

**IMPACT OF PUBLIC TRANSPORT SYSTEM ON THE ACADEMIC
PERFORMANCE OF PRIMARY SCHOOL STUDENTS IN
DAR ES SALAAM**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION IN TRANSPORT AND LOGISTICS MANAGEMENT
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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by Open University of Tanzania a dissertation titled; ***Impact of Public Transport System on the Academic Performance of Primary School Students in Dar es Salaam***” in partial fulfillment of requirements for the degree of Master of Business Administration (MBA) in Transport and Logistics Management of the Open University of Tanzania.

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DECLARATION

I, **Rosemary Richard Mlagara**, do hereby declare that, this dissertation is my original work and that; it has not been presented and will not be presented to any other university for a similar or any other degree award.

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Date

DEDICATION

I dedicate this dissertation to my family. This dissertation is the fruit of their sacrifice and patience, which they gave me during my entire studies at the Open University of Tanzania, may God bless all.

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My first and foremost thanks go to the almighty God for strength, courage wisdom and acumen he has given me during the whole period of undertaking this study. My sincere gratitude goes to my supervisor, Dr. Salum Mohamed who guided me from proposal writing up to the preparation of this dissertation. His criticism, invaluable patience, intellectual guidance and support helped me to accomplish this study; he deserves all kinds of credits and appreciation. Special thanks go to my lovely husband Deo Seimu Liheta for his encouragement and support during the whole process of research proposal and final report writing.

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ABSTRACT

This study examined the impact of public transport system on the academic performance of Primary School Student in Dar es Salaam. Specifically, the study was aimed at assessing the current system of public transport used by students in the city of Dar es Salaam, to examine the impact of public transport irregular schedule on the academic performance of primary school students, and to examine coping strategies that are used by primary school students to deal with challenging public transport system in the city of Dar es Salaam. The study was carried out in Temeke district involving three primary schools where 45 students and 9 teachers participated in the study. Data from students were collected through self-administered questionnaires. From teachers, data were collected through interviews guided by interview questions that were administered by the researcher. Findings revealed that the current system of public transport is mainly managed by the private sector. It is partly regulated by the government especially on the routes they serve. It is also used by most students to travel to school within the city. But the private buses have no fixed known time schedule in providing transport services in the city. It was learned from the study that students who use public transport arrive to school late when the first classes have started. They also fail to get enough time to do homework or revise at home because of limited time. Their time for homework and private studies is spent on the way struggling to board the public buses. The study recommends that the government should make a close follow up to regulate the services provided by private bus owners especially on handling students who use these buses.

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LIST OF ABBREVIATIONS

ISU International School of Uganda

UDA Shirika la Usafiri Dar es Salaam

UNESCO United Nations Educational Scientific and Cultural Organization

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Transporting students by use of school buses became popular in many parts of the world. In America and Latin America for example, larger proportion of students are using school buses rather than public transport. In America alone, Statistics show that in one year, school buses carry about 24 million students and covers more than 4 billion miles collectively. The students' buses are usually painted differently to identify them. In America they are painted yellow. In Argentina school buses are painted orange and in Canada, all school buses are required to be identical in color (O'Day, 1993).

Various countries in Asia have also considered improving students transport using school buses instead of public transport. In Hong Kong, most students use school buses that are managed by specific schools. But there are also special buses for students that are called public students buses. These buses are not managed by schools but they are owned by the government but they are designated for students only.

According to Howe and Bryceson (2000) students transport has been a challenge in many African countries. Popular transport for students used to be public transport in most of African countries. But this started to change in 1980s where some schools especially public schools operated school buses for students. The buses operate through parents' contribution towards running costs to maintain them. In Uganda and

Lesotho for example, it is common now for private schools to transport their students on school buses.

Most public schools in African countries have no school buses. Students use public buses and other means of transport. These students are facing many challenges including arriving late to school and rough treatments from bus conductors. These challenges are not bothering students who use school buses within same countries (ibid).

School buses are chosen because generally school buses and other special buses for students are considered to be safer than other public buses. Considering how many students the buses carry and the distance they cover, deaths on the road are extremely rare. School buses in America have a rate of 0.2 deaths per 100 million miles traveled. The rate of deaths in other automobiles transport is eight times higher. Statistics provides a good way of comparing risks involved. In a period of 11 years, from 1994-2004, a total of 71 passengers on school buses died in crashes. But in one year, 2004 alone, traffic accidents killed 31,693 people traveling in cars and light trucks in America (Forkenbrock, 2004).

In Tanzania, Dar es Salaam city residents travel under difficult conditions from one part of the city to another. Available information shows that daily travel in the city is facing many difficulties. These difficulties include the split between residential areas and places of work or areas where people get services, expansion of urbanized area and deficient transport system. As a result of these factors, transport remains to be a critical need for city residents (Sliuzas, 2001).

Werlin (1999) explain that generally lack of adequate transport system, is potential to create complicated daily life by making access to various destinations and services difficulty for majority of people especially the poor. Privileged section of the population has access to good transport infrastructure but on the other hand, the low income population is facing poor urban public transportation.

According to Howe and Bryceson (2000), city transport in Dar es Salaam was initially provided by the urban public transport company named Shirika la Usafiri Dar es Salaam (UDA). But towards the end of 1980s, UDA started to fail to meet transport needs of the city residents. This is where private owned vehicles started to operate carrying passengers in the city. Private vehicles were popular known by name of *daladala*.

Briggs and Mwafumpe (2000) argue that even with the *daladala* support, transport in the city of Dar es Salaam continued to be a challenge for residents. Increased population fuel furthers the problem of transport in the city. According to national census data, the population of Dar es Salaam was 348,000 in 1968, 852,000 in 1978 and about 2,500,000 in 2002. The current number in 2012 is about 5,000,000 (National Bureau of Statistics, 2012).

Again Briggs and Mwafumpe (2000) report that increasing distance from residential areas to the city center has increased over time. For example, by the year 1968 the maximum distance from the furthest end was 6 to 10 kilometers. But the with city expansion, the distance increased to 15 kilometers in 1978 and then 30 kilometers in

the middle of 1990s. With urbanization on the process, this distance continues to grow making transport even more complicated.

Such inadequate and unreliable transport in the city of Dar es Salaam is also experienced by primary school students. The students also need transport every day to go to school and going back home after school. It is common in Dar es Salaam to see many students stranded at bus stands for long time waiting for transport. But there are other students who use special school buses. This group may not be experiencing the same transport impact as their fellows who use public means (Nyirenda, 2012). This study examined the impact of public transport system on the performance of Primary school students in Dar es Salaam.

1.2 Statement of the Research Problem

Student population in the city of Dar es Salaam is growing. According to Mjinga (2011), there are about 550,000 students in the city who need transport to go to school and travelling back home. But the safety of travelling for these students, most of them rely on the erratic public transport system, which is at stake most of the time. Mjinga (2011) also reports that Dar es Salaam has a total of 3,775 public schools. At the primary level there are 350 schools and at the secondary stage there are 3,425 schools.

But most of these schools have no proper transport arrangements for their students. University of Dar es Salaam (2008) observed that the students travel to various schools and back home with a lot of difficulty. When travelling from the outskirts of the city to their respective schools, students face the inconvenience of commuting

unreliable public transport. This means that the future of transport system for students who use public transport system in the city of Dar es Salaam is uncertain.

But on the other hand, University of Dar es Salaam (2008) argues that there are students who use school buses to travel from home to school and back home. Those who use school buses are mainly those attending private schools in the city. This group is privileged with less difficulty in travelling compared with their fellows who use public transport system. One would wonder what happened to students who face such transport challenges both personally and in their academic activities. At the same time one would want to know what are the benefits enjoyed by students who use school buses to travel over those who use public transport system. This study examined the impact of public transport system on the academic performance of primary students in the city of Dar es Salaam.

1.3 Research Objectives

1.3.1 General Research Objective

The general objective of the study was to assess the impact of public transport system on academic performance of primary school students in Dar es Salaam city.

1.3.2 Specific Research Objectives

Specific objectives of the study were as follows:

- (i) To assess the current system of public transport used by students in the city of Dar es Salaam.
- (ii) To examine the impact of public transport irregular schedule on academic performance of primary school students.

