding the vehicles. From participants, their conductors always lifted the crippled and assisted unaccompanied visually impaired travellers to board or alight from their vehicles. According to participants, this tactic has been executed for years and is seen to offer the best result in getting PWDs in and out of their buses. In reaction to the notion that PWDs sometimes felt embarrassed and uncomfortable when lifted onto or from buses by conductors, trotro drivers rather shared their disappointment on how their attempt to offer support services was seen in bad light. While making a case for their unwillingness to provide ramps to reduce the stress of entry, participants also made it clear that the government cannot change

their resolution and that PWDs should be prepared to be lifted or physically assisted when boarding or alighting.

Queuing at transport terminals

The second support service examined focused on enjoying dedicated services like the exemption from queuing. At the Circle and Kaneshie terminals, queuing constitutes a crucial part of transport operators' daily activities and this usually happens when demand for transport services exceeds supply. Even without a dedicated disability policy at the respective study sites, all trotro drivers indicated that PWDs were always exempted from joining the queue during peak hours. Though this was done out of compassion and the need to reduce the stress of standing for long, participants indicated that each study site had porters who were primarily tasked to scout for PWDs and exempt them from joining queues. In addition, the bookmen and other transport operators also offered support in looking out for PWDs at the station.

The only exception to the aforementioned was that such provision was mainly offered to PWDs who arrived at the station without an aid. If an identified aid is available, both PWD and their aid were made to join the queue except in cases where the severity of the disability required immediate assistance. While limited opportunities existed for PWDs to be exempted from joining queues, the conditions of the terminals significantly affected PWDs ability to enjoy such exemptions to the latter. For instance, the absence and inaccessible nature of waiting areas at the Kaneshie and Kwame Nkrumah Lorry station respectively exposed PWDs to the harsh weather conditions even if they are exempted from queues. As seen in Figure

13B, the inaccessible nature of the waiting facility at the Kwame Nkrumah Circle was seen in the absence of curb cuts for wheelchair users as well as the encroachment by transport operators and conductors who use such facility as a resting or sleeping area. Hawkers and other people were also seen using the waiting areas even though they had no intention of boarding a bus at the station.

Despite efforts to exempt PWDs' from queuing, trotro operators indicated that some PWDs declined their request and rather choose to queue just like the able population. From participants, such actions were informed by PWDs' desire to seek autonomy and reduce the impression of considering disability as a focal point for charity and pity.





Figure 13: Waiting area at Kaneshie (A) and Kwame Nkrumah Circle (B)

Source: Fieldwork, 2020

Priority seats

Aside from skipping queues, another variable that came under review was the enjoyment of priority seats for the visually impaired and dedicated space for wheelchair users. According to Wong et al. (2018), such a service is useful since it assures PWDs and older travellers of the willingness of transport operators and policymakers to meet their travel needs. In view of the aforementioned, this section sought to observe and review vehicular seating arrangements at the study sites. For instance, when asked where PWDs sit in their buses, the following responses emerged:

People are always alighting and joining the trotro and so we mostly make them sit by the window so that people won't get to worry them. If they sit close to the entrance, people will always ask them to alight. If the seat close to the window is occupied, I will ask the PWD to sit elsewhere. [33-year-old Mercedes Benz 207 driver at the Kaneshie]

Behind the driver's seat. If the passenger has crutches or wheelchair, they may prefer sitting in the front seat since it's more convenient for them and their crutches. They sit in the car and the wheelchair is placed beside them. I have experienced one at Kasoa where the disabled person in a wheelchair boarded a car and was helped by the mate to place the wheelchair beside the person. [30-year-old Nissan Urvan driver at the Kaneshie Lorry station]

From participants' remarks, no prescribed seating arrangement was available but trotro operators identified two preferred seating positions for PWDs at the respective stations. As seen from Figure 14, these preferred seats include the seat beside the driver and the one directly behind the driver. To participants, these seats were chosen based on their desire to prevent PWDs from being requested to alight anytime a passenger intends to alight or join the bus. Of these two positions, the front seat was always the first choice since it required only two passengers and presented the least challenge to PWDs. Though the seat behind the driver had room

for three people, trotro drivers identified the seat closer to the window as the first option for PWDs if the front seats are not available (Figure 14B).

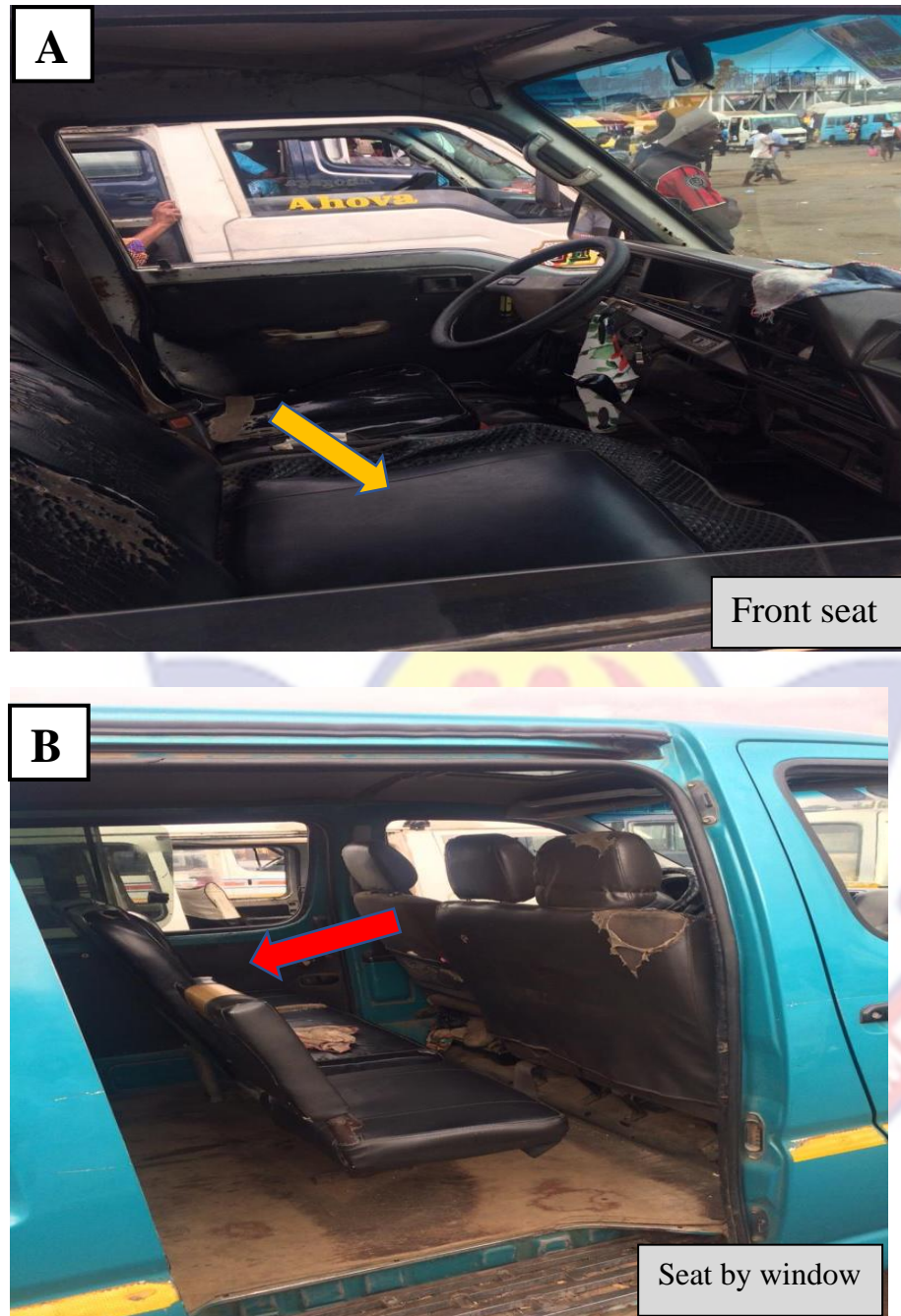


Figure 14: Front seat (A) and seat behind the driver (B)

Source: Fieldwork, 2020

As indicated earlier, trotro drivers were totally oblivious of Ghana's Disability Act, and their failure to reserve dedicated seats was seen to contradict the transport provision that required them to do so (Government of Ghana, 2006). The identified seating positions for PWDs did not come with any inscription that deterred other passengers from using them. Unfortunately, these were also the preferred choice for the able population since such seats presented the same advantage as those expected to be enjoyed by the disability community. On indicating how competition with the able population affected PWDs' enjoyment of such dedicated services, participants' response on how to remedy the situation included the use of gentle request to persuade the able population to vacate such seats for PWDs. However, participants revealed that not all passengers heeded to such requests and since PWDs' were paying the same fare as the able population, PWDs' may resolve to either use other seats in the car or skip/wait for the next vehicle.

Just as trotro drivers sought to offer discretionary dedicated seats for PWDs based on compassion, these drivers also revealed that the visually impaired and other disability types sometimes preferred other seats as opposed to those prescribed by a conductor or driver. These include the last seat at the back of the vehicle or other seats close to any of the windows. Inasmuch as transport operators found these choices odd, they observed that PWDs who usually occupy the last seats were passengers who were either the last to alight from the bus or those heading to the final destination of the trotro. Amid all possible options, one particular seating position identified as the least prescribed by trotro operators were

the foldable seats (see Figure 15) that served as entry points to other sections of the vehicles.

For transport operators, the inconvenience of having to intermittently alight or adjust oneself to accommodate the entry of other passengers was the prime reason why these seats were the least prescribed for PWDs. This remark confirmed Kodjo's (2016) assertions on how foldable seats always remain the last to be occupied especially when such seats are locally fabricated. As seen in many Mercedes Benz buses, Tetteh et al., (2017) claimed that locally fabricated seats focus on enhancing the seating capacity for increased profits hence comfort and safety requirements are usually not considered in most trotro. This revelation came to light when they compared foldable seats in the Mercedes Benz 207 sprinter to other vehicles like Nissan Urvan and Toyota Haice. The finding revealed that the leg room space in the Mercedes Benz was limited making it difficult for persons with disability to manoeuvre themselves and also feel comfortable while seated. Additionally, most observed seats in the Mercedes Benz Buses appeared to have exposed fabricated metals which further increases risk of injuries associated with this means of transport.



Figure 15: Foldable seats on trotro buses

Source: Fieldwork, 2020

Fare concessions

The literature on the living conditions of PWDs further sheds light on their enjoyment of different forms of concession meant to reduce the burden of life among such people. In most cases, these concessions are established by the state as welfare programmes, but owners of private establishments may also be required to offer services that align with such directives (Sackey, 2019). For instance, the Federal Republic of Nigeria offers room for all persons with disability to enjoy free transport services regardless of the owners but the enjoyment of free education and health care services in Nigeria are limited to only public establishments (Disability Rights Education & Defense Fund, 2000). Whereas such welfare packages differ from country to country, transport services have always been prominent among the catalogue of welfare services that PWDs enjoy in both developed and developing countries (United States Congress, 2009). Despite the silence of Ghana's Disability Act on PWDs' enjoyment of travel concessions, all trotro drivers engaged for the

study agreed that PWDs paid the same fare as other travelling groups and that there were no regulation that instructed them to do otherwise.

While requiring PWDs to pay the same fare, trotro drivers also claimed that the use of their discretion to exempt PWDs from the payment of fare was based on their assessment of the extent or severity of disability as well as condition of the traveller. By this, drivers were heard to commonly use words like *'I pity them'*, *'I do this because of my religion'* as well as *'these people are also human beings'*. Likewise, trotro drivers cited PWDs with long standing relations as another group that was easily exempted from the payment of fares. Though some drivers said that doing this was an act of compassion, other drivers refuted this gesture since some PWDs were known to have full-time jobs or were engaged in some form of economic activity. Besides, transport services are enjoyed by people who have the money to pay for it and not by those who hope for exemptions.

Another reason that prompted operators' refusal to exempt PWDs from the payment of fares was the perception that PWDs were quick tempered, difficult to handle and had also been known to rain insults over the least provocation. One driver offered an account of how PWDs insulted and threw tantrums when conductors failed to give them the requisite change. To this driver, such insults could be received even if their conductors were found to be 10 pesewas short of the required change. Outside the transport environment, other drivers also shared their experience of how blind beggars or wheelchair users had insulted drivers for not giving PWDs the opportunity to beg or seek alms from passengers. To some drivers, though they sympathise with the plight of PWDs, these acts sometimes make it

difficult for them to show compassion and subsequently exclude PWDs from the payment of fares.