- (iii) To assess the outcome of careless handling of public transport system on primary school students.
- (iv) To examine coping strategies that are used by primary school students to deal with challenging public transport system in the city of Dar es Salaam.

1.4 Research Questions

1.4.1 General Research Question

What is the impact of public transport system on academic performance of primary school students in Dar es Salaam?

1.4.2 Specific Research Questions

The proposed study was guided by the following specific research questions:

- (i) What is the current system of public transport used by primary school students in the city of Dar es Salaam?
- (ii) What is the impact of public transport irregular schedule on the academic performance of primary school students?
- (iii) What is the outcome of careless handling of public transport system on primary school students?
- (iv) What are the coping strategies that are used by primary school students to deal with challenging public transport system in the city of Dar es Salaam?

1.5 Significance of the Research

The study contributes towards the on-going discussions and initiatives taken by various stakeholders towards providing reliable transport to students. The study also

adds on information about the impact of poor transport system on students. In academic cycles, most authors have written about challenges faced by students who use public transport without giving its impact on academic performance. This study provides information on the impact of those challenges on students' academic performance especially in the city of Dar es Salaam.

1.6 Scope of the Study

In order to understand the impact of public transport system on the academic performance of primary school students in Dar es Salaam city, the study assessed type of challenges faced by primary school students and their impact on the students' academic performance in schools.

1.7 Organization of the Study

The study has five chapters that present introduction and background of the research in chapter one, literature review of ideas and arguments from various authors related to the subject in chapter two, followed by chapter three that discussed research methodology that was followed on the research work. Chapter four presents study findings and analysis of the findings. Chapter five presents summary conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of ideas and arguments from various authors related to the subject. Specifically, the chapter discusses theories relevant to this study, conceptual framework and key issues which contribute to the understanding of the subject of this research study.

2.2 Conceptual Definitions

Transport is the process of shipping or moving item from point A to point B. It is the movement of people, animals and goods from one location to another (Williams, 2005). Starkey (2002) defines Public transport as a shared passenger transport service which is available for use by the general public as distinct from modes such as taxicab or hired buses.

The word “public” is defined by Lane (2000) as an adjective relating to or involving people in general, rather than being limited to a particular group of people. It represents a shared property or system that is accessible to all members of the community. Members of the community should have a space to give opinion at some point to shape or change the public system or property.

Public transport is defined by Newman and Kenworthy (1999) as a shared passenger transport system, which is accessible to the general public. It includes bus, train, tram, flight, ship or other mode of transport. Other hired transport systems such as

taxicab is usually not private. Public transport has scheduled timetable and specified routes. Examples of public transport in Tanzania include city buses commonly known as daladala. They are public because any member of the community has access to these buses and they have specified routes where they operate.

Academic performance is defined by Eccles and Templeton (2002) as an outcome of education process that a teacher or students or a school has achieved. According to Darling (2005) academic performance might be influenced by many factors including mental ability and self-motivation towards studies. There are also other important factors outside classroom settings. These include supportive learning environment such as controlled noise, transport to and from school, feeding programs for students and availability of extracurricular activities.

2.3 Theoretical Literature Review

Various writers discussed different theories on transport. Green (2008) shares narrative theory of transportation concerned with immersion of a person in narrative content and effect of transportation on that person. An individual is transported by certain transport means going away from home. This makes his home surroundings inaccessible. The person will return home somehow changed because of the journey. Narrative theory is used as a means to understand feelings, effects and experience of an individual after travelling. Narrative theory is suitable for this study because it tries understand experiences, feelings and changes that may occur to students who use public transport and those who use school buses to commute from home going to school and travel back home from school. Narrative theory explains that the travel and all other things that happens on the way brings some changes to the person who

travelled. The "changing" that occurs to the individual as a result of travel experience became a center of interest and discussion.

2.3.1 General Challenges of Public Transport

Maunder and Mbara (1995) see that public transport can be cost effective to some people but it has some challenges that need to be made known to people who use this transport. The challenges of public transport include careless handling that may threaten personal safety and irregular transport schedule. It is also common to find that public transport covers limited areas and provide services in selected hours only.

This is true because limited routes covered by public transport pose a big challenge to travelers who do not have an alternative means to get around. Most public transport does not reach many destinations, travelers who use public transport for example in Dar es Salaam are forced to use additional means such as motorcycles known as *bodaboda* to reach homes or areas that are not near the public transport routes. This also supported by (Chalya et al, 2010) who said that sometimes limited routes for public transport are forcing people to use more than one means of transport to reach final destination.

For students in Tanzania cities, Setty (2005) explain that they face transport challenges including reluctance of bus conductors to take them because of lower fare that they pay per trip. The current fare for students approved by the government is Tsh. 200 compared to Tsh, 400 or more for adults per trip. This is true because it is a challenge to students causing them to reach home or school late.

Maunder and Fouracre (1997) argues that the challenges of transport for students in Tanzania are not facing students in Dar es Salaam city alone. This is the case for students in Mwanza, which is the second largest city in Tanzania second to Dar es Salaam. They are also constrained by problems of public transport system. Buses are usually crowded. For instance, there are always too many passengers on the same bus in rush hour. Late arrival to school was mentioned by the author to be common among primary school students in all schools in Mwanza city.

2.3.2 Benefits of School Buses

Khayesi (1999) explain that school buses are more convenient for students because they follow regular schedules all the time. Pick up points for students are determined ahead of time. If a family shift from one location to another, it is possible to change pick up point for a student. Students do not normally have to walk long distance to catch up a school bus. After school, students are taking buses just within school compound and dropped close to their respective homes.

In the United States for example, school bus is the safest transportation for students. One of reasons for being safety is the fact that school bus drivers undergo many tests before they are allowed to drive school buses. The tests include drug and alcohol test. These tests are repeated from time to time to ensure that drivers fit to drive school buses (Spence, 2000).

According to Transport Research Board (1989) school buses are beneficial because of their reliability and punctuality. Students can count on their bus to pick them up at the assigned point and drop them off at school on time every day. What is important

is for students to know bus stop location and time of bus arrival. In most occasions when there is a possible delay, communication is made to make parents and students aware of the delay.

As explained by Spence (2000) transportation means as movement of things from one place to another. But this statement takes the matter in general terms. There are other descriptions that need to be taken into account when trying to explain transport. It will be better if transport is explained by considering the importance of its accomplishment of moving things with the least force and in the shortest time. Speed, then, is one fundamental aspect, while economy of force, translated in the light of actual conditions, means cheapness. Speed and cheapness never cease in the most complex development of transportation.

According to Brushett (2005) when any person or group of people such as students for example decides to use public transport they get advantage of saving money. This is because they will pay a small portion while other passengers also contribute. But public transport has many other disadvantages that people who use it needs to be aware of. These include irregularities in time and schedules, limited coverage and somehow low level of safety standards. It is therefore important for people who use public transport to understand the transport system well and prepare to meet these challenges.

2.3.3 Role of Reliable Transport in Students' Performance

According to Ball (2003) safe and reliable transport for students has critical role to play in their performance in school. It will make the students arrive in school on time

and commence classes on time. Unreliable transport will make students get late in class and therefore miss early lessons.

A student who arrive in school and class on time, are building up confidence because they attend all classroom programs. In many cases students who are late in school lose confidence because then they get half lessons in class. On the way home, those with no reliable transport are exposed to high chances of getting home late. Homework and private readings become interrupted (Farber, 1998).

There are times where a student or a group of students are given extra classes to improve their learning ability. Again this requires reliable transport to reach home after extra classes. Public transport may not offer assurance to manage time effectively especially in a situation where extra classes are offered outside normal school (ibid).

2.3.4 Outcome of Poor Transport System on Students

Most of primary school students are young boys and girls aged between seven and 14 years. Public transport in most African cities is poorly coordinated causing difficulties for young girls and boys to board. It requires a stronger person to push other people when entering the public buses (Alspaugh, 1998).

Miller (2001) argues that public transport is not suitable for students with disability. Students with disability require special attention. Bus drivers and conductors working in public transport systems such as buses may not have skills to care for

students with special needs. The buses that provide public are in business. There provide little or no space or facilities to cater for people with disability.

Where students share public transport with elders they receive no special attention when something goes wrong on the buses. This is different from special school buses where police and other authorities are more likely to pay attention when something gets wrong. There are countries where there are state laws govern school bus safety standards but this is not the case for public transport (Alspaugh, 1998).

2.4 Empirical Literature Review

This section presents similar general studies from various authors who contributed towards understanding students transport.

2.4.1 Empirical Literature Review Worldwide

Abdulkadiglu et al (2011) carried out a study in Boston to assess factors for school performance by students in high schools. The study involved 250 high school students from 30 different high schools. The study discovered that students who use public transport are more vulnerable to poor performance in school than their counterparts who use special school buses. It was found out that use of public transport contributes towards reduction of class grades by about one third. The study concluded that public transport has a significant negative effect on students' school performance.

Spence (2000) conducted a study in Canada to determine how public transport affects student achievement in school. A total of 100 students from grade 4 and 5

participated in the study. The study found out that more than 75 per cent who participated in the study rides public buses for longer distances of more than 20 miles to go to school. Evidence collected from this study suggests that long public bus rides have negative effects on students' performance in school. It also affects students' ability to fully participate in the school experience such as sports, leadership and general socialization.

Fack and Grenet (2010) carried out a study in France in the city of Paris on the role of better transport for students on the improved school grades. The authors involved 10 private schools that offer transport services to students through school buses. About 500 students participated in the study. Findings from the study indicated that more than 475 students who participated in the study (equal to 95 per cent) reported that availability of school buses allows better planning for both school and private studies for students and hence contributes to an improved school grades. This study confirms another study by Spence (2000) which found out that student who use public transport fail to participate fully in both academic and social activities in and out of school.

Kendra (2011) assessed the key factor in winning existing competition among public schools in India. His study involved a total of 40 public high schools. Sample for the study was drawn from parents with students who attend the selected high schools. The study included 200 parents and 200 students. Data were collected through e-mails and through focus group discussions with respective parents. The study revealed that all public schools that participated in the study provides the same level of academic curriculum but the schools with students' transport were most favored

by both the parents and students. It was found out further that transport assurance for students contributes to student's performance in class work grades and in other extra curricula activities. Students who are given transport to school and on the way home, have a better opportunity to plan and manage their time well. They will be assured of arrival time near home and reaching school compound on time.

Dills and Hernandez-Julian (2008) examined academic performance of lower school students in Mexico. The study involved 50 public schools in 10 cities through a survey. Data for the study were collected from students and teachers in respective schools. It was found out that there were a group of students whose schools grades were lower than other fellow students in same school and same classes. Transport was mentioned to be among key factors for differences in school grades between students. It was indicated that students who use public transport are affected most such that their school grades reported to be lower. In this study, it can be thought that students who use public transport waste much time while on the way to and from school such that they do not get enough time to make private study.

2.4.2 Empirical Literature Review in Africa

It has been reported by Khayesi (1999) that some students in some cities in Southern Africa have no access to public buses at all. They use other means such as pickups that are not designed to carry passengers. The pickups are often overloaded with cargo. This means that students who board these vehicles are in danger. These studies are relevant to the proposed study because they provide an input on the importance and understanding of school buses for students. Students' safety and

performance in school is a concern of many actors including parents, schools and the government.

Tlale (1994) conducted a study in Lesotho on public transport and the effects on different groups of users. One of the groups who use public transport more frequently are the students. Information from the study revealed that both the parents and students choose those schools that are near their homes because of negative academic impact experienced by other students who commute public buses travelling to school.

The study concluded that public transport is not favored by students and parents not only because of its safety issues but also because of its contribution towards poor school performance for students. But on the other hand, public transport is also reported to be positive and recommended for use for students but if it is well planned in terms of routes and timing.

A study by Vaaje (1987) revealed that in West African cities, public transport is favorable for students because it has known specific routes covering many locations in a city. It has also many buses that go many rounds within the same routes. This assures students with transport because they will always catch the next bus that will pass through on time. In this way the scholar has not seen any issues with students' school performance. This study proves that reliable transport for students contributes to the students' school performance. In another way, school performance may be affected where students have no reliable transport especially those using public transport that are not well planned.

Krueger (2003) conducted a study in South African rural area of Nqutu about the role of transport on students' performance in school. In this study, it was reported that primary schools are not found in all villages. Students who live in those villages where there are no schools have to walk about ten miles going to and from school. The study saw that these students are at high risk of snake bites, rape and treacherous river crossing. By the time they arrive at school after a long walk, their energy has worn off and they are fully aware, as they do their best to pay attention in class that they will have to repeat the journey all over again at the end of the day. In this situation it is also difficult for the students to focus in class and have energy to complete their homework.

It has been reported by Setty (2005) that primary school students in Kenyan urban communities face transport challenges that affect their academic engagement and performance. Those who use public buses have to fight entering the buses that are in most cases unscheduled. The students arrive to school late and exhausted. The same scenario happens when they travel back home after school. When students are tired, they will not have energy and motivation to concentrate on their private studies.

2.4.3 Empirical Literature Review in Tanzania

According to Onyango (2012) the government or Dar es Salaam City Council has not provided special buses for students. This is true because for many years students transport relied on public transport that is used by all other city residents. The study by this author revealed that students who use public buses suffer many difficulties such as weak participation in school activities and curriculum. Both academic and extra-curricular participation of students are affected.

There has also been a sustained government and City Council effort to create essential transport infrastructure and services for students. These efforts are aimed at improving access to schools and other educational facilities such as libraries. The aim is to create conducive environment for students learning (UNESCO, 2012). Mjingo (2011), report that other corporate organizations also came in to support efforts in improving students' transport in the city of Dar es Salaam. One of these corporate organizations is the CRDB Bank. In 2010, the bank donated five school buses for students only. The buses were handed to another city transport company, UDA, for management and provision of transport to students.

According to Banyikwa (2008) buses used in public transport in Tanzania are not designed to support physically challenged individuals such as people with disabilities. Even the bus attendants have not been given such roles to help disabled passengers. They are also not having skills to help passengers with special needs. The buses have no special seats or wheelchair accessibility. Learning conditions for disabled students are affected from transport point of view before they even reach the school.

An ongoing rapid bus transport project implemented in Dar es Salaam may bring some relief to students who use public transport in the city of Dar es Salaam. According to United Republic of Tanzania (2013), the project will not cover all the roads in the city. The project will cover most major roads that connect different parts of the city. The areas that will benefit are those around Morogoro road, Kawawa road, Msimbazi road, Kivukoni road, Kilwa road and Kawawa road. Other roads are

Nyerere, Uhuru, Bi Titi, Azikiwe, Bagamoyo, Sam Nujoma, Mandela and Old Bagamoyo road.

2.5 Research Gap Identified

From literature that has been reviewed it has been observed that many authors such as Banyikwa (2008) and Onyango (2012) covered and discussed about problems and challenges of public transport systems facing students. But they have not significantly covered specific impacts of those challenges and problems students school performance. This study contributes towards understanding the real impact of poor public transport on students 'academic performance in school.

2.6 Conceptual Framework

Fox (1996) observed that public transport is still helpful for students. This is because it is cheaper for low-income families and reaches many destinations. But poor coordinated public transport has been reported to cause negative consequences to many students. These includes but not limited to poor school performance and absenteeism from school. Public transport has been designed well so as to improve students' accessibility and finally improve school performance for students.