Just as most transport operators endorsed the payment of approved fares by PWDs, participants also agreed that PWDs were sometimes allowed to join without paying the full fare. This only happens when PWDs approached trotro drivers or their conductors to ask for leniency since they couldn't afford the required fare. All trotro drivers agreed that the need for such gesture was not only a civil duty but a religious one since the tenets of both Christian and Islamic religions focus on compassion, helping the needy and love. While drivers' showed willingness to be lenient on PWDs who could not afford to pay the fare, it was also the case that these drivers did not support a call for legislation to abolish or reduce lorry fares for the disabled population. The following remarks illustrate trotro drivers stands on the issues:

This will not be necessary. One thing is that most drivers do not own the vehicles they use and they have to render accounts of their daily sales to their respective owners. So, requesting drivers to reduce fares or allow PWDs to join for free will not be necessary.

If the government should take such an action, PWDs in Ghana are going to suffer at the hands of trotro drivers since drivers will not be willing to pick them. [28-year-old Mercedes Benz 207 driver at Kwame Nkrumah Circle]

It will not be possible because when you buy fuel for your car, they wouldn't subsidize the price of fuel simply because we exempt

PWDs from paying fares. And so, if I pick about 4 PWDs, it will not make any sense to make them ride for free or reduce their fare. How will I make my sales and also maintain my vehicle? I have to take the fare by all means. The only exemption is not to charge any fee for their luggage. [33-year-old Mercedes Benz 207 driver at Kaneshie]

That would be difficult to achieve because not all drivers can cope with that loss in revenue especially those of us with smaller vehicle. Looking at the booking fees, daily wages for mate and low occupancy of my car, allowing PWDs to ride for free will make it difficult to achieve my daily sales target unless I decide to do it out of compassion. If they decide to make it a law, I will personally not abide by it since it will affect me in diverse ways. Some PWDs have jobs and can pay the full fare so asking us to give them a reduction or enjoy free rides will not make sense. [31-year-old Toyota Haice driver at Kaneshie]

From participants' remarks, offering travel concessions was the least support services they hoped for since this had the likelihood of significantly reducing their ability to meet daily or weekly sales targets. This was mainly because most drivers did not own the vehicle they operate and also considered their ability to meet sales target as an important variable in their employability. Aside the expectations of not meeting sales target, most participants expressed their desire for the State to rather

engage their respective car owners since such decisions could not be taken without owners' approval. Even if the owners were engaged, some participants were still sceptical on a positive response given a history of owners' opposition to any idea that threatens their sales targets.

The only identified form of concession that had the support of trotro drivers was the exemption of PWDs in the payment of fees when assistive walking aids like wheelchair, skates and crutches were placed in the boot or trunk of the vehicle. From the study, transport operators indicated that though there were no written laws to this effect, drivers caught for charging fees for keeping assistive walking aids in a vehicle's trunk may attract punitive measures from their local GPRTU leaders.

On the importance of travel concessions in enhancing PWDs' life, some trotro drivers disclosed that an imposition of such a directive may even worsen the plight of PWDs given the unresponsive nature of the current transport environment. Specifically, some drivers believed that imposing travel concessions may render PWDs unattractive especially when they travel in groups. Here, participants alluded that even when PWDs had the money to pay for transport services, some transport operators still refuse to stop for them to join their bus hence the imposition of a directive for PWDs to enjoy reduced or no fare will even heighten transport operators' objection to allowing them on board.

While trotro drivers considered travel concessions to be unnecessary, they rather called on the government to show a sign of good faith by either offering a dedicated bus service for the disability community or absorb the cost associated with such a directive since owners and operators of commercial vehicles did not

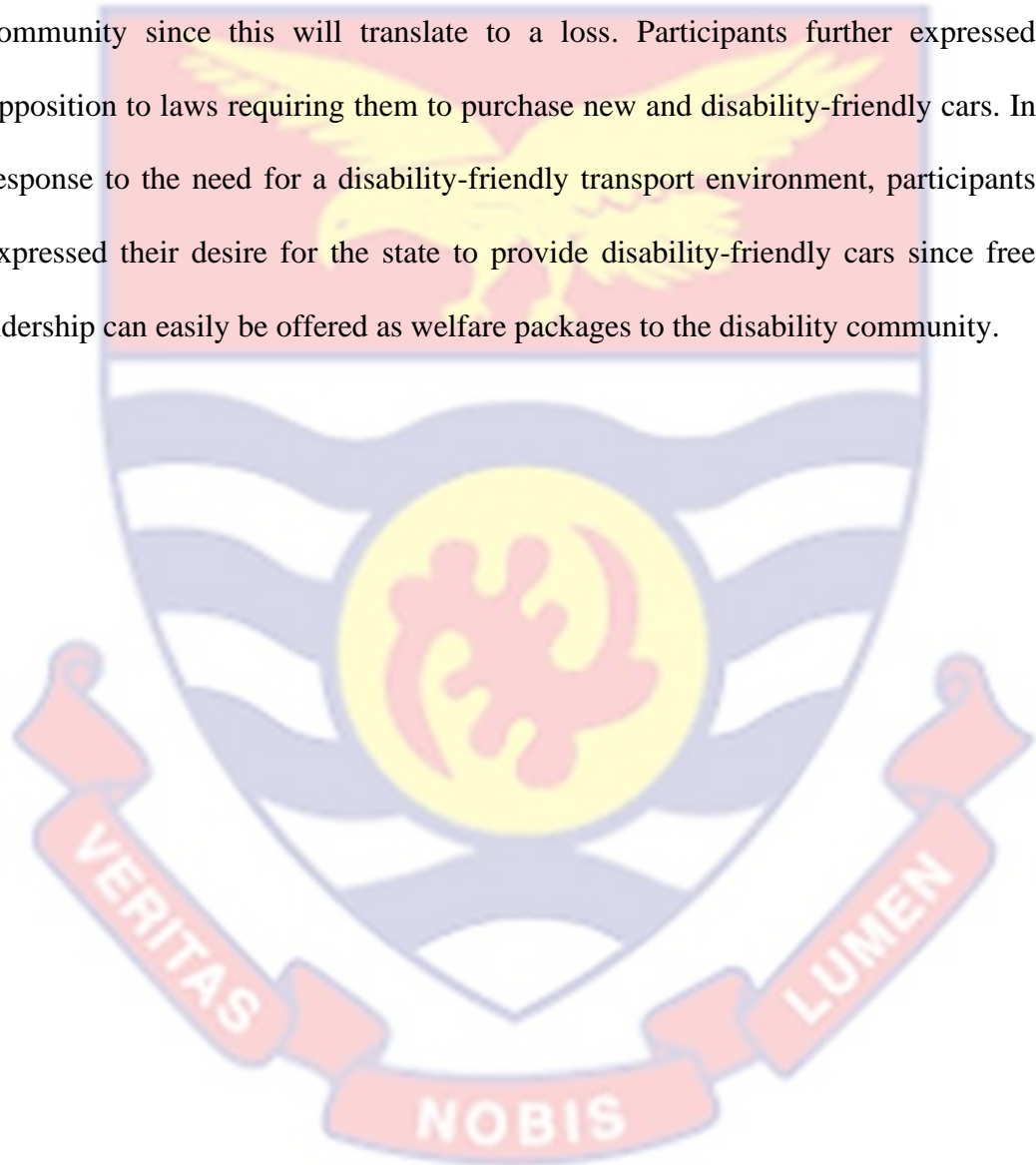
enjoy any subsidy or benefits when they purchase fuel, pay taxes or fees as well as renew or acquire drivers licence or road worthy certificate. To the trotro drivers, the combined effect of losing sales and paying the full cost of fees and taxes may cripple the already dwindling business since Uber and other ride sharing services have taken a considerable share of the GPRTU's hold of the commuter travelling population.

Unlike most trotro operators who refused to support the call to reduce or give free ridership, a few trotro drivers supported such a course. Among them was a driver who also owned the vehicle he operated. However, for the few who did not own their vehicles, religious beliefs were the common denominator influencing their motive. Here, participants expressed their views on how their willingness to support such a programme will attract the blessings of God and also deliver drivers from any misfortunes like accident. Likewise, some drivers remarked that God offers opportunities for people to be a blessing unto others hence a drivers' refusal to offer free ridership to PWDs who are mostly unemployed and poor would only translate to a disregard of God's commandments.

Chapter Summary

This Chapter highlights transport operators' view on Ghana's Disability Act and its associated transport provisions as well as any regulation that purports to offer dedicated transport services to PWDs. Transport operators claimed that all activities and support services were informed by common sense or intuition. A physical examination of vehicles at the respective study sites did not show any

indication of a priority or dedicated seats and ramps and neither did participants consider the provision of these facilities to be necessary since it increased their cost of operation. Furthermore, trotro operators also disclosed their intention to reject any law requiring them to reduce fares or offer free ridership to the disability community since this will translate to a loss. Participants further expressed opposition to laws requiring them to purchase new and disability-friendly cars. In response to the need for a disability-friendly transport environment, participants expressed their desire for the state to provide disability-friendly cars since free ridership can easily be offered as welfare packages to the disability community.



CHAPTER NINE

STAKEHOLDERS AND THEIR ROLES IN TRANSPORT PROVISION

FOR PWDS'

Introduction

This chapter presents the findings on the role of various stakeholders as they address the transport and mobility concerns of persons with disability in Accra. Specifically, the stakeholders engaged in this study include a national representative from the Ghana Private Road Transport Union (GPRTU), representative from the Department of Social Welfare (DSW), the Transport Unit of the Accra Metropolitan Assembly (AMA) and the Ghana Federation of Disability Association (GFD). This section was deemed useful since it offered an opportunity to examine the position of stakeholders on the issues that concern persons with disability.

Ghana Private Road Transport Union (GPRTU)

A national executive of the GPRTU was engaged since their office was situated in Accra and was also known to have an oversight responsibility over the activities of the Accra Metro GPRTU. Issues covered in this section include the existence or knowledge of a disability transport policy, provision of tangible and intangible support services as well as drivers' exposure to disability information.

Disability by-laws and policy

The stakeholder alluded to the notion that a poor transport service stands to impair people's access to various socio – economic activities. In making further claims, the participant from the GPRTU added that the critical role of transport in connecting people to key places has accounted for the reason why the GPRTU has never embarked on a nationwide strike since this may affect vulnerable people from enjoying critical services like healthcare. In view of the aforementioned, the study sought to ascertain if the GPRTU had a written or formal document that informed the delivery of such critical services to vulnerable people like those with disability.

The response of the GPRTU participant included the following:

No! It is not written down, but we use our discretion and this is a convention that all of us are aware of. What we do as a union is to encourage drivers to assist the disabled to join a bus. We encourage the drivers using various means like the priority loading system or exempting drivers from the payment of booking fees.

The participant echoed that the only policy instrument that borders on the activities of the GPRTU was its constitution but the dictates of this constitution does not offer any information on the provision of services to any dedicated travelling population. To fill this gap, the GPRTU admonishes its members to use their discretion in offering support services but various local terminals in Accra were cited to institute various incentive packages to encourage drivers to offer such support services. These incentives were seen in the enjoyment of ‘priority loading system’ at the

terminals. Here, drivers who were identified to offer free ridership were exempted from joining queues as other drivers took turns to cart passengers from one terminal to the other. While offering further clarification, the participant reiterated that drivers who enjoyed such 'priority loading system' always ended up making more trips and sales than other drivers. When a concern was raised about how such 'priority loading system' may hinder other drivers from reaching their sales target, the participant further revealed that, this approach was only limited to drivers who offered free ridership to many PWDs as compared to one or three PWDs.

In cases where the number of PWDs was low, the participant revealed that some terminals exempted drivers from the payment of loading fee. Here, the loading fee was identified as a flat token paid by each loading driver to their local GPRTU station. This token is paid anytime a vehicle leaves a station with passengers, and this payment did not consider whether the vehicle was filled to capacity. This loading fee was paid into a pool used for the daily upkeep of the terminal, including payment for the cleaning, maintenance and acquisition of tools needed by each station. To the stakeholder, the purpose of this exemption was to cushion drivers from losses incurred from the exempting PWDs from paying lorry fares.