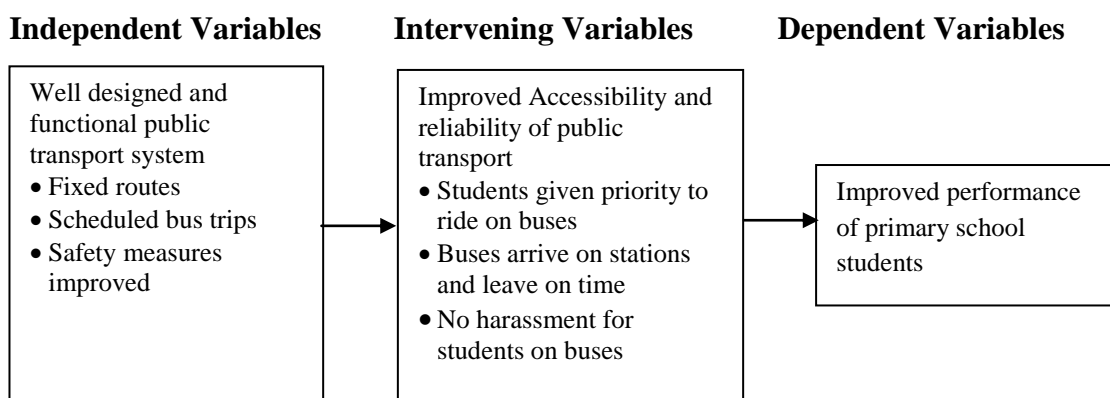


Figure 2.1: Conceptual Framework

Source: Designed by the researcher, (2016)

From the conceptual Framework above, improved performance of primary school student is a dependent variable. A well-designed and functional public transport system is an independent variable. An improved accessibility and reliability of public transport is an intervening variable.

2.7 Theoretical Framework

Improved performance of primary school students is a dependent variable. In order to have an improved performance of the students, a well-designed and functional public transport system is needed. A well-designed and functional public transport system need to have fixed routes, scheduled bus trips and an improved safety measures. Again a well-designed transport may realize student's school performance automatically. It requires an intervening variable. A well-designed transport system should be accessible and reliable to students. Being accessible and reliable means that students are given priority to ride on buses, buses arrive on stations and leave on time and there is no harassment for students on buses (Maunder and Fouracre, 1997).

An ideal public transport for students is the one that is accessible and reliable. According to Spence (2000) public bus accessibility means students are given priority to board. Reliability also means that the buses arrive and leave stations on time. This will make students arrive to school on time and start lessons on time. When students arrive to school on time they will have enough time to study and cover materials in the class and therefore contribute in an improved performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter deals with methodological processes as well as procedures to be used in the data collection and data analysis. More specifically, it describes the research design, sample, sample size, sampling procedure, data collection methods and tools for data collection. The chapter also describes data analysis plan.

3.2 Research Design

Chave and Nachimias (1996) define research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy and procedure. It constitutes a blue print for collection, measurement and analysis of data. The research design that used in this study was a case study. This method has been chosen because it studies a situation of students who use public transport in one location, the city of Dar es Salaam. According to Kombo and Tromp (2006), a case study is a research method that seeks to describe a unit in detail, in context and holistically.

3.3 Area of Research

The study was conducted in the city of Dar es Salaam covering one district of Temeke. Dar es Salaam city has been chosen because it is the largest city in Tanzania and it is where most students use public transport systems. The district (Temeke) has been chosen because the researcher has access to primary schools where data for the study were collected.

3.4 Study Population

According to Kothari (2003) study population is the total member of a defined class of people, objects, places or events selected because they are relevant the problem under study. In this study the targeted population were the primary school students and teachers in Temeke district in Dar es Salaam.

3.5 Sample size and Sampling Design

A Sample is a finite part of a statistical population whose properties are studied to gain information about whom (Webster,1985).When dealing with people, it can be defined as a set of respondents(people)selected from a large population for the purpose of a survey.Sample for the study which includes students and teachers was drawn from three primary schools namely Chamazi Primary School, Keko Magurumbasi Primary School and Mbande Primary School. Three schools were selected because of time to manage data collection were limited. Students are selected because they are the ones who use either public transport or school buses to travel between homes and their respective schools. Teachers are in a position to provide information about impact of type of transport for students.

3.5.1 Sample Size

The researcher involves students and teachers in each of the three schools. For students, there are seven grades in the school. These are grade one to seven. The researcher involved grade five to seven. This is because the researcher felt that students at this level have better communication ability and can express themselves better than younger students of lower grades. There are at least three classrooms from each grade namely streams “a”, “b” and “c”. The researcher could not afford to

talk to all students. Five students were selected from each stream randomly to make 15 students from each school. Random sampling according to Chave and Nachimias (1996) is a sample selection where any object from the larger population has a chance to be picked. In this case therefore, the researcher involves 45 students in total from three schools. But gender balance was maintained to get feedback from both male and female students.

For teachers, the researcher requested to involve the Head Teacher, Academic Teacher and Discipline Teacher. These were picked purposively because their positions are directly involved in student's affairs. Purposive sampling is defined by Kothari (2003) as a form of non-probability sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher based upon a variety of criteria which may include specialist knowledge of the research issue, or the individual participants who would be most likely to contribute appropriate information. In this case therefore, a total of 9 teachers were involved from the 3 schools. Table 3.1 summarizes the sample and sample size.

Table 3.1: Sample Size

Respondent	Sample size	Percentage (%)	Sampling design	Data collection tools
Students	45	83.3	Random sampling	Questionnaires
Head Teachers	3	5.6	Purposive sampling	Interview questions
Academic Teachers	3	5.6	Purposive sampling	Interview questions
Discipline Teachers	3	5.6	Purposive sampling	Interview questions
Total	54	100		

Source: Field Data, (2016)

3.5.2 Sampling Design

The sampling design is a definite plan for obtaining a sample from a given population (Mugenda and Abel, 1999). It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sampling is the act, process or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population (ibid). In this study, a mixer of two sampling designs was adopted.

These are purposive and random procedure. Purposive sampling is non probability sampling strategy in which required information is gathered from a specific target or group of people on some rational basis (Saunders, 2003). Random sampling refers to that method of sample selection, which gives each possible sample combination an equal probability of being picked up and each item in the entire population to have an equal chance of being included in the sample (Kothari, 2004).

Under this research, purposive sampling was applied to select teachers who participated in the study. This is because the teachers are the ones who responsible for students' affairs directly in school and in classrooms. Random sampling was applied to get students who participated in the study.

The researcher asked Academic Teachers to provide a list of students who are present in classes. All students' names from the list were written on piece of papers then folded and put on a container. The researcher picked the piece of papers from the container to get 15 students from each of the three schools.

3.6 Variables and Measurement Procedures

Both qualitative and quantitative data were used in this study. Data were collected from the students and teachers. Data collected were about the impact of public transport system on the academic performance of primary school students. The information collected helps to determine the performance of students in schools in relation to the use of public transport.

3.7 Data Collection Methods

3.7.1 Primary Data

Primary data was collected from students and teachers. Teachers were interviewed through interview questions administered by the researcher. Information from students was collected through questionnaires that were filled in by students themselves but were guided by the researcher. In total, the researcher engaged a total of 45 students in three primary schools.

3.7.2 Secondary Data

Secondary data was requested from teachers in a form of students' school attendance sheets, examination and test scores for students.

3.8 Data Collection Tools

To gather data, the researcher used interviews. Data from teachers were collected using interview questions. But data from students were collected through questionnaires that were administered by students themselves and guided by the researcher. This is because students were many such that the researcher could not interview them one by one in person. The nature of the study involved children whom most of them were under 18 years of age. The researcher explained the

purpose of the study to school administration before engaging the students. The researcher also shared the students' questionnaires to school heads before distribution to students. On reporting the findings, real names of students are not mentioned for the sake of confidentiality and child protection.

3.9 Reliability and Validity of Data

3.9.1 Reliability of Data

Neuman (2003) defines reliability as the extent to which data are consistent over time and an accurate representation of the total population under study. The researcher for this study assured reliability of data through using the same interview questions to all teachers without alterations. The uses of the same interview questions guided the researcher to ask similar questions from all teachers. Same interview questions allowed triangulation of information from various respondents to assure reliability. The same was applied to students. The researcher also used the same questionnaires for all 45 students.

Furthermore, by understanding that primary school students are below 18 years of age, the researcher ensured that the students are accompanied by teachers during the process of data collection. The teachers were involved because of two reasons. One being the fact that they take care of students while in school on behalf of parents. Secondly, the research theme relates with academic performance of students where teachers play a part.

3.9.2 Validity of Data

Chave and Nachimias (1996) define validity as the ability of data to measure what it is intended to measure. In order to assure validity of information to be collected, the

researcher used specific objectives to set up interview questions for teachers and in designing questionnaires for students. Furthermore, the researcher tested interview questions to one teacher before they are used over to all teachers. Questionnaire for students were shared to teachers for checking before they were distributed.

3.10 Data Analysis

The qualitative data gathered through questionnaire and interviews were broken down into simple parts in tabular forms and percentage for the purpose of interpretation to determine the inherent facts. During analysis, data were coded in order to recognize their differences and similarities, and then the data were presented and explained to understand a bigger picture that it is presented by the data. The findings were discussed and interpreted with respect to research objectives.

3.11 Ethical Consideration

The nature of the study involved children who most of are under 18 years of age. The researcher explained the purpose of the study to school administration before engaging the students. The researcher also shared questionnaires and interview questions to school heads before talking to students. On reporting the findings, real names of students are not mentioned for the sake of confidentiality and child protection.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF THE FINDINGS

4.1 Introduction

The results section of the body of the report presents the findings of the study in some detail, often including supporting tables and figures (Churchill and Brown, 2007). This chapter presents details of the study findings in the light of predetermined research objectives and questions. It analyses and presents the research data as well as discusses the findings of the study.

4.2 Respondents Characteristics

The respondents who participated in the study were asked to provide information in terms of age, position, and gender. The findings, analysis and discussion are presented in the context of these variables.

4.2.1 Students' Age

It was important to know the age of students who participated in the study. Each student was asked to mention his/her age when filling in the questionnaires. The ages were then summarized as indicated on the table below:

Table 4.1: Students' Age

Age range	Frequency (N)	Percentage (%)
8 to 10 years	0	0
10 to 12 years	18	40
12 to 14 years	22	49
14 to 16 years	5	11
Total	45	100

Source: Research Findings, (2016)

According to information presented on Table 4.1 there was no student who participated in the study aged between 8 and 10 years. A total of 18 students (equal to 40%) were aged between 10 and 12 years. Those whose age was between 12 and 14 years were 22 (equal to 49 %) while those aged between 14 and 16 years were 5 (equal to 11 %).

4.2.2 Respondents' Gender

The respondents who participated in the study were students and teachers. Their genders were as presented on the Table 4.2.

Table 4.2: Students' and Teachers' Gender

Gender	Frequency (N)	
	Students	Teachers
Male	22 (49%)	3 (33%)
Female	23 (51%)	6 (67%)
Total	45 (100%)	9 (100%)

Source: Research Findings, (2016)

Information presented on Table 4.2 shows that there are 22 male students (equal to 49 %) while the female students who participated in the study were 23 equal to 51 %. This data means that there were slightly more female students than male who participated in the study. The table also shows that there were nine teachers who were involved in the study, three from each of three schools that participated in the study. There were three male teachers who participated in the study. This number is equal to 33 % of all teachers who participated in the study from the three schools.

Female teachers who participated in the study were six equal to 67%. This information represents the fact that female teachers who participated in the study were more than male teachers.

4.2.3 Teachers' Positions

The researcher wanted to know the teachers' role position in their respective schools in addition to being normal teachers. Findings from this question were summarized and presented on the Table 4.3.

Table 4.3: Teachers' Position

Position	Frequency (N)	Percentage (%)
Head Teachers	3	33.3
Discipline Teacher	3	33.3
Academic Teachers	3	33.3
Total	9	100

Source: Research Findings, (2016)

According to information presented on Table 4.3, it shows that three Head Teachers, three Discipline Teachers and three Academic Teachers were involved in the study. This information means that there were equal numbers of Head Teachers, Discipline Teachers and Academic Teachers represented in the study.

4.3 Transport Used by Students

The researcher wanted to know from students about type of transport they use when going to school and on returning back home from school. Each student from the three schools who participated in the study was given opportunity to mention the

type of transport they use. The researcher noted the responses from each student as presented on the Table 4.4.

Table 4.4: Type of Transport Used by Students

Schools	Travel by Public Transport	%	Travel on Foot	%	Travel by School Bus	%	Total
Chamazi Primary School	10	66.6	2	13.3	3	20	15
Keko Magurumbasi Primary School	12	80	3	20	0	0	15
Mbande Primary School	7	46.6	8	53.3	0	0	15
Total	29	64.4	13	28.8	3	6.6	45

Source: Research Findings, (2016)

Data presented on Table 4.4 indicates that 29 out of 45 students who participated in the study from three primary schools reported to use public transport to travel to and from school. This number is equal to 64.4% of all 45 students who participated in the study from three primary schools. Other 13 students said they walk to and from school. This is equal to 28.8%, those who travel by school bus were 3 only equal to 6.6%. This information indicates that majority of students who participated in the study uses public transport to travel to and from school. This evidence is represented by 64.4% of students who reported to use public transport than those who walk or board school buses. Teachers reported that students who use public transport are more often late to arrive in school and have indicated poor performance in general. But those students who walk to school and those who use school buses their school performance is significantly better.

Furthermore, the lowest number of students who use school buses represents the fact that most public primary school does not offer school bus transport for their students. This was also reported by Bryceson (2000) who said that most public schools in African countries have no school buses. Most students have to use public buses and other means of transport.

4.4 Time a Student Spends from Home to Reach Bus Stop

The researcher asked the students who participated in the study, how much time they spend to walk from home to the bus stop. The question was asked to those who travel by public transport and school buses only. The results were as shown on Table 4.5.

Table 4.5: Time Student Spends to Walk from Home to Bus Stop

Time Spent	Chamazi Primary School			Keko Magurumbasi Primary School			Mbande Primary School		
	frequency	%	total	frequency	%	total	frequency	%	Total
30 minutes	8	61.5	13	3	25	12	6	85.7	7
15 minutes	5	38.5	13	8	66.7	12	1	14.3	7
10 minutes	0	0	13	1	8.3	12	0	0	7

Source: Research Data, (2016)

Table 4.5 indicates that 8 students out of 13 from Chamazi Primary School (equal to 61.5%), 3 students out of 12 from Keko Magurumbasi (equal to 25%) and 6 out of 7 from Mbande Primary School (equal to 87.5%) spend 30 minutes to walk from home to reach respective bus stop to board either public buses or school buses going to school.

The table also indicates that 5 students out of 13 from Chamazi Primary School (equal to 38.5%), 8 from Keko Magurumbasi Primary School (equal to 66.7%) and 1

out of 7 from Mbande Primary School (equal to 14.3%) use 10 minutes to walk from home to reach bus stop to board a bus. The table indicates further that there was only one student who use 10 minutes to walk from home to the bus stop. This student is from Keko Magurumbasi Primary School.

Information presented on Table 4.5 mean that most students who either use public buses or school buses have to walk for some distance (10 to 30 minutes) to reach the bus stop point to board a bus when travelling to school or walking same distance from bus drop point to reach home. There is no student who is picked up by buses from home. As learned from the study, students who have to walk to school are likely to arrive late to school. This was noted for the students who spend at least 30 minutes walking to school. Findings indicated that students who arrive late misses some lessons in the morning and therefore fall under weak school performance.

4.5 Distances from Home to the Bus Stop

It was found out that there are different distances from students' home to the bus stop. Each student who reported to use either public buses or school buses and who participated in the study was given opportunity to estimate distances in kilometers from his/her home to the point where they board buses. A total of 32 students represented those who board buses. The responses were summarized and presented on the Table 4.6.

Information presented on Table 4.6 indicate that among the 32 students who use buses to travel to school, 20 of them (equal to 62.5%) have to walk between 0 and 1 kilometers from home to reach the public bus stop or a point where they are picked

up by public buses. Those whose distance from home to the bus stop is between 1 and 2 kilometers were 8 equal to 25%. Four students reported that their homes are located between 2 and 3 kilometers from the bus stops. The information from the table means that all students who participated in the study live within the walking distance to the bus stops where they can get either public buses or board school buses.

Table 4.6: Distances from Home to the Bus Stop

Distance in kilometers	Frequency (N)	Per cent (%)
0 to 1	20	62.5
1 to 2	8	25
2 to 3	4	12.5
Total	32	100

Source: Research Data, (2016)

4.6 Capability of Bus Fare

Any passenger who board public buses is obliged to pay applicable bus fare for the distance travelled. Students who use public buses and who participated in the study were asked if they have bus fares every day when they go to school and on returning home. The question on bus fare was asked to a total of 29 students who use public buses. The responses were summarized on the Table 4.7.