The final approach employed by local GPRTU executives to encourage drivers to offer free ridership was to reimburse drivers through the use of tickets or coupons. Though seldomly used, these coupons were assigned to members of the disability community as free pass at various stations and by the end of the day's work, various drivers submit the coupons to their respective local executives for reimbursement.

Aside from the aforementioned methods, a common denominator revealed by the participant was the use of driver's discretion to voluntarily exempt PWDs from paying fares without requesting any of the identified incentives. To the participant, such actions were usually instituted on the grounds of compassion since the connotation of disability in many local settings depicts a poor and unemployed population group. Additionally, such compassion was extended when PWDs approach drivers to ask for leniency when they did not have enough money to pay the full fare.

When asked about the practicality of transport operators' adherence to these incentives since previous interview sessions with persons with disability revealed the full payment of lorry fares except in isolated cases where other passengers paid for them, the representative revealed that though GPRTU sympathise with the plight of PWDs, transport operators are businessmen and by this, such a behaviour was expected especially when no law enjoined them to offer free ridership. Asked if the GPRTU was willing to support a call for the enactment of laws that would exempt PWDs from the payment of fares. The participant responded as follows:

Yes! I can say with confidence that if this interview had been brought earlier (before August), we would have drafted a motion and presented at our quadrennial delegate conference for them to consider it to be enshrined in our constitutions. By this, we will have a particular document that can be used to punish recalcitrant drivers in various stations.

Just as the stakeholder revealed his eagerness to support such legislation, he reiterated that GPRTU was an organized group where members respected its leaders. By this, the call for such legislation would achieve better outcome if such a decision was championed by the leadership especially when such measures would be accompanied with punitive measures for recalcitrant drivers. In examining the factors that informed this decision, the stakeholder disclosed that road traffic crashes are a familiar consequence of the transport businesses and this incident is also known to be a leading cause of disability which render some people jobless. With this analogy, the call for such legislation will form part of the corporate social responsibility of the GPRTU. Additionally, support for such a call was also seen as a religious duty since such gestures may attract blessing from the Almighty and also offer protection to transport operators and passengers.

Intangible Support services

The Ghana Disability Act offers guidelines in reducing the effort or physical burden in joining public transport. This ranges from the physical alternation of terminal or vehicular environment to promoting positive attitudes towards the disability community. When asked if special seating arrangement or policy exist for PWDs, a key respondent responded as follows:

No! When a disabled person comes, there are two things involved.

When he is physically challenged, any other seat from the back of a trotro to the front is available for them. So apart from the front, the choice of seat depends on the time they arrive at the station.

With no knowledge on special seating arrangement, the study informed the stakeholder of local trotro operators' decision to reserve the front seat for PWDs'. Unfortunately, the stakeholder disagreed with this action especially when such seats were reserved for the visually impaired. Here, the stakeholder indicated that though local trotro operators reserve front seats as a way of reducing the effort and distance required to enter or disembark from a bus, these seats are supposed to be reserved for people who would act as principal witness to a driver especially in the case of an accident (if they survived the accident). By this, reserving the front seat for the visually impaired in particular may not augur well especially when such a person is needed to offer an eyewitness account. Aside disqualifying the visually impaired from using the front seat, the stakeholder appeared to be indifferent on where PWDs should sit but rather called on transport operators to offer seats that are closer to the entrance of public transport vehicles as compared to seats at the back.

Additionally, the study also examined if the national executive had any idea of a legislation that specifically required transport operators to offer such services to the disability community. Unfortunately, the GPRTU national executive's response was in the negative and to his defence, he claimed to have heard of Ghana's Disability Law but had not had the time to peruse the law despite the existence of the law for the past 14 years. Though the absence of priority seats was considered a breach of the dictates of the Ghana's Disability Act, this situation also offers some insight into key omissions of this law especially when it comes to

prescribing the location of such priority seats since the current law does not offer enough interpretation on this subject matter.

Aside from the priority seat, another support service that was examined was queuing for PWDs. This had been established to be at the discretion of the driver or his mate. The participant indicated that the absence of laws had been complimented with internal arrangements at various lorry stations. By this, some transport operators and their mates looked out for PWDs and other vulnerable population groups. Aside from scouting for them, the participant revealed that other stations only offered such exemptions when PWDs requested such services. Here, the National Executive indicated that the widely preferred practice among trotro operators was to wait for PWDs to request exemptions since it was difficult to distinguish between prospective travellers and other PWDs who use lorry stations as begging spots or places of economic activities.

Despite measures to exempt PWDs from joining queues, the findings of previous interviews with PWDs in Accra showed that queuing was a part of PWDs' daily life and this was partly due to other passengers' refusal to allow drivers to exempt them from skipping queues. The GPRTU official acknowledged the possibility of such occurrence especially in rush hours when demand exceeded the supply of transport services. However, he claimed that reports or complaints of such instances had not come to his outfit. From the data, a key contributory factor to other passengers' refusal to allow PWDs to skip queues was the absence of an operational guideline for public transport services since this would have addressed the issue of queuing among members of the disability community.

Physical Support Services

Aside from intangible support services like those enumerated, the conditions of vehicles also offer an avenue to examine the priority of stakeholders when it comes to support services for the disability community. The GPRTU official admitted that vehicles used by the GPRTU fell short of current and modern standards as seen from other transport service operators like the Inter-City STC, Metro Mass Transit and Ayalolo Transit Services. To explain why their vehicles were deemed disability unfriendly, the stakeholder remarked that:

One thing that comes to mind is that GPRTU as a transport organization usually does not have a role to play or an input in the manufacturing of vehicles. Most of our vehicles are high and also not disability friendly. So, what we do is that in every loading terminal, we make sure that the physically challenged are given some special assistance to board and then to sit at where they can easily get off when they get to their destinations.

From the remark, the stakeholder's argument centred on the high floor height of most GPRTU buses and this was found to be a common denominator in all the study sites. A key reason why GPRTU has not been able to upgrade its vehicular fleet is the lack of support from the government to upscale its services. Here, the participant reiterated that, such expected assistance begins from the absorption of GPRTU into government apparatus as seen in the case of Burkina Faso. By this, the participant argued for the government to absorb GPRTU under its jurisdiction instead of establishing state transport services like the STC and MMT. Like in

Burkina Faso, the conversion of GPRTU from a private to quasi-government institution offers the government the opportunity to fully regulate the activities of the Union especially when it comes to the provision of public transport services for vulnerable commuters.

The participant further added that supervision by the state would offer guidelines on which vehicles are to be used for public transport services. By extension, this will also offer GPRTU the opportunity to interact with vehicle manufacturers and negotiate on standards that suit the Ghanaian terrain. The outcome of such provision may witness the use of modern vehicles with kneeling effect, priority seats and spaces as well as assistive communication technology. When asked if these aspirations would not increase their cost of operation, the stakeholder opined that existing hire purchase arrangements with the government would cushion transport operators who may not afford these new cars but added that passengers should be ready to pay a higher fare since such new buses come at a much higher cost. To offer some level of clarity on the responsiveness of existing GPRTU's buses to PWDs' travel needs, the participant was asked to rate the condition of GPRTU buses from 1 to 10. The following remark was given:

...Then we can talk only about 3. Looking at our vehicular conditions, we will only talk about 3 on a scale and we cannot go beyond that...

In rationalising the score, the stakeholder compared the conditions of GPRTU buses to those of STC and MMT. Here, the participant disclosed that GPRTU buses, especially the Mercedes Benz 207 series, were less comfortable with little leg room

space and high floor height. Aside from the legroom, the stakeholder also revealed a sharp disparity between the interior condition of most trotro buses since some appear to show visible signs of torn seats, protruding objects and rusty metals.

The final physical support service that was reviewed for the study centred on the condition of transport terminals. When asked if the GPRTU considers its terminals to be disability friendly, participant's response included the following:

I don't think the structure we use as a loading terminal needs any provision for the physical disability. In our homes, we share the same benches with the disabled and I don't see why we should make a special provision for them in our stations. So, in my mind, the structures and terminals are equally friendly.

Though this participant offered a clear definition on disability, he however did not consider the conditions of the transport terminals in Accra to be a barrier to PWDs usage. From the narrative, a prime reason that informed his assertion was the observation of how persons with disability easily use household items and facilities with the other members of society. He also claimed that no complaints had come to his office from the disability community on the state of the terminals. Using the Tudu lorry station as a point of reference, the key informant from GPRTU was asked to assess the ease of navigation of the station by a wheelchair user or a visually impaired especially when there were no drop curbs and assistive aids. He alluded to the fact that a PWD cannot easily use the Tudu station but maintained his position that waiting time in most lorry stations was about a minute hence there

was no need to modify existing facilities to accommodate the disabled. Though this remark came as a surprise, Ashigbi et al., (2017) has indicated how a similar assumption has resulted in a sluggish approach to the modification of the built environment in key public facilities including the University of Ghana, Parliament House and Supreme Court.

When prompted that the Ghana Disability Act enjoins owners or operators of public facilities to ensure easy accessibility for persons with disability, the GPRTU official argued that lorry stations in Ghana belong to various District Assemblies (DA) and that GPRTU were only tenants of these facilities. In his views, the District Assemblies only sought the opinions of engineers and did not consult the GPRTU when such terminals were being designed and constructed. When asked if the GPRTU has made suggestions on what facilities to include in the construction of any terminal, the participant opined that, none of these suggestions had been adhered to. Additionally, any request for a modification of current transport terminals may not materialise since the District Assembly may surcharge GPRTU for such modifications. The participant cited an example where a request for the construction of a new urinal at the Tudu lorry station appeared to have fallen on deaf ears even though numerous reminders had been served on the Assembly. By extension, the stakeholder was sceptical if further requests for the modification of any terminal would be considered and granted.

Driver Training and Disability Information

While driving is considered a lifelong skill, knowledge and training in prompting sanity on the road as well as ensuring a better customer experience become key to the operations of various transport service providers including the GPRTU. When asked if the GPRTU had an outline of educational programmes for its members, the response was in the affirmative and while recounting previous training sessions, the highlight of these centred on road safety awareness, first aid and vehicular maintenance. In seeking clarity, the GPRTU official was asked if such education had ever centred on disability community as focus for services delivery. The response is revealed the following:

No! There has never been anything like that. Even with the enactment of LI 2180, the Road Safety Commission and DVLA took it up upon themselves to go round the country to educate drivers but nothing like that has been done on disability. We hold various road campaigns and other similar programmes for our drivers but we don't mention the disabled.

From participants' remarks, the focus of all educational programmes from the GPRTU had largely centred on road safety issues. This was emphasised in the way the key informant constantly referred to the Road Traffic Regulations (L.I. 2180) and considered it as the drivers Bible. When asked about the reason for the seemingly absence of an educational programme highlighting the needs of vulnerable travel population like PWDs, the key informant was of the inclination that drivers were generally required to uphold better business practices by offering

the needed help to all passengers. This comment re-echoed the key informant's earlier stand on using discretion or common sense as a guiding principle in trotro operators' activities. When reminded that some trotro operators had refused PWDs entry while others had charged fees to keep a wheelchair in the trunk or boot of a car, the key informant responded that drivers were always under pressure to meet their daily sales targets and though such practices were unnecessary, very few complaints from the disability community had reached his outfit. Here, the key informant highlighted a plan to encourage the public to report drivers who offered unsatisfactory service since this would offer an indication or guidelines on what topics to include in driver educational programmes as well as what punishment to give out to drivers who falter.

In all, the key informant from the GPRTU offered enough reasons to highlight his disinterest in ensuring the creation of a barrier free transport services. Though the absence of operational guidelines may partly fuel this, this situation also reveals how poor enforcement of existing transport related laws have resulted in poor services delivered by the GPRTU.

Department of Social Welfare (DSW)

The Department of Social Welfare (DSW) is under the Ministry of Gender, Children and Social Protection and its mandate is to champion the integration of various disadvantaged and vulnerable populations into mainstream society. This mandate has seen a lot of social welfare programmes that reflect various needs of Ghana's disability population. Prominent among the legislative instruments that

guide the operations of this agency is both the Ghana Disability Act and the 1992 Constitution of Ghana which seeks to offer equal rights and opportunity for all people regardless of one's disability, status or creed. Aside emphasising the mobility and transport needs of persons with disability, the following paragraphs sheds light on other areas of priority for this agency when it comes to the needs of people living with a disability.

Transport Service Provision By DSW

With a legal educational background, the role of transport in connecting people to various life enhancing opportunities became apparent as the key informant revealed how the poor public transport services had hindered PWDs' ability to enjoy educational, health and other programmes instituted by the DSW. When asked if the DSW has a specific transport related welfare provision for the disability community, the response was negative. According to her, the disability community used to enjoy such provision in the past since her outfit had an arrangement that offered free trips for PWDs who travelled to other parts of the country using InterCity STC coaches. While the key informant could not recall the last time such service was extended to PWDs, she however suspected the dwindling market hold of the STC as the reason for the collapse of that arrangement.

The key informant added that the activities of the Metro Mass Transit Services were also a social welfare programme since the target for its operations was the poor and vulnerable in society. Evidence of this can be seen in the payment of 20 per cent less the market price for transport services though Yobo (2013) has warned of the risk of collapsing the company as seen in the gradual reduction of its

vehicular fleets. When asked if the DSW had made attempts at engaging the GPRTU to provide similar transport related social welfare packages to PWDs, her response was negative. In probing further, the key informant reiterated that the needs of the disability community and vulnerable populations were so enormous that they could not focus on only their travel needs.

Additionally, the study sought to ascertain if the DSW had made efforts to revive their arrangement with the STC given the government's effort to revive this state-owned transport service. Unfortunately, the participant indicated that both the STC and DSW were government agencies hence any attempt to highlight the government's deficiency to maintain its previously held commitment may end up with repercussions. These may include losing one's job or position as well as being identified to be influenced by other opposition parties. In view of the DSW's low commitment to the transport needs of the disability community, the key informant expressed her disappointment in the various disability groups and NGOs who only focus on cash transfers and monetary based welfare packages instead of championing a call for stakeholders to ensure a barrier free transport service. Here, the key informant also expressed her worry on how the disability community easily mount platforms or threaten demonstrations if there is a delay in the release of the District Assembly Disability Fund (DADF) but could not see a similar effort towards a modification of the built environment. Finally, the key informant admonished the disability community to prioritise their needs and also consider the fight for a barrier-free transport environment as a collective one and not the direct responsibility of public agencies like the DSW.

Transport Department of the Accra Metropolitan Assembly

While the construction of the fixed physical transport infrastructure like roads is primarily limited to the Ministry of Transport or Roads and Highway, the Transport Department of the various Metropolitan, Municipal and District Assemblies is known to be responsible for the management of transport services. This unique role of the AMA's Transport Department necessitated its selection for the study since it offers the opportunity to examine the AMA's priority in creating barrier free transport services for all travelling groups. In seeking clarity on the specific duties of the Transport Department, the representative offered the following explanation:

Our role is basically transport planning and let me put it on record that this role has not been operationalised in our country until 2016 though the department was formed in 2014. And so, if you look at our history of approaching transport, we have not had a local government clearly defining that until 2014. Even before that, I think that transportation issues had been taken for granted and that's to put it in summary.

As indicated in the response, the Head of the Transport Department revealed that their core duty centred on planning of transport services. Despite the establishment of guidelines for the development and management of transport services in Ghana by National Transport Policy of 2008, the AMA had shown little interest in making this a reality especially when it took six years to establish a department for transport. Prior to the establishment of the Transport Department in 2014, a review of the AMA's strategic plan 1 and 2 revealed its focus on developing transport and

communication but the key informant disclosed that these strategic goals centred on increasing connectivity and not necessarily offering a user centred experience that focuses on the unique needs of various travel groups.

Evidence of transport investment and programmes for increased connectivity include the introduction of the various mass transit projects like the Metro Mass Transit (MMT) and the Bus Rapid Transit (BRT) system that connect Tudu to Amasaman. Other transport programmes identified in these strategic plans relate to road safety as seen in a recent publication of the AMA titled '*Pedestrian Road Safety Action Plan for The Accra Metropolitan Assembly 2018-2022*'. Despite AMA's attempts to ensure the general safety of the travelling environment, the recent establishment of its outfit has also limited its ability to effect the needed changes in various sections of Accra's transport network since the transport department was less resourced.

To be specific, the key informant indicated that transport data in the Accra Metropolitan Assembly was either obsolete or non-existent and this situation had heightened its struggles to uncover transport related challenges that pertained to any travelling group. As at the time of the interview, the key informant revealed that his outfit had just received a grant from a development partner that was geared towards the development of key transport data that relates to both pedestrian and vehicular movement, road safety, congestion or parking as well as a GIS component that was needed to develop a transport profile for the AMA. This was best captured in the following remark:

As I sit now, we are collecting data, trying to create a database of issues we consider for transport planning and definitely, barrier-free mobility will be part of it. Also, we have mapped all our roads and digitised them. Let me say that we now have a city profile for transport in terms of the modes and it didn't use to be like that until last year because we have taken it upon ourselves to provide that data.

When the study inquired why the data collection exercise did not feature anything on vulnerable road users like PWDs, the key informant expressed his disappointment with both the central and local governments especially when it came to the provision of funds for research. The absence of such research activities he indicated, heightened the challenges of the Transport Department in identifying the needs of various road users. With regards to the recent operations of the Transport Department, the key informant confirmed that both his outfit and the AMA had not undertaken any transport related programmes that explicitly cited PWDs or other vulnerable populations as beneficiaries. He stressed that the receipt of grants was accompanied with conditionalities which largely reflected the donor's interest and needs, hence the exclusion of disability related variables in their ongoing project.

Transport Related Disability by-laws by Accra Metropolitan Assembly

As a central government representative at the local level, the Transport Director made a remark which suggested the assumption of a homogenous travelling population since very little was heard of the vulnerable population. As the local authority, the AMA is bound by duty to ensure compliance with all national laws

which includes Ghana's Disability Act and its transport provision. In view of AMA's attempt to manage transport issues within its jurisdiction, the key informant mentioned the enactment of transport related by-laws that pertained to parking and use of road space. Though these by-laws provide a framework for the management of the physical environment, they also appeared to assume that all travellers in Accra were 'abled-bodied' and did not have a disability. When the study inquired if the transport department or AMA had a dedicated transport policy for vulnerable populations, the following remark was gathered:

No! No! Let me say that nobody will plan for the vulnerable if the government does not and it is the government's responsibility to make sure that they are incorporated. We have only looked at it from the economic empowerment point of view left out their mobility issues which is also not good. In fact, the leadership needed to do that is just not there.

From the aforementioned, he confirmed the non-existence of any local by-law or policy that ensured a barrier free transport service for any vulnerable travelling population. To the key informant, a critical factor that accounted for the alienation of PWDs was the lack of political will to champion the needs of PWDs. He indicated that the erroneous assumption of considering transport issues as a matter of constructing roads without regards to the specific needs of various user groups also contributed to the little attention offered to vulnerable travellers. Evidence of this assumption could be seen in political promises as revealed in President Akuffo Addo's proclamation of 2020 as a year for the construction or repair of roads in

Ghana (Gyesi, 2019). Of course, such proclamation leaves little emphasis on the conditions of vehicles or corresponding transport services that are needed to facilitate the movement of all travellers.

While the delivery of transport services in Ghana is dominated by the private sector (GPRTU), the key informant affirmed the notion that services rendered to the disability community had been one of compassion or charity and not because the GPRTU was enjoined to comply with local or national legislations. When asked about laws that govern the operations of the GPRTU, he mentioned laws that related to the registration of vehicles at the DVLA and local GPRTU unions, payment of statutory fees and taxes as well as the observance of all driver-related regulations that largely centred on the Road Traffic Regulations (L.I. 2180). On reviewing this regulation, no mention of support services for any travel group was cited neither was there any mention of vehicular standards for public use. This finding was not just unique to the AMA since Odame (2017) also revealed the absence of policy on transport services for students with disability in the University of Cape Coast.

Another key factor that influenced the absence of attention or policy on the travel needs of PWDs was the focus on their economic empowerment since this was considered critical to their survival. To key informant, politicians preferred to offer such services given the attention and praises received for such gestures. From the literature, such economic empowerment programmes primarily centre on cash transfers from the LEAP and DCF as well as periodic donations from philanthropists to various vulnerable groups. Sackey (2019) also purports that a key

reason that accounts for the emphasis on such economic relief is the international attention and accolades that are attributed to governments who offer such welfare packages or support systems to cater for the needs of poor and vulnerable people. This is very peculiar in countries like Ghana which has ratified the United Nations Millennium and Sustainable Development Goals that focuses on ending poverty for all people.

Relationship with public transport operators

Having revealed his department's concentration in gathering transport data at the time of the study, the operations of the GPRTU remained topical in participants' discussion given the GPRTUs' dominance in Accra's transport sector. In view of this, the key informant indicated that the relationship between his outfit and the GPRTU has been one of a regulator since the mandate of transport planning also gives the AMA an oversight responsibility on the activities of all transport operators within its jurisdiction. This relationship was best described in the following statement:

So everywhere there is transport operation, there's supposed to be some form of regulation. Let me say that we have one of the biggest challenges as a country. In fact, we have left GPRTU to self-regulate and that has also been part of the body of politics in this country. Nobody regulates their activities when it comes to the type of vehicles they use and how they run their operations.

Although the Transport Department regulates some aspects of the transport activities in Accra, the key informant reiterated that the GPRTU had also

established itself as a major force that regulated its own operations. Evidence of such self-regulation styles can be witnessed in the GPRTU's choice of support services to various travelling populations, preferred areas of coverage as well as preferred choice of a means of transport. To the AMA, this self-regulating style and dominant status in the public transport sector has also made the GPRTU powerful when it comes to influencing national politics. Again, this situation has even made it difficult for politicians to regulate the activities of the Union when it comes to setting vehicular standards or streamlining their operations to meet modern/international standards. Confirmation of these remarks can be seen in earlier interview sessions where the GPRTU representative openly refuted calls for the acquisition of disability friendly vehicles or the exemptions of PWDs from paying lorry fares. To GPRTU members, such demands from the local authorities was a breach to their status as a private transport operator but may however consider such a request only if the local authorities offered financial support since the cost of making modification or acquiring new cars was high.

With GPRTU's hesitation to acquire disability friendly public transport buses or modify existing buses, the AMA's key informant identified some programmes by the local authorities and the central government to ensure barrier-free transport services. It must be noted that these projects were not solely undertaken with the disability community in mind but were undertaken as part of a bigger project to ease congestion and encourage commuters to join public transport. Prominent among these projects was the Bus Rapid Transit (BRT) services commonly known as 'Ayalolo' in Accra. On a closer inspection, the study found

the Ayalolo buses (Figure 16) to be the best-known disability friendly public transport option in Accra since it had a kneeling effect that made it easy for wheelchair users to join. Despite no travel concession, these buses also had contrasting colours for the partially sighted, dedicated space for wheelchair and the blind as well as the assistive communication gadgets that aided PWDs.



Figure 16: Ayalolo Buses

Source: Fieldwork, 2020

The BRT did not go beyond the pilot stages as it was bedevilled with a series of challenges. Among such challenges, Amarteifio (2018) purports that poor management, over pricing of buses and political interference in the running of the BRT remained prominent in collapsing this government project despite the 151 million dollars invested by the World Bank and other partners. Even if this project had succeeded, its low market share of the commuter population may still have hindered the BRT's availability and competitiveness in the transport sector as seen in the case of the Metro Mass Transport services (Akoto, 2017).

Accessibility Ambassador of the Ghana Federation of Disability Association (GFD)

While other stakeholders appeared to be non-members of GFD or did not have a disability, the Accessibility Ambassador who was popular among the disability community was also a wheelchair user. In the interaction, he made it clear that the creation of his office was necessitated by the Ghana Federation of Disability Association and DANIDA who offered the needed resources to increase awareness on how the design of the built environment influences PWDs' ability to enjoy opportunities like the general population. To this key informant, the needed training and certification as a National Accessibility Ambassador was funded by DANIDA but this position did not come with any remuneration since DANIDA's support was only limited to the training and certification.