Table 4.7: Students' Capability on Having Bus Fare

Responses	Frequency (N)	Percentage (%)
Always having bus fare	7	24
Sometimes having no bus fare	22	76
Total	29	100

Source: Research data

Table 4.7 shows that 7 students out of 29 who use public buses (equal to 24%) reported to have bus fares every time they board public buses. But 22 students (equal to 76%) reported that they sometimes lack bus fares. Majority of the students indicated that sometimes have no bus fares, this poses a question to consider. The researcher asked those who sometimes miss bus fare on how they travel without bus fares

They provided different types of experiences. Eight students said they ask for support from other fellow students. Four said they ask bus conductors to give them free ride. The bus conductors sometimes agree and sometimes disagree and have to try next bus. Nine others said they ask for a ride from other passing vehicles that are not buses. In his study, Khayesi (1999) discovered that sometimes students take a ride on vehicles that are not designed to carry passengers. This poses danger for the students when travelling. Another student said he walks on foot to school. Walking on foot may delay a student to reach school and may make it questionable to attend first classes on time and therefore, fail to get the opportunity to ask questions and to share skills and knowledge this contributes to lower the student's academic performance because of poor school attendance when the parent fails to provide cash for bus fares.

4.7 Students Arrival to School

The students who participated in the study were asked if they always arrive to school on time every day. This was responded by all 45 students who participated in the study from three schools. The responses were recorded on Table 4.8.

Table 4.8: Students' Arrival to School on Time

Responses	Frequency (N)	Percentage (%)
Yes	7	27
No	38	73
Total	45	100

Source: Research Data, (2016)

Information presented on Table 4.8 indicates that few students (7 out of 45 equal to 27%) arrive to school on time always. But majority of students (38 out of 45 equal to 73%) who participated in the study reported to arrive to school late always. Reference was made to the research responses from students and it was discovered that those who arrive to school late are those who use public transport to travel to school from home. A similar observation was reported by Setty (2005) who said that primary school students in Kenyan urban communities who use public transport arrive to school late and exhausted. Normally students who do not arrive school on time miss out on the important learning activities scheduled early in the day that affects their learning processes and performance.

Those who said they always arrive late to school were asked a follow up question on the consequences they suffer in school when they arrive late. Their responses were summarized as listed below:

- (i) Do not catch up first classes or find it already started
- (ii) Receiving punishments from teachers
- (iii) Asked by teachers to wait outside classes until the first class is finish

These consequences experienced by students may have a negative effect on the academic performance of individual students. Any form of punishment result in deepening the challenges affecting the student. Such student cannot grow well academically

4.8 Number of Buses Used by Students to Travel

Students who use public transport were asked to indicate the number of buses they connect to travel to school. This question came in because in the city of Dar es Salaam, travelling from one place to another through public transport may involve changing buses to take specific routes going different directions depending on the location that the passenger is going to. The study revealed that some students take more than one bus in the way to school a total of 29 students who use bus transport responded to this question. The responses were as presented on the Table 4.9.

Table 4.9: Number of Buses Used by Students to Travel

Number of buses	Frequency (N)	Percentage (%)
1 bus	24	83
2 buses	5	17
Total	29	100

Source: Research Data, (2016)

Information presented on Table 4.10 shows that majority of students (24 out of 29) equal to 83% who use public buses to travel to school and who participated in the study need one bus to reach school or home. But there are also few students (5 out of 29) equal to 17 % who connect two buses on the way to school and on the way home after school. The need for more than one bus may mean that the student home is

located far away from school or in a different location that requires changing buses on the way. The survey revealed that the more the student changes buses to go to school the more amount of money is needed to meet the increased transport cost which frustrates students as well as parents from poor families as they cannot afford to have money always, hence students miss to go to school regularly.

As explained by Sliuzas (2001), connecting more than one bus may be caused by the split between residential areas and places of work or areas where people get services, expansion of urbanized area and deficient transport system. As a result of these factors, transport remains to be a critical need for city residents and especially the students.

4.9 Waiting Time for Buses

Students who participated in the study were asked to mention the time they spend to wait for buses when they go to school or when they travel back home after school. This question was particularly responded by 32 students (29 who use public buses and 3 who use school buses). The responses were as presented on the Table 4.10.

Table 4.10: Waiting Time for Buses

Waiting Time	Travel by Public Buses		Travel by School Buses	
	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)
1 minute to 20 minutes	4	14	3	100
20 minutes to 1 hour	7	24	0	0
1 hour to 2 hours	18	62	0	0
Total	29	100	3	100

Source: Research Data, (2016)

According information presented on table 4.10, only 4 out of 29 students who use public buses (equal to 14 %) spend 1 to 20 minutes to get a bus. But on the other hand, all 3 students (equal to 100 %) who use school buses reported to spend 1 to 20 minutes to wait for the school bus. Furthermore, there were 7 out of 29 students (equal to 24 %) who have to wait for public bus for between 20 minutes and 1 hour. Majority of students (18 out of 29) equal to 62 % who have to spend between 1 and 2 hours waiting to get public buses. This information indicates that students who use public buses waste more time for waiting buses, there is approximately two to four hours per day spend to wait for buses when they go to school or when they travel back home after school, This gives less time for her/him to participate in learning effectively and classroom concentration, transport time for students should not exceed an hour to arrive at school this can encourage student to participate in all school activities mentally and physically, hence improves the student performance.

4.10 Students' Time to Arrive Home from School

All 45 students who participated in the study were asked on the time they arrive home from school after classes. The responses were summarized and presented on the Table 4.11.

Table 4.11: Students' Time to Arrive Home from School

Time	Travel by Public Transport (N)	%	Travel on Foot (N)	%	Travel by School Bus (N)	%
3.00pm-4.00pm	8	27.6	13	100	3	100
4.00pm-5.00pm	6	20.7	0	0	0	0
5.00pm-6.00pm	15	51.7	0	0	0	0
Total	29	100	13	100	3	100

Source: Research Data, (2016)

Table 4.11 indicates that 8 out of 29 students who use public buses arrive home from school between 3.00 pm to 4.00pm. This number is equal to 27.6%. All 13 students who walk from school equal to 100% and all 3 students who use school buses equal to 100 % also reach home from school between 3.00 pm to 4.00 pm. There were 6 other students who use public transport (equal to 20.7%) who said they arrive home from school between 4.00 pm and 5.00 pm. Furthermore, there were 15 students (equal to 51%) who use public transport arrive home between 5.00 pm to 6.00 pm. This information shows that students who use public transport arrive home late from school due to transport problem. This gives the student no time to do private studies at home. Lack of time for private studies contributes to lower school grades because for the student to do well in class, she/he has to read class notes after Teacher's session in class.

4.11 Time to do Homework and Readings

Students who participated in the study were asked whether they have time to do their homework or readings when they arrive home after school. This question was responded to by all 45 students who participated in the study. Their responses were summarized on the Table 4.12.

Table 4.12: Time to do Homework and Readings

Responses	Travel by Public Transport (N)	%	Travel on Foot (N)	%	Travel by School Bus (N)	%
Yes	10	34	11	85	3	100
No	19	66	2	15	0	0
Total	29	100	13		3	100

Source: Research Data, (2016)

Information presented on Table 4.12 shows that 19 out of 29 (equal to 66 %) students who use public buses do not get time to do their homework or private reading when they arrive at home after school. It is only 10 out of 29 (equal to 34 %) students who use public transport gets time to do their homework or private studies at home after school.

On the other hand, all 3 students (equal to 100 %) who travel by school buses reported that they get time to do their homework and make private studies when they arrive home after school. For those who walk to school 11 out of 13 9 equal to 85 % said that they get time to do their homework and private studies when they arrive home from school. There were only 2 students (equal to 15 %) among the groups that walk to school who reported to have no time to do homework or private reading at home, this is due to tiredness.