Another reason purported to have necessitated the training of an Accessibility Ambassador was the need for an alternative advocacy approach since the GFD had heavily focused on press conferences as a primary medium of getting public attention to remove barriers in the physical environment. To this key informant, DANIDA's resources and reach of influence propelled the disability community to engage owners and administrators of public facilities on a one-on-one basis instead of relying on press conferences. During such engagements, Ghana's Disability Act was used as a primary policy instrument to offer recommendations on the creation of an inclusive environment. This role was best captured in the following remark:

We used to talk at press conferences on the need to remove barriers, but we didn't succeed in getting the desired changes in our environment. And so, DANIDA came to train some of our people to go to the ground to engage people. You see, when you go on evangelism, some people go from house to house to preach about Jesus Christ and we also believe that when we use this method, we can succeed more than what we used to do. That's why we also adopted that strategy and it's working.

While the aforementioned remark highlighted the Accessibility Ambassadors' new working approach, the data further revealed that the focus of such ambassadorial position was limited to modifying public facilities like schools, embassies and hospitals. This was made clear when the key informant emphasized his role in ensuring the inclusion of disability friendly facilities in the construction of the New AMA building and the Multi-court complex in Accra. Though this did not come easy, he opined that constant engagement with the estate managers of these facilities as well as his outfit's instance on complying with the dictates of the Ghana's Disability Act became key in the realisation of identified inclusive facilities. In fact, even after the completion of these building projects, the key informant highlighted his role in auditing the said facilities to ensure their full compliance.

Beyond these newly constructed facilities, the Accessibility Ambassador also shared an account of how his team had engaged various faith-based organisations, schools and embassies on the need to ensure they complied with the

dictates of the Disability Act. Despite some level of success attained in this area, key government facilities like public schools and other government offices have failed to adhere to such directives despite countless reminders. Reasons that account for the delay in modifying the built environment generally centered on poor funding and lack of space in the physical environment to accommodate such changes. As observed by Danso et al. (2017), the inaccessibility nature of most public facilities like Ghana's Parliament House, Supreme Court and public schools is a testament of facility managers neglect of disabled peoples' travel need especially when Ghana's Disability Act gave a 10-year moratorium for such modifications to be implemented by 2016.

Advocacy for Accessible Public Transport

Having focused on the need to modify the built environment, the study raised concerns on why transport services did not feature in the narrative of the Accessibility Ambassador since it also constituted a key component of the built environment. Additionally, transport services connect people to these facilities hence the omission of an advocacy programme for an inclusive transport service does not portray a perfect picture of an inclusive environment. In responding to the study's inquiry, the key informant revealed the following:

With the transport system, what we need is a policy because we don't manufacture cars in Ghana especially when trotro owners only buy cars they can afford. So, we can't stop people from going into business but for the buildings in your country, whether we like it or not, it is for us and we can change it. At this point, we

can only lobby for the government to bring accessible buses and one clear example is Ayalolo but how many are they? As for me, my believe is that trotro must be there, Ayalolo should also be there and everywhere as well.

The key informant concluded that the condition of public transport buses in Accra did not meet his criteria since previous experiences in the use of public transport in Australia and other European countries revealed a sharp contrast. While highlighting the limitations of current trotro buses to individual freedom in Accra, he was quick to mention the high floor height and absence of ramps in most GPRTU stations. Despite these challenges, the participant indicated that a call for the replacement of current public transport buses with modern or disability friendly options might not constitute a realistic approach since such buses were not manufactured in Ghana. By extension, the cost implication associated with the procurement of such disability friendly buses may further heighten the barrier to entry into the public transport space since such buses are more expensive than the preferred second-hand vehicles used for trotro services. The remark is also confirmed by Obeng-Odoom (2010) who classified most commercial buses in Ghana to be imported second-hand vehicles from Asia, Europe or America which are usually cheaper due to their high carbon emission rate or non-compliance to modern standards like low floor height.

On the other hand, the participant also insisted that emphasis on compulsory modification of existing public transport buses may put some transport operators out of business since the perceived cost of such modification may be expensive for

transport operators especially when the GPRTU's market hold was threatened by emerging service providers like Uber. While expressing the helplessness of his outfit in advocating for a change in GPRTU buses, the key informant however identified government intervention in the supply and running of accessible public transport as the best solution since the Bus Rapid Transit offered a good indication of the government capacity to offer such service. Despite citing the BRT as the most accessible transport option, the key informant was quick to add that the low market share and limited operational lines imply that many PWDs' in other parts of Accra might never enjoy such services hence further injection of capital into this venture would be needed.

On the back of participants' helplessness in championing an advocacy for a change in vehicular conditions, the participant divulged that much of his effort has been dedicated to changing the attitude of transport operators towards the disability community. This focus was necessitated by numerous reports from members of the disability community who have been subjected to poor treatment by transport operators. Specifically, such reports have centred on drivers' refusal to pick PWDs' by the roadside, charging extra fees for keeping wheelchairs in the trunk as well as refusing to offer dedicated services like priority seats. In highlighting the extent of his engagement, the key informant disclosed the following:

We go to the various stations to engage them, show the drivers the disability Act and mark the place that reminds them of our transport needs. Today, when you are a wheelchair user and you go to the Dodowa station, they will lobby somebody to get up from

the front for you to sit down. Additionally, when they see any person with disability, they remember me and accord them with the necessary support. Unfortunately, these services are limited to the stations and if it is not a station car, you are likely to encounter that challenge.

With many GPRTU stations in Accra, the key informant cited the Dodowa and La terminals as two locations that had witnessed numerous interactions with his outfit. Key reasons that informed the choice of these two terminals included the stakeholders' familiarity with transport operators at the identified terminals as well as their proximity to the headquarters of the Federation of Disability Associations. Before the said engagements, the key informant reiterated that transport operators at the said terminals preferred to offer their boots or trunks to traders since such usage was done at a fee. To deter wheelchair users from enjoying this service for free, transport operators consistently complained of faulty or inaccessible boot (trunk). Since PWD's had no way to confirm such claims, the next travel option was to hope for a positive response from another driver unless wheelchair users were either willing to pay to keep their wheelchair in the boot or ready to buy an extra seat on board for their wheelchair.

In all, such interactions were held with only the leadership of each union since it was difficult to meet a cross section of drivers at each station. Inasmuch as such meetings offered the Accessibility Ambassador the opportunity to enlighten drivers on the dictates of Ghana's Disability Act, the expected results were only realised in these two locations leaving out many unattended stations. Specifically,

the key informant reiterated that, support services received from such drivers witnessed a significant improvement since drivers were now less inclined to charge a fee for keeping wheelchairs in their trunks, readily offer priority seats for person with disability as well as offer physical support to PWDs as they joined or alighted from buses.

While these appeared to yield some successes, the key informant was also quick to add that reports of transport operators' interaction with PWD's at various bus stops were mostly negative and this was peculiar to wheelchair users and other physically challenged who required considerable assistance or time in joining public transport. To him, the relatively long period of time required for PWDs to join a bus was a primary factor that made wheelchair users unattractive to transport operators since such drivers may be outwitted by competitors when it comes to reaching prospective passengers. Here, the Accessibility Ambassador claimed that such transport operators were usually non-unionised drivers since efforts to trace and report such recalcitrant drivers at various local stations had proven unsuccessful.

Aside the need to outwit other transport operators', the Accessibility Ambassador made it clear that harassment from the Police also accounted for reasons why wheelchair users remained unattractive to some transport operators. While explaining this point, the key informant maintained that current road laws prohibit vehicles from driving with their boot or trunk opened and even though the dimension of some wheelchairs required drivers to keep their trunk opened, the need to avoid confrontation with the Police also accounts for driver's hesitation in

allowing wheelchair users to join their vehicles. Specifically, the participant cited operators of the Mercedes Benz 207 sprinter as the culprit of such cases but also called for a review of policy to encourage drivers to keep wheelchairs in their trunk even if such drivers would have to drive around with their trunk opened.

Challenges Associated with Advocacy Programmes

While the Accessibility Ambassador expressed a mixed feeling on the success of his activities, the need to upscale the scope of his operations appeared topical in his assertions. As an approach to examine ways of upscaling such engagements with transport operators, the study inquired if the participant had resorted to mass media since most observations from the field revealed drivers' reliance on radio as means of entertainment and medium of getting information. Although using this medium would reduce the time and energy required to engage each lorry station in Accra, the key informant's response was as follows:

That is where the problem is. We have to buy airtime, and this is because radio stations have become a business unless there is a disability event where someone or a radio station will call us for our inputs but this is not enough. We need the airtime to be talking and even if we get access to radio stations every day, we will like it.

From his remark, commercial interest of radio stations in Accra remained a key barrier to his outfit's access to these platforms. This is typically so as the competitiveness of radio airtime and the associated cost attached to these airtimes reduced poor organizations' ability to reach out to a target audience. To the key

informant, the only source of funds for the disability community was the central government. Aside from the delay in releasing these funds, pressure on the needs to meet various interest groups made it difficult for his outfit to receive funds for such advocacy programmes. When the study inquired if a fraction of the Disability Common Fund could be dedicated to these activities, he revealed that though this funding option was available, delay in releasing such funds induces the fund managers to prioritise critical areas like economic empowerment and health. In fact, being a member of the disability fund managers committee, the key informant disclosed that some districts in Accra were owed in arrears of Three quarters.

The key informant further claimed that efforts to request for free airtime had yielded no result since the opportunity cost of such free time was enormous for radio managers. Being a popular disability figure in Ghana, the key informant disclosed that the only time he got media attention was when media firms required clarification on the activities of the disability community. Furthermore, the participant disclosed that appeals for sponsorship from various cooperate organisations had yielded no result since disability issues did not attract the expected media traffic that offered marketing platforms to cooperate organisations to reach their clients. As at the time of this study, a review of current airways only identified two exclusive disability talk shows which were hosted and funded by private individuals. Of these two, 'Let's Talk Ability Tv Show' which was hosted by Former Gender Minister Otiko Djaba last aired in 2019 while the other programme 'The Helping Hand TV Show' is currently supported by public

donations and religious associates of Bishop Charles Hackman who is the host of this programme.

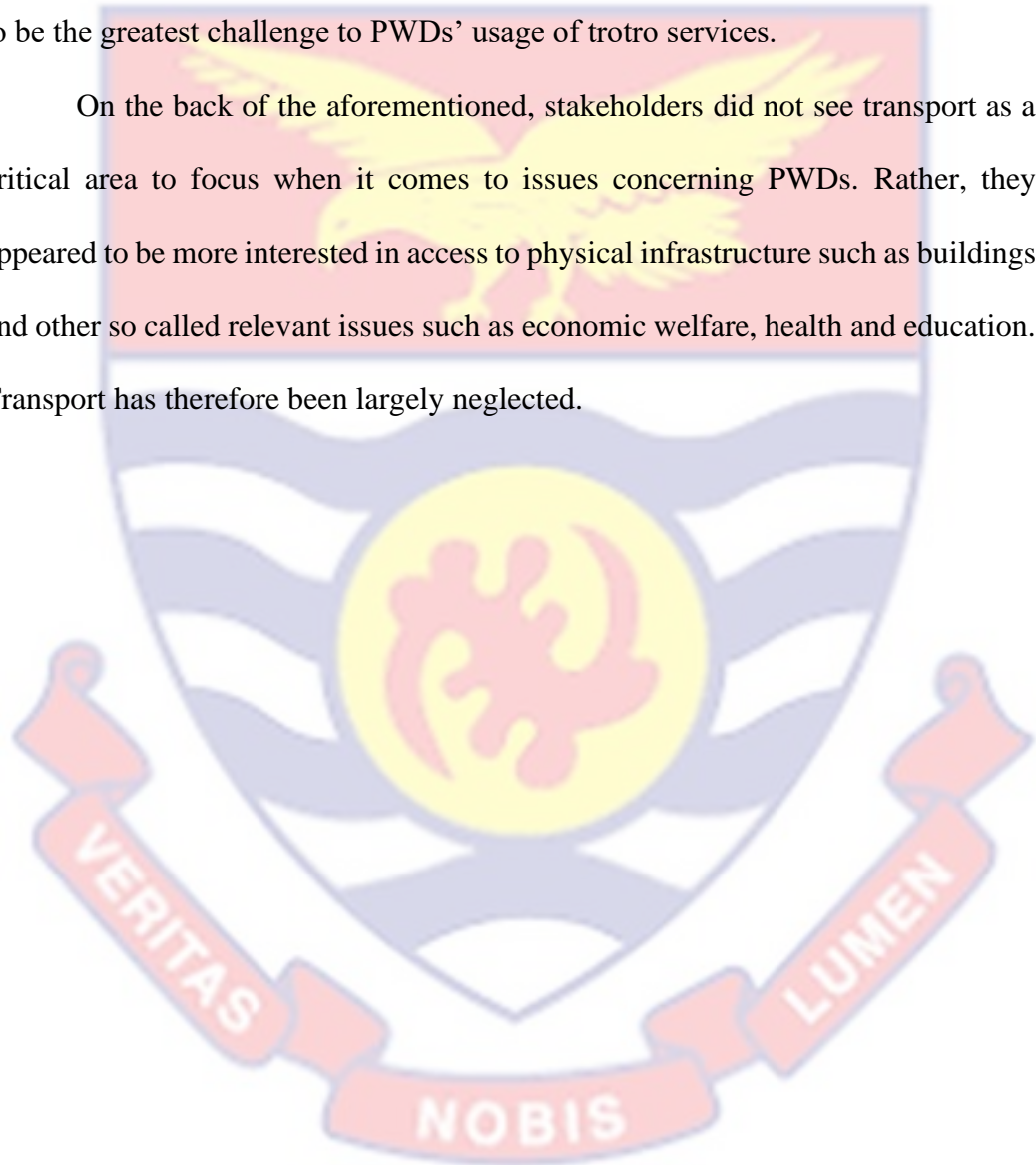
Chapter Summary

This chapter highlights the activities of key stakeholders in meeting the mobility needs of the disability community. Among the stakeholders is a representative of the GPRTU who identified the absence of guidelines for the operation of public transport but outlined the use of common sense as a guiding principle in addressing the needs of the disability community. The key informant from GPRTU indicated his lack of knowledge on the transport provision of Ghana's Disability Act but appeared to agree on the need to adhere to this law since road crashes is a leading cause of disability. Despite the Department of Social Welfare's (DSW) mandate to ensure the integration of all persons with disability into society, financial and political constraints have resulted in the DSW's focus on critical aspect of PWDs' life such as access to health, education and employment leaving out their transport needs.