These results indicate that primary school students who use public transport have difficulties in engaging in private studies after arriving at home. In this case student may find no time for self-preparation academically and so will not cover enough materials through reading hence perform poorly in class tests or examinations.

4.12 Travel Way in which Students Face Problems the Most

The study intended to know the most challenging travel route between the travel from home to school in the morning and the afternoon when they travel from school towards home. The question was asked to a total of 32 students who travel on public buses and on school buses. The responses are summarized on Table 4.13.

Table 4.13: Travel Way in Which Students Face Problems the Most

Travel route	Frequency (N)	Percentage (%)
Morning travel	12	38
Afternoon	10	31
Both morning and afternoon	10	31
Total	32	100

Source: Research Findings, (2016)

Information presented on Table 4.13, indicates that 12 students (equal to 38%) see the morning travel going to school being the most challenging. Those who see the afternoon travel being the most challenging were 10 out of 32 (equal to 31%). Other 10 students (equal to 31%) see that both morning and afternoon travel being challenging. This information is close to one another. The number of students who see morning travel being challenging is higher than those who experience travelling in the afternoon being challenging. This means that students who are challenged by travelling to school in the morning are more likely to miss first classes in school and therefore contributes to poor performance in school. But again those who face challenges when travelling back home are likely to arrive home late. This means also that being late to arrive home after school is also a factor for missing private studies and completion of home works and therefore contributing to poor school performance.

4.13 Challenges Experienced by Students Using Public Transport

The responses obtained through questionnaire indicate that Students who use public transport experiences many challenges while using the buses. Their responses were summarized as follows:

- (i) Harassment from bus employees related to low fares that the student pays. The policy says students should pay Tsh. 200 per route on public buses. Elders pay between Tsh. 400 to Tsh. 800 per route.
- (ii) Long waiting at bus stop. Sometimes buses are full or the bus employees refuse to take students on board their buses.
- (iii) When they board the public buses, students are allocated small space to occupy in a bus. Normal passenger seats are usually reserved for other passengers other than students.
- (iv) If it happens a student provide money to the bus conductor that requires a change back, they receive dirty words from the conductors.
- (v) Most times students get to school late because the public buses does not have time schedule to leave or arrive to specific stations.
- (vi) When arrive in school late they find the first class has started and becomes difficult to catch up with others.

4.14 The Impact of Public Transport Irregular Schedule on the Performance of Primary School Students

Among the challenges mentioned by students who use public transport is the fact that the public buses do not have time schedule to leave or arrive to specific stations. In a discussion they mentioned further that irregular schedule of buses results in long waiting in bus stations because it is not known as to when the buses will arrive. It was also reported by students that because of irregular bus schedule, they are not sure of specific time to arrive to school. All 9 teachers who participated in the study

reported that irregular public bus schedules affect students' plans to catch buses and therefore getting late to school and miss some morning lessons in classes.

4.15 The Outcome of Careless Handling of Public Transport System on Primary School Students

All 29 students who use public transport (equal to 100 per cent) and all 9 teachers who participated in the study reported that public transport system poses many challenges because of careless handling which include lack of priority to students to board the buses. Students said that bus conductors prefer other passengers other than students because of low bus fare given by students. As a result, few students are allowed in buses while many others has to wait for next buses that is not clear as to when it will arrive. This is also supported by Briggs and Mwafumpe (2000) who argue that students in the city of Dar es Salaam are facing challenges to travel due to unreliability of public transport.

4.16 Coping with Public Buses Challenges

The study wanted to know from students who travel on public buses about how they cope with the challenges they experience while travelling going to school or going home from school. Coping strategies in this study means ways in which the students are struggling on their own to find ways to overcome challenges experienced during travel on public buses.

The study discovered that the students have no coping strategies to make them travel comfortable to and from school. But instead they continue to experience difficulties every day in the morning when going to school and on returning home. Among the

challenges experience include long waiting for buses, sometimes missing bus fares to pay, walking long distance to board buses from other points where they think they can be allowed in by the bus conductors and sometimes missing going to go to school when transport becomes a big problem.

4.17 The Ratio of Students Who Arrive to School on Time

The researcher for this study asked the teachers from the three schools about the ratio of students who arrive in schools late. Responses from teachers indicated that out of ten students, at least four to five students arrive to school late every day. This means that half of the class is always late to start first classes on daily basis. Consequently, there are high chances that these students will not perform well in classes.

4.18 Students' Punishment

Teachers were asked if they punish students who arrive to school late. All teachers said that they punish students who arrive late to school except for those with genuine known reasons. Teachers insisted that some students may fake the delay sighting transport as reasons but they play on the way until they get late. One teacher said that:

“I give various forms of punishments such as watering the garden or cleaning toilets or sweeping small parts of the school environment”.

This observation indicates that students who use public buses are likely to receive punishments many times in a year because they cannot arrive to school on time. This will also affect their class concentration because of frequent punishments.

4.19 Academic Performance of Students who use Public Transport

General indication from teachers shows that students who use public transport mostly have challenges in making it to school and home on time. Their academic grades are not pleasing because they frequently miss many first classes in the morning. One would not expect high scores for students who miss some lessons in class and who does not get enough time to complete home works and do private studies at home.

4.20 Beginning of Daily School Program

It was learned from teachers that the morning school program begins at 8:00 am every day. This time is the same as most public and private business office hours in the morning. This means therefore that many people who use public transport will be on the road in the morning to rush to their respective work places. Students are also lining up in the morning trying to catch the same public buses to go to school.

4.21 Kind of Transport Used by Students to Come to School

Teachers were asked to mention kind of transport used by their students. Responses from teachers indicated that students use public buses, school buses, private cars and others walks from home to school and back home after school. They further mentioned that public buses are the most common means of transport for most students.

4.22 Challenges Faced by Students in Public Transport

Teachers from the three schools who participated in the study reported that students are facing many challenging when using public buses. Their responses indicated

similar challenges faced by students who use public transport. These included long waiting for buses, harassments from bus conductors, unscheduled time for public buses and boarding overcrowded buses.

4.23 Number of Students who use Public Transport to Come to School

Teachers were asked to mention the number of students from their respective schools who use public transport to come to school. All nine teachers from three schools who participated in the study reported that they have no data that will tell exactly number of students who use public transport. They admitted that they have not done formal study to know the number of students who use public transport.

4.24 Discussion of the Findings

The findings of the study are discussed in relation to the specific objectives of the study. The findings are also related to some literatures that have been reviewed under literature review section of this study.

4.24.1 The Current System of Public Transport Used by Students in the City

Learning from the findings of this study, it is evident that most students use public buses to travel from home to school in the morning and from school to home after school in the afternoon. School bus is another means of transport used by students to travel to school and back home. But the use of school buses has been observed to be used by fewer students who attend public schools. It was also observed that other students walk to school and on their way back home after school. This was seen to be feasible for students who live relatively close to school within walking distance. But general findings show that most students travel to school and return home on public

buses. This fact has also been observed by a scholar (Fox, 1996) who argued that public transport is helpful for majority of students. A study by Vaaje (1987) also revealed that in West African cities, public transport is favorable for students because it has known specific routes covering many locations in a city.

4.24.2 Impact of Public Transport Irregular Schedule on the Academic

Performance of Primary School Students

It was learned from the study that students who use public transport arrive to school late when the first classes have started. They also fail to get enough time to do homework or revise at home because of limited time. Their time for homework and private studies is spent on the way struggling to board the public buses. Nyirenda (2012) explained similar situation. He said that inadequate and unreliable transport in the city of Dar es Salaam affects primary school students. It is common in the city of Dar es Salaam to see students stranded at bus stands for long time waiting for transport. But the students who use special school buses do not experience the same impact. In their study in Mexico, Dills and Hernandez-Julian (2008) reported that unreliable transport has a high contribution in affecting students' performance in school.

At the same time, after arriving late to school they receive punishments from teachers that involve waste of time again. Teachers confirmed that students who use public buses have not been performing well in school. Information from Chamazi Primary School Academic Teacher indicates that 90 per cent of students who use public buses scores low grades. The Academic Teacher from Mbande Primary School reported that use of public transport contributes to about 20 per cent of

students' low performance in school while the Academic Teacher for Keko Magurumbasi Primary School see that students who use public transport lose at least 15 to 20 per cent of materials covered in the class and hence contributing the same level in low performance in class.