The Transport Director of the AMA observed that whereas his outfit's mandate centred on the management of transport issues, lack of funding and the recent establishment of the AMA's transport department has limited its ability to enact by-laws and also enforce the transport provision of Ghana's Disability Act. Finally, the Accessibility Ambassador of the Ghana Federation of Disability Associations (GFD) also centred on championing an advocacy for the creation of an inclusive environment. Whereas the focus of his activities centred on the

modification of the built environment, the key informant was sceptical about the reality of proposing a legislation to compel transport operators to switch to disability friendly buses. Rather, the key informant preferred to influence transport operators' attitude towards the disability community since this has been identified to be the greatest challenge to PWDs' usage of trotro services.

On the back of the aforementioned, stakeholders did not see transport as a critical area to focus when it comes to issues concerning PWDs. Rather, they appeared to be more interested in access to physical infrastructure such as buildings and other so called relevant issues such as economic welfare, health and education. Transport has therefore been largely neglected.



CHAPTER TEN

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter presents the summary of the research methods employed to examine the responsiveness of public transport services to the needs of persons with disability as well as the major findings. Additionally, the Chapter highlights conclusions from the study and make recommendations on key actions that needs to be executed to address the travel needs of persons with disability in Accra. Finally, the study's contribution to knowledge both in terms of theory and practice are also enumerated.

Context of the study

This study was necessitated by the focus of academic attention on the use of objective accessibility approaches as the primary tool for the measurement of transport related social exclusion which also alienates minority travelling populations like those with disability. Accordingly, this study focuses on the use of a subjective accessibility approach as a way of highlighting PWDs' extent of using trotro services in the Accra Metropolitan Area which has the highest urban disability population and also known to have the highest vehicular population in Ghana. Specifically, the study sought to:

1. Explore persons with disability' knowledge on the concept of disability.
2. Assess the factors that influence PWDs usage of public transport services in Accra.

3. Explore strategies adopted by PWDs to overcome their transport-related social exclusion.
4. Examine how Transport Operators' perceived thoughts of disability shape transport support services extended to PWDs.
5. Examine the role of stakeholders in addressing the mobility concerns of PWD.

While focusing on participants lived experiences to highlight PWD's limitation in using public transport services, an exploratory research approach was employed since it offered the opportunity to shine light on issues that have not received much attention. Specifically, a qualitative research approach was employed since it offers a suitable platform to acquire a deeper perspective of participants' reality in using or proving public transport in Accra. The sample include 50 persons with disability comprising 28 visual impaired and 22 physically challenged who were reached through snowballing and convenient sampling. Others include 10 transport operators and 4 key stakeholders who were also reached through convenient and purposive sampling respectively. Research instruments employed for the study are interview schedule and an auditing scheme. While the interview guide was informed by the research objectives, Ghana's Disability Act informed the choice of variables on the auditing scheme which was primarily used to measure transport operator's compliance to the selected disability inclined transport provisions.

The data collection spanned from March to November 2020 where the office of the Ghana Federation of Disability Association (GFD) and Ghana Society of the Socially Disadvantaged (GSSD) became the reference point in reaching out

to PWDs. The transport operators and stakeholders on the other hand were reached from their various workplaces and the duration of all interviews spanned from 32 to 120 minutes. Data from the interviews were transcribed, edited and coded using MaxQDA. Analysis of the qualitative data centres on direct and the relational content analysis which does not only look at describing individual codes but also draws inferences from the relationship between different codes.

Major findings

The definition of disability among PWDs was inclined towards the Medical Model which defines disability as a personal tragedy and focuses on the differences in ones' physical appearance. One key issue that fuelled this finding was the inadequacy of various Ghanaian languages to define and categorise various disability groups especially in the wake of new paradigms in the disability discourse. This situation led to the use of generic terms to grossly reference PWDs' to be a faulty or sick population group. On the causes of disability, medical negligence and other domestic accidents remained prominent among both the visual and physically challenged. Here, wrong injection practices and negligence in diagnoses appeared to cause many wheelchair users to lose functionality of their limbs. Despite role of medicine in explaining the causes of various disability types, the belief in witchcraft and superstition also remained dominant among most PWDs especially for those who considered the circumstance leading to the disability to be strange.

In reviewing their living conditions, participants were more vocal about their perceived disadvantages associated with living with disability in Accra since the connotation of disability creates doubts on PWDs' capability to execute various functions. These disadvantages included PWDs' difficulty in gaining job opportunities, low prospect of finding marriage partners especially for females with disability as well as hesitation by members of the general population in making physical contact. In spite of the enjoyment of financial benefit from the state and philanthropist, PWDs were of the opinion that such financial assistance only reinforces the negative stereotype of living with a disability. They would rather prefer to be offered opportunities to prove themselves instead of being offered tokens or cash transfers.

With regards to the second objective, PWDs identified trotro services to be the widely used public transport option and this was primarily informed by the lower user charges that comes with this option. Additionally, other factors include the sense of community and personal safety that reduced PWDs likelihood of being robbed or targeted for ritual murder. Having identified their preferred transport option, the study found that trotro services in Accra, did not offer prescribed transport support services that were needed to reduce the stress and time in joining or disembarking. Specifically, PWDs indicated the absence of ramps on most high flow vehicles, none-enjoyment of priority seating arrangements on buses as well as the absence of way-finding aids or assistive technology that reduces the stress of ascertaining one's location or relaying an information to a transport operator. Indeed, PWDs acknowledged that, the enjoyment of these support services was

subject to the discretion of the transport operators and this heightened their challenges associated with enjoying trotro services as compared to the general population.

While participants cited the non-enjoyment of physical support services, findings from the data also portrayed the attitude of transport operators and other commuters as key barriers that heightened their ability to enjoy trotro services. Here, constant request for support from wheelchair users in joining or disembarking made PWDs unattractive given the tedious efforts required to execute such task. Additionally, PWDs cited that the time spent in offering such help also increased their unattractiveness to trotro operators since this may translate to a loss of prospective commuters to other competitors. In addition to the aforementioned, such negative connotations of disability also translated to conductors' hesitation in allowing visually impaired to join their bus due to fear of not being able to find their way home and in some cases, conductors were even mentioned to deliberately under declare the value of currency notes as a way to cheat visually impaired commuters. In spite of this, conductors were rated higher than their drivers in terms of their friendly reception of PWDs.

In relation to the strategies adopted by PWDs to overcome the challenges inherent in their use of public transport, e-hailing services like Uber remained a good alternative transport option for PWDs in reaching various desired opportunities since this option presents the least limitations to participants travel freedom. Among the key factors that influenced this choice were the friendly reception received from various Uber operators and the ease of engaging Uber. Specifically,

such ease ranges from the use of mobile technology in ordering rides without having to walk to a lorry station, queue or being refused the chance to enter a vehicle as seen in the case of trotro services.

Unfortunately, the higher preference for Uber services did not translate to higher patronage since the fare determination process for Uber heightened PWDs challenges in adequately budgeting for such trips. Here, the use of a distance-time algorithm in determining fares implied a disproportionate increase in fares when incidents like traffic jams and accidents increase the estimated time committed to a trip. This situation always resulted in a discrepancy in quoted fares between the time of ordering a trip and the time of arrival. On the back of this note, PWDs revealed their resilience in not letting these challenges hinder them from travelling to any opportunities since these opportunities are usually critical to their quality of life. Other seldomly employed travelling strategies include walking, use of assistive aids like wheelchairs and skates for shorter trips, use of proxy for trips as well as blacklisting transport operators who are known to have been hostile to PWDs.

The findings of the fourth objective centred on transport operators' knowledge of any transport related disability policy as well as their responsiveness to disability inclusive transport options. Here all transport operators revealed their lack of knowledge of any existing disability centred transport policy that guides their operation. By extension, all services that borders on the delivery of services to persons with disability were guided by common sense or transport operators' discretion. Despite transport operators' admission that their buses' conditions do not conform to current trends in the delivery of inclusive services, transport

operators were hesitant to modify their vehicles. Aside the fact that most transport operators engaged for the study did not own the vehicles they used, this position also appeared to be influenced by economic factors since transport operators deemed the low disability population as a disincentive for the higher cost associated with the acquisition of disability friendly vehicles. Additionally, some transport operators revealed that their desire to keep existing high floor buses stems from the need to reduce maintenance cost associated with poor road conditions. In all respect, transport operators rather called on the government to expand its investment in the delivery of intra city public transport options since any attempt to compel the GPRTU would be a breach of their status as private transport service providers.

Summary of the final objective focuses on the role of stakeholders in addressing the travel needs of PWDs. Despite stakeholders acknowledgment of the role of transport services in influencing the enjoyment of opportunities, this critical role did not appear to be central to various disability programmes by these stakeholders. For instance, the stakeholder from the Department of Social Welfare considered economic, political and health needs of the disability community to be more critical to their survival than their transport needs hence the little attention received from such institution. Additionally, the representative of the GPRTU revealed how their ignorance on the transport provision of Ghana's disability act have also influenced the alienation of the minority commuters travel needs. However, this study offered some level of enlightenment to the representative of

the GPRTU who expressed his interest in enlightening members of the Union to offer inclusive services.

Conclusions

Based on the research's objectives and subsequent findings, the following conclusions were reached:

1. The definition of disability in the Accra Metropolitan Area aligned with the medical model which reflects society's poor attention to the role of culture and the physical environment in limiting PWDs freedom. In all regard, the focus on using difference in one's body as the basis to differentiate the 'sick' or 'faulty group' from the general population also confirms participants belief in considering person with disability as a population who needs to be cared for and not necessarily given the opportunity to exhibit their capabilities. Such conclusion can also be drawn from numerous accounts of participants perceived disadvantages of living with a disability in Accra.
2. While confirming the findings of the Ghana National Transport Household Survey of 2008, trotro was identified as the commonly used transport mode for PWDs since most participants were either unemployed or had low paying jobs. Despite this revelation, the unresponsiveness of trotro services to the needs of the disability population can be seen in the poor conditions of trotro vehicles and the unfriendly reception or support services received from trotro operators. Here, most trotro buses engaged in the study did not comply with the transport dictates of Ghana's Disability Act as such buses had high floor height, no assistive technology or way

findings aids. This situation does not only reveal the PWDs reliance on the general population in enjoying trotro services but also reinforces the connotation of considering persons with disability as needy and incapable. In the case of the poor reception from trotro operators, the study concludes that such reception was influenced by the severity, type and sex of PWDs as female participants with mild or less observable disability did not receive much hesitation or ill treatment from trotro operators.

3. All participants revealed that the challenges experienced in their use of trotro services did not hinder them from enjoying any desired activity. The study concludes that such assertion was influenced by the fact that most trips undertaken by PWDs were limited to essential services like health, education and employment hence their refusal to decline a trip may affect their ability to enjoy such services.
4. In the wake of PWDs challenges in the use of trotro services, trotro operators appeared to be satisfied with the conditions of their buses and did not consider this to be a challenge for PWDs despite evidence to prove otherwise. The study concludes that such position was informed by trotro operators' oblivion to the transport provision of the Ghana's Disability Act.
5. Finally, stakeholders did not consider transport issues as a critical area to focus when it comes to issues concerning Ghana's disability population. Rather, they are more interested in PWDs' access to physical infrastructure such as buildings and other so called relevant or critical of issues including economic welfare, health and education.

Recommendations for Policy

In view of the research findings and conclusions, the following recommendations are made to ensure the responsiveness of trotro services to the needs of persons with disability in the Accra Metropolitan Area.

1. National Council for Persons with Disability (NCPD) and National Commission on Civic Education (NCCE) should embark on a public awareness and education campaign that seeks to change the connotation of disability. This action is necessitated to ensure conformity in the definition and measure of disability which appears to align with the dictates of the Social Model of disability. Here, elaborate attempt is needed to consider disability not a curse or fault but as part of human diversity. Doing this may go a long way to portray a positive image since the focus for integration will further be shifted from rehabilitation of a 'faulty' body to the removal of barriers in society. As part of the educational campaign, efforts should also be made to update the vocabulary of many local dialects in adequately defining and classifying various disability types since this will prevent many Ghanaians from using generic or derogatory terms in reference to persons with disability.
2. Though trotro services appeared to be a commonly used transport service, poor enforcement of the transport provisions of Ghana's Disability Act resulted in the use of common sense or transport operator's discretion as the basis for the provision of public transport for the disability community. Here, the intervention of the Ministry of Transport, Motor Traffic & Transport Department of the Ghana Police Service and Accra Metropolitan Assembly in

ensuring compliance would not only draw attention to the disability community but also consider them as valuable members of society who deserve to enjoy a responsive public transport service.

3. Despite the Ghana's Disability Act general outlook in meeting the needs of the disability community, a specialised road transport operational guideline as seen in the case of the aviation sector will best address all gaps when it comes to meeting the needs of the disability community. Here the National Council for Persons with Disability (NCPD) together with Ministry of Transport, Accra Metropolitan Assembly and the GPRTU should ensure that the provision of an operational guidelines that specifies key indicators like the floor height of commercial vehicles, seating arrangement, presence and dimension of disability accessories in public transport as well as design of terminals. This guideline will not only streamline the activities of the GPRTU but also offer an opportunity for the Ghana Federation of Disability Association to insist on their right and seek redress in court when the need arise.
4. As part of removing barriers to PWDs' travel, the introduction of travel concessions should be considered. The Department of Social Welfare through the Ministry of Gender, Children and Women Protection as well as the Accra Metropolitan Assembly and the GPRTU should develop a concession scheme that will allow PWDs to either travel for free or at a discount. As seen in countries like South Africa and Norway, this scheme may also constitute a welfare programme aimed at reducing the travel costs faced by vulnerable populations.

5. On the back of making efforts to ensure the provision of disability friendly buses, the attitudes of trotro operators and their conductors appeared to be one key issue that heightened PWDs challenges in using trotro buses. Here, the GPRTU, Ministry of Transport and the Department of Social Welfare should undertake a series of workshops on customer relations to trotro operators. This should begin with the enforcement of rules to ensure that all prospective drivers attend driving schools as most drivers engaged for this study revealed otherwise. Though attending such driving school is important, the curriculum of these driving schools should also be reviewed since existing manuals does not cover topics on persons with disability. The inclusion of such sensitive topics may reduce the incidence of hostile reception received from such operators.
6. The Department of Social Welfare (DSW) should reconsider its position of not considering transport issues as critical to PWDs survival when it comes to the DSW's scope of operation. Here, the DSW's emphasis on economic, health and educational programmes will amount to nothing if the needed transport services to connect PWDs to these facilities are not available. By this, the inclusion of transport programmes can begin with a revamp of earlier concessionary arrangement with the STC as well as advocacy programmes to ensure transport operators compliance to the dictates of the Ghana's Disability Act.
7. Despite efforts to reduce the accessibility barriers for the disability community, low funding opportunities limited the scope of the AMA and other stakeholders

to removing barriers in public facilities like schools and hospitals. Here, the provision of funds and other resources from the state will not only offer the platform or resources to engage transport providers but also conduct the needed research to unearth critical issues that bother on PWDs' travel.

8. Finally, the government should engage the GPRTU on the possibility of taking active role in the operations of the GPRTU. This approach will begin with a strong regulatory environment and a deliberate attempt at enforcing these regulations. This situation will further make it easier for the government to dictate vehicular standard, allow PWDs to enjoy travel concession as well as offer financial support to existing operators who may not be in a position to acquire disability friendly vehicles.

Contributions to Knowledge

From the aforementioned discussion, key contributions to knowledge centres on mobility and disability issues that have not been addressed by existing literature particularly in the Accra Metropolitan Assembly. These contributions include the following:

1. Firstly, this study shed lights on the daily living conditions of persons with disability in the Accra Metropolitan Area. Despite literature's general inclination to the tenants of the Social model of disability, the definition of disability from participants centres on the medical model which highlights individual bodily difference. Though this revelation appears to affirm existing studies, none of these studies have examined the influence of local languages on the connotation of disability. From the study, the deficiency of Twi, Ga and other languages results

in the use of generic terms like ‘yarefoɔ’ which reinforces the connotation of considering persons with disability as needy hence the many instances of perceived disadvantages associated with living with a disability in Accra.

2. Another contribution to knowledge was the reliance on trotro as the frequently used transport option and though this appeared to be common for most vulnerable population groups, the study unearths key factors that significantly reduced PWDs ease of using this travel option. Principal among these factors was the attitudes of transport operators compared to the emphasis on physical support services postulated in existing literature. Additionally, the study revealed that the absence of assistive technology and the strenuous effort required to facilitate PWDs' entry into trotro buses made wheelchair users unattractive to transport operators.
3. In highlighting the key challenges associated with trotro services, the study uncovers emerging transport options like Uber as a desirable alternative, but Ubers unpredictable pricing schemes limited the frequency of this option. Unfortunately, the efficacy of Uber services as an alternative travel option for PWDs' has not received academic attention despite being in existence for the past four years.
4. While examining the contribution of transport operators to PWDs' ease of using transport services, findings from the study revealed trotro operator's oblivion to Ghana Disability Act and its transport provision. This revelation not only depicts transport operators' reliance on common sense as a guiding principle in responding to the needs of the disability community but also highlights the extent to which public transport services have alienated commuters with disability.
5. Just like Yigitcanlar et al's (2019) proposition on examining social exclusion from a multidimensional approach, this study developed a conceptual framework to

access transport related social exclusion while leveraging on Yigitcanlar et al's (2019) model and other theories. This is novel as sets the agenda for further studies

Suggestions for Further Research

While the share of public transport options in the Accra Metropolitan Assembly is diverse, the study's focus on GPRTU services may not necessarily offer a broader picture of commuter travel choice hence there is the need to examine the responsiveness of other popular intra-city transport options like Metro Mass and Ayalolo bus services to the needs of persons with disability. Research in these areas will offer a broader platform or data to compare PWDs' travel issues across different modes.

Secondly, travel issues of urban dwellers like those in Accra begin and end on foot, especially considering the first and last mile of every trip. Here, a study on the walking environment which connects PWD's homes to various public transport options will also offer enough grounds to examine the responsiveness of the entire built environment to the PWD's travel needs. Research in this area will offer the needed platform to examine the extent to which Ghana's disability population are factored into the planning, design and construction of the entire built environment.

Finally, while this study relied on PWDs' subjective impression of their travel needs, a travel survey on PWDs' mode choice and travel issues will offer the needed data to understand the burden of transport which will be needed as the basis for transport policy to improve social equity, travel conditions, the movement of people and goods as well as general transport accessibility. Attention to the

disability community is necessary since existing travel surveys in Ghana heavily focus on the general population who do not have a disability.



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APPENDIX A

AUDITING SCHEME FOR PASSENGER FACILITY

UNIVERSITY OF CAPE COAST

DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING

Introduction: This auditing scheme seeks to outline the number, condition and dimension of selected vehicles transport terminals in Accra. The topic for this study is ‘Transport related social exclusion among persons with disability in Accra’ and the findings will be used to validate the account of both PWDs and transport operators as well as produce a descriptive on the state of transport facilities for students with disability.

License Number of vehicle:				
Brand of Vehicle:				
Model:				
Variables	Availability		Condition	Dimension
Floor height				
Entrance Width				
Ramp	Yes []	No []		
Hand rails	Yes []	No []		
Priority seats	Yes []	No []		
Location of priority seats				1.Behind driver [] 2.First seat after entrance [] 3.Anywhere []
Disability signage for seats	Yes []	No []		
How many of such seats are preserved for PWDs				
Push Bells	Yes []	No []		

Audio Transmitters	Yes []	No []		
Digital device on vehicle	Yes []	No []		
Signage for moving vehicle	Yes []	No []		
Inscription on signage				
Background colour of signage				
Notation of signage				
Travel concession	Yes []	No []		
Type of concession				1.Reduced fare [] 2.Free ridership [] 3.Others []
Fee for wheelchair and mobility assistive tool	Yes []	No []		Amount charged:
Waiting area	Yes []	No []		1. With shed [] 2. With seats [] 3. Designated space []

APPENDIX B

INTERVIEW GUIDE FOR PERSONS WITH DISABILITY

UNIVERSITY OF CAPE COAST

DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING

Introduction: This interview guide seeks information on PWDs' ease of using transport services and reception received from transport operators. The information you provide is purely for academic purpose and you are assured of total confidentiality and anonymity.

Date of interview:	Place of interview:
Sex:	Educational attainment:
Impairment type:	Marital status:
Age of onset:	Employment status:

1. What does the term disability mean to you?
2. What characterises a person with disability?
3. What is the main cause of disability?
4. Do you feel you are similar to or different from others?
5. What connotation do people in Accra have about disability?
6. Are there advantages and/or disadvantages of living with a disability?
7. Which places do you visit frequently?