A study by the University of Dar es Salaam (2008) pointed out that late arrival in school results in affecting students both at personal levels and their academic activities. When a student is late in school, she or he misses some classes that will affect academic performance. Punishments from teachers may have negative impact on the students.

4.24.3 The Outcome of Careless Handling of Public Transport System on Primary School Students

The current public transport system in the city of Dar es Salaam is primarily handled by the private sector. The buses operate under the guidelines supervised by the government. These buses have been assigned specific routes but does not have known fixed time schedule on the road. They are known for mishandling of students. But it was also seen from the study that the government and the community does not make deliberate and sustainable efforts to shape the city public transport to be favorable to students.

As a result, students travel in difficulties every day morning and afternoon. Their school performances are jeopardized for reasons that can be dealt with. Students have thought their coping strategies that are not sufficient to assure permanent solutions for their transport challenges. A study by Vaaje (1987) proved that

students' school performance is partly affected where such students have no reliable transport especially those using public transport that are not well planned. Maunder and Fouracre (1997) also reported that students in Mwanza city who use public buses have a proven record of arriving to school late compared with others who use school buses.

In this study it was realized that the outcome of careless handling of public transport system on primary school students include long waiting time on bus stop. This was reported by 18 students out of 29 who use public buses (equal to 62 per cent) who said that they sometimes wait for one to two hours before they get a bus. Again 51.7 per cent of students who use public transport also reported they arrive home between 5.00 pm and 6.00 pm at least two hours later than students who travel on school buses.

4.24.4 Coping Strategies used by Students to Deal with Challenging Public Transport

It was realized in this study that as the students who travel on public buses face challenges associated with poor management of the bus services. But the students have no coping strategies to help them overcome the challenges they experience when travelling with public buses in the morning when going to school and in the afternoon after school when going back home. Some students reported to miss school completely when they see that they are late. A study by Tlale (1994) in Lesotho indicates students and their families choosing schools that are closer to their homes after failing to cope with challenging public transport.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The section five presents the conclusions of the research, which are arrived from the objectives of the study. The study recommendations are also presented based on the study findings.

5.2 Summary of the Main Findings

The study found out that majority of primary school students uses public transport when travelling to and from school. But there are also students who use school buses and those who walk to school. Students who use school buses and who participated in the study reported that although they use public transport, they have to walk from home to the bus stop to board buses and from the final bus stop to reach school. From the result, it is clear that there are many impact of public transport system, which affects their school performance. Where the public transport is not well coordinated and managed to support students transport, it contributes to the students' poor performance in school through the fact that students do not arrive to school on time and missing classes in the morning. They also arrive home late and tired such that they do not get enough time to complete homework and for private studies. They will not cover enough materials and therefore weak preparations for class tests and examinations.

Students who use public buses said that they experience many challenges when travelling to and from school. The challenges include delays to reach their

destinations because they have to wait for the buses that are not scheduled. Bus conductors most often do not accept students because they pay the lowest bus fares. Then they have to wait for longer time to get buses that will take them in.

The challenges experienced on the way are among the causal factors for the students to get late to school. This means that they are also late to attend most of first classes in the morning. In all schools that participated in the study, students who use public buses said that they receive punishments from teachers when they are late. It was noted from teachers that punishments may not help because transport problem is beyond the students' control. The study has generally found out that improper handling of public transport has an effect on students. The students who use public buses experience more challenges than those who use other form of transport to travelling to and from school. School grades are affected by the fact that the students miss some of first classes and they do not get enough time for private studies at home.

5.3 Implications of the Finding

As found out in the study, most primary school students in Temeke district use public buses to travel to and from school. But the public buses are not well coordinated. They do not have known schedule of operations. Furthermore, the students' use of these buses has not been well managed. As a result, students do not have smooth access to reliable transport.

Students' participation in classroom activities and learning in general is affected and finally school grades are below expectations. There are no significant plans for the

future that will assure reliable transport for the students. This means also that students who use public buses will continue to experience the same challenges. They will also continue to see their school performance below school average.

5.4 Conclusions

From the findings of the study the researcher concludes that public transport system has an impact on the academic performance of primary school students who use these buses. The study discovered that the current system of transport used by students in the city of Dar es Salaam involves privately owned buses that community between different city streets and locations. These buses have been assigned specific routes but have no regular time schedule to provide services to passengers.

Irregular and poor control of public transport system in has been proved to affect students who depend on the public buses in many ways. Students arrive to school late when first classes have started. When they arrive in school late they are punished by teachers. It was also seen that students who travel on public buses do not get adequate time to do their homework or private studies at home because much time is used on the way.

From the study findings it is concluded that careless handling of public transport system has a negative outcome on primary school students. It partly contributes towards poor students' performance in school because of time waste on travel between school and home every day. Students whose travel on public buses formed their own coping strategies in order to cope with frustrations caused by poor coordinated public transport system. They came out with coping strategies that

include waiting for buses for a long time, begging bus fare from other passengers when they run out of money and some missing school completely when they cannot have bus fares on time.

5.5 Recommendations

- (i) The government should make a close follow up to regulate the services provided by private bus owners especially on handling students who use these buses.
- (ii) Parents should register their children to nearby school from home so that they don't have to travel long distances going to school and returning home after school.
- (iii) Parents should ensure that their children who use public transport are given applicable bus fares to minimize harassments when travelling on private buses.
- (iv) Teachers should identify students who face transport challenges and help them to catch up lessons where applicable, schools should not punish students who arrive to school late in the morning for reasons associated with lack of reliable transport.

5.6 Limitations of the Study

Some students who participate in the study from one school, Keko Magurumbasi Primary School, were reluctant to provide information for this study. The researcher asked for the support from the Head Teacher to talk to students. The Head Teacher helped to give confidence to students who later accepted to provide information and participated in the study.

Another limitation was the fact that the study process did not include specific school grades for students who participated in the study. The researcher had to rely on general information from students and from teachers to assess students' school performance.

5.7 Suggested Area for Further Studies

Due to scarcity resources in terms of time and finances, the sample size drawn was small from primary school students only, it is suggested that a more insightful study done across using both students of primary and secondary schools who use public transport in Dar es Salaam to make conclusion richer, and determine if similar results are obtained to validate the findings of this study. The recommended area for future research by this study is to take actual school grades for students for each taught subject. The study should assess the class grades and compare with means of transport used by specific students. This will come out with a more specific results and conclusions.

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APPENDICES

Appendix 1: Questionnaire for Students

Name of school.....

Students' Grade.....

Age.....

Gender (Male/female).....

1. What kind of transport do you use to come to school?

.....

2. How much time do you use walking from home to the bus stop?

i) 30 minutes

ii) 15 minutes

iii) 10 minutes

3. What is the distance from school to the bus stop?

i) 0 to 1kilometers

ii) 1 to 2 kilometers

iii) 2 to 3 kilometers

4. Do you have bus fare every day?

i) Always having bus fare.....

ii) Sometimes having no bus fare.....

Explain what happen when you do not have bus fare?

5. Do you get to school on time every day?

Yes..... No.....

If you sometimes get to school late, what consequences do you suffer in school?

6. How many buses do you take or connect to reach school and getting home from school?

7. What time do you spend to wait a bus?

i) 1 minute to 20 minutes

ii) 20 minutes to 1 hour

iii) 1 hour to 2 hours

8. At what time do you arrive home from school?

i) 3.00 -4.00 pm

ii) 4.00 pm-5.00 pm

iv) 5.00 pm – 6.00 pm

9. Do you have time to do homework and readings?

Yes.....

No.....

10. Which way do you face more problems to get the buses.....in the morning when going to school or in the evening when going back home?

11. What challenges do you face on public transport?

Appendix 2: Interview Questions for Teachers

1. What is the ratio of students who arrive to school on time?
2. Do you punish students who arrive in school late?
3. What is your view on the performance of students who use public transport?
4. What time does school program starts in the morning?
5. What kind of transport do students uses to come to school?
6. What challenges do students faces in public transport?
7. How many students use public transport to come to school?