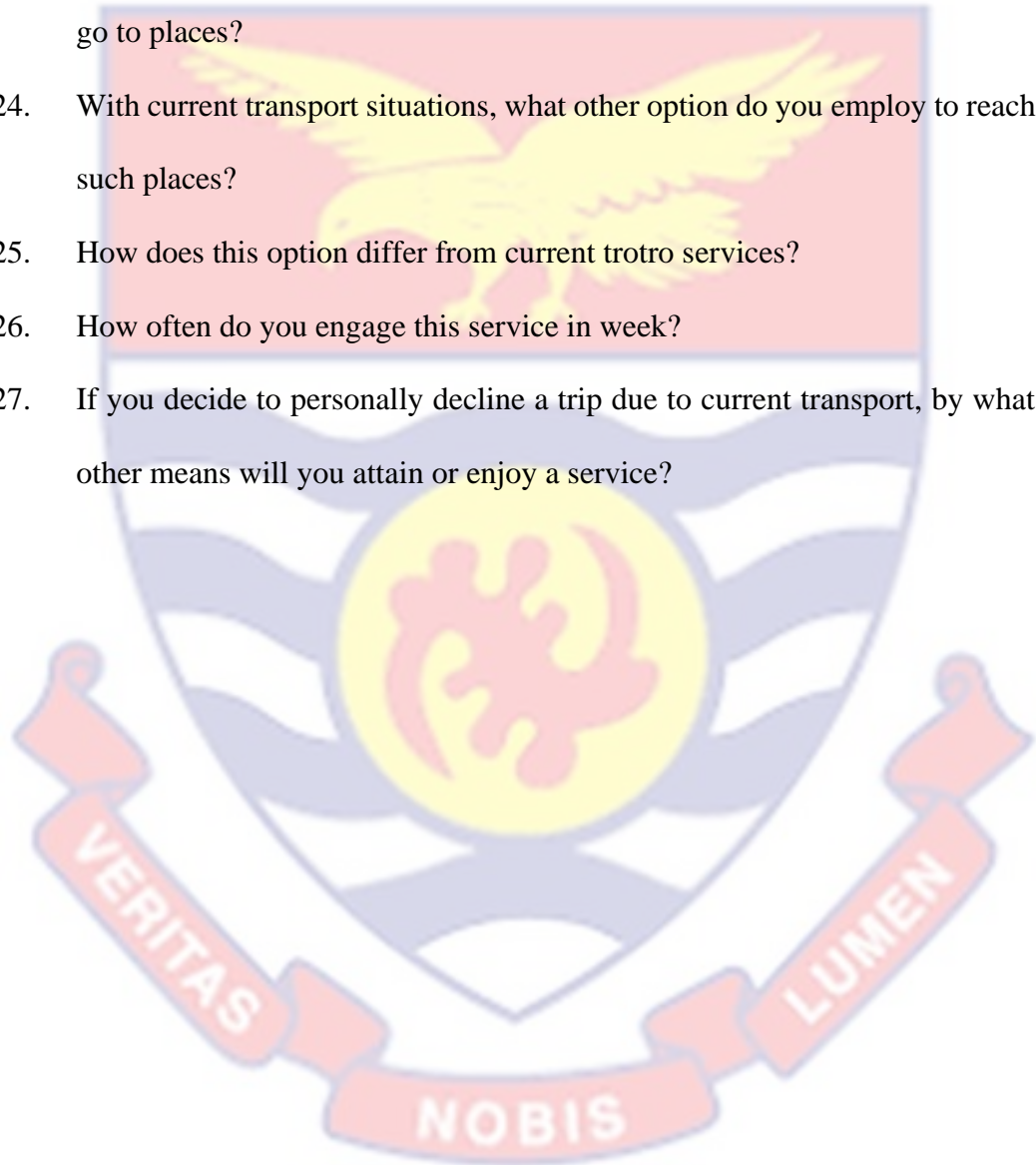
PWD ease of using public transport

8. How does your disability influence your choice of public transport?

9. Can you recount any support or assistance received at various terminals?
(Who provides the support? If physical, what kind of support is that?)
10. How do you identify the right bus to join? (for visually impaired?)
11. When was the last time you joined queues in the terminal?
12. Where do you normally sit when you join a bus?
13. Do you pay the same fare as other passengers?
14. While on board, do you pay to keep your wheelchair on board? (for wheelchair users)
15. How would you describe the reception of the following group of people to you?
 - a) Drivers
 - b) Conductors (Ask participants to score Driver and conductors. Account for difference)
 - c) Other passengers
16. In your view, what do you think account for the kind of reception received from drivers, conductors and other passengers?
17. How do you ascertain where the location of the vehicle? (for visually impaired)
18. How do you communicate your intention to alight? Any assistive technology?
19. Where do you go when it training at the terminals?
20. What barriers do you face in using public transport?
21. What kind of transport services do you hope for?

Strategies to overcome their social exclusion

22. How does current public transport services influence your trip making plans?
23. How does these transport issues affect your ability or frequency to visit or go to places?
24. With current transport situations, what other option do you employ to reach such places?
25. How does this option differ from current trotro services?
26. How often do you engage this service in week?
27. If you decide to personally decline a trip due to current transport, by what other means will you attain or enjoy a service?



APPENDIX C

INTERVIEW GUIDE FOR TRANSPORT OPERATORS

UNIVERSITY OF CAPE COAST

DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING

Introduction: This interview guide seeks information on Transport related social exclusion among persons with disability in Accra to facilitate project work. The information you provide is purely for academic purpose and you are assured of total confidentiality and anonymity

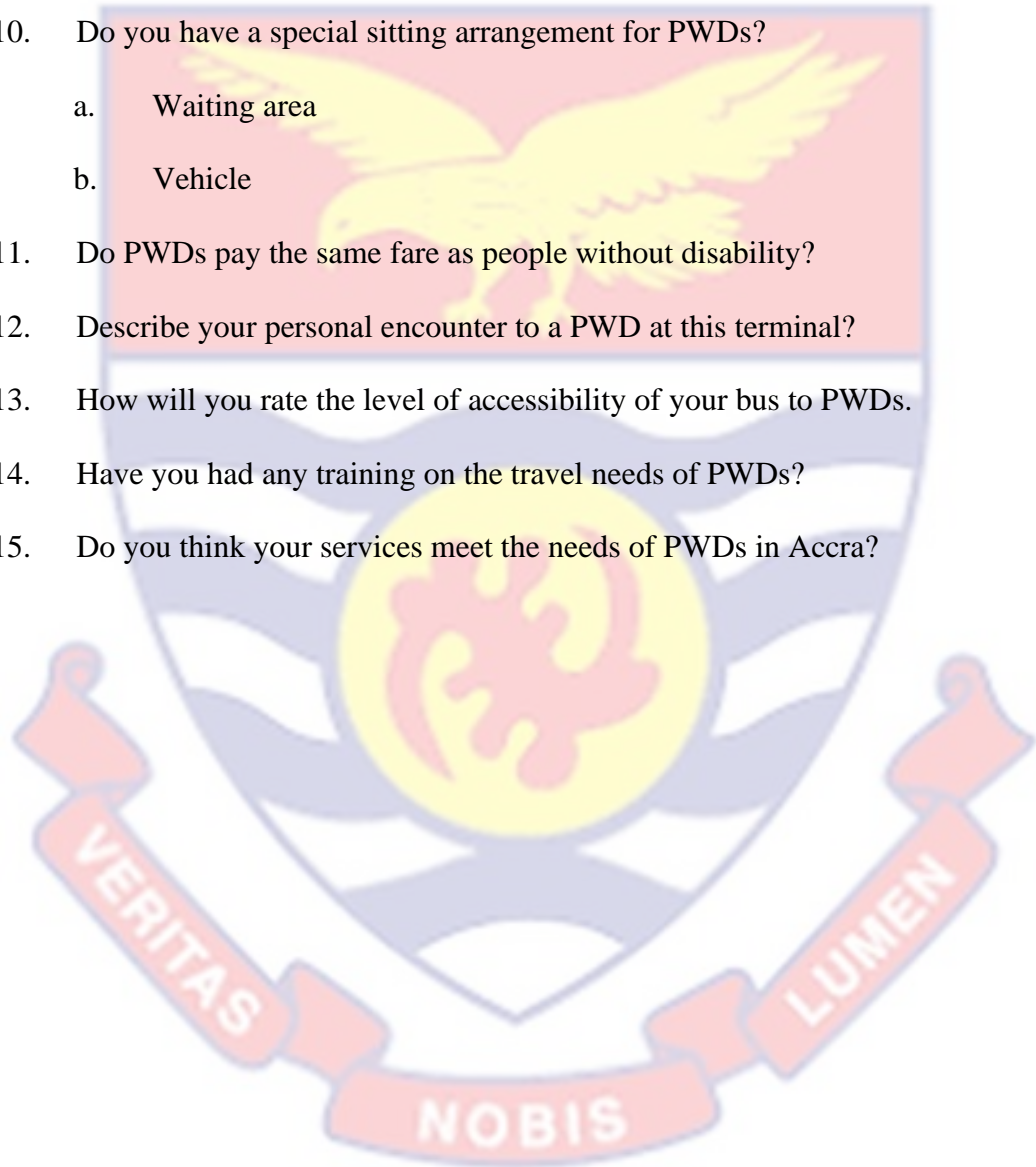
Date of interview:

Place of interview.

Interviewer name:

1. What does the term disability mean to you?
2. What characterises a person with disability?
3. How do you say the word 'disability' in your local language?
4. What is the main cause of disability?
5. Are you aware of any existing regulation that caters for the transportation needs of PWDs?
 - a. Tell me about it
 - b. When was this regulation enacted?
 - c. Has there been any amendments?
 - d. What were the changes?
6. Do you have a disability policy for your local station?
 - a. How long has this policy been in place?

- b. What are the provisions of the policy?
7. How long have you been driving?
8. How will a blind person locate your car if he gets to this station?
9. How will the wheelchair user get into your car if he wants to join?
10. Do you have a special sitting arrangement for PWDs?
 - a. Waiting area
 - b. Vehicle
11. Do PWDs pay the same fare as people without disability?
12. Describe your personal encounter to a PWD at this terminal?
13. How will you rate the level of accessibility of your bus to PWDs.
14. Have you had any training on the travel needs of PWDs?
15. Do you think your services meet the needs of PWDs in Accra?



APPENDIX D

INTERVIEW GUIDE FOR STAKEHOLDERS

UNIVERSITY OF CAPE COAST

DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING

Introduction: This interview guide seeks information on stakeholders role in providing accessible transport services for PWDs'. The information you provide is purely for academic purpose and you are assured of total confidentiality and anonymity.

1. What does the term disability mean to you?
2. What characterises a person with disability?
3. How do you say the word 'disability' in your local language?
4. What is the main cause of disability?
5. Are you aware of any existing regulation that caters for the transportation needs of PWDs?
 - a. When was this regulation enacted?
 - b. Have there been any amendments?
 - c. What were the changes?
6. Are you aware of any transport-related provision for persons with disability in Accra?
7. In what ways does your office ensure transport operators compliance to the dictates of the Ghana's Disability Act?
8. When was the last time you organized an educational program centred on addressing the travel needs of vulnerable users?

9. Have you heard of PWDs complaints about current transport services?
10. What improvement would you wish to see in the transport sector for PWDs?
11. How would you rate transport operators and attitudes towards PWDs?



APPENDIX E

UNIVERSITY OF CAPE COAST

COLLEGE OF HUMANITIES AND LEGAL STUDIES

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF GEOGRAPHY & REGIONAL PLANNING

Our Ref: GRP/S4./20/Vol.1/222

Your Ref:



UNIVERSITY POST OFFICE
CAPE COAST, GHANA
WEST AFRICA

27th February, 2020

The Director,
Ghana Society For The Socially Disadvantaged,
Kaneshie,
Accra

Dear Sir,

**TO WHOM IT MAY CONCERN
LETTER OF INTRODUCTION**

The bearer of this letter, **Mr Prince Kwame Odame (SS/DGR/18/0004)**, is a Post Graduate Student of the Department of Geography and Regional Planning, University of Cape Coast. He is conducting a study on: "TRANSPORT RELATED SOCIAL EXCLUSION AMONG TRANSPORT DISADVANTAGED IN ACCRA".

We would therefore be very grateful if your organisation could assist him with any relevant information to support the study.

Thank you.

Yours faithfully,

Dr. (Mrs) Regina Obilie Amoako-Sakyi.

HEAD

APPENDIX F

UNIVERSITY OF CAPE COAST

COLLEGE OF HUMANITIES AND LEGAL STUDIES
FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF GEOGRAPHY & REGIONAL PLANNING



Our Ref: GRP/G.4^A/19/Vol.3/

Your Ref:

UNIVERSITY POST OFFICE
CAPE COAST, GHANA
WEST AFRICA

12th December, 2019.

The Director
Ghana Society of the Physically Disabled (GSPD)
Accra Rehabilitation Centre
Post Office Box AC 40
Accra

Dear Sir/Madam,

LETTER OF INTRODUCTION

The bearer of this letter **Mr. Prince Kwame Odame (SS/GRP/18/0004)** is a PhD student at the Department of Geography and Regional Planning, University of Cape Coast.

He is undertaking a research project on the topic: **"The Role of Culture in Social Exclusion among Transport Disadvantaged in Accra"**.

We shall be very grateful if you could offer him any assistance to access any information that would be useful to his work.

We count on your usual cooperation.

Yours faithfully,

Prof. Simon Mariwah
ACTING HEAD

APPENDIX G

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309/ 0244207814

C/O Directorate of Research, Innovation and Consultancy

E-MAIL: irb@ucc.edu.gh

OUR REF: UCC/IRB/A/2016/703

YOUR REF:

OMB NO: 0990-0279

IORG #: IORG0009096



16TH JUNE, 2020

Mr. Prince Kwame Odame
Department of Geography and Regional Planning
University of Cape Coast

Dear Mr. Odame,

ETHICAL CLEARANCE – ID (UCCIRB/CHLS/2020/11)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for the implementation of your research protocol **Transport Related Social Exclusion among Transport Disadvantaged in Accra, Ghana**. This approval is valid from 16th June, 2020 to 15th June, 2021. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'S. Asiedu Owusu'.

Samuel Asiedu Owusu, PhD

UCCIRB Administrator

ADMINISTRATOR
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST