INFLUENCE OF SCHOOL BASED FACTORS ON ACADEMIC PERFORMANCE OF LEARNERS WITH PHYSICAL DISABILITIES IN PRIMARY SCHOOLS IN HOMA BAY COUNTY

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DECLARATION

I declare that this document and the research that it describes are my original work and that they have not been presented in any other university for academic work

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This research was conducted under my supervision and is submitted with my approval as University supervisor

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DEDICATION

I dedicate this work to my husband, George, for his constant support during my studies. To my children Vivian and Dozzel, and, thereby to remind you to achieve greater heights than this.

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ABSTRACT

Education is a fundamental right for all persons including those with disabilities and special needs. It is a key to other human rights, the heart of development and a tool for empowering people to improve their welfare. However, placing learners with disabilities into the general education setting without proper support and intervention has proved disastrous to their wellbeing and academic performance. The purpose of the study was to establish the influence of school based factors on academic performance of learners with physical disabilities in primary schools in Homa Bay County. The objectives of the study were to: determine the influence of teachers' work habits on academic performance of learners with physical disabilities; assess the influence of school leadership on academic performance of learners with physical disabilities; and to establish the influence of physical facilities on academic performance of learners with physical disabilities in Homa Bay County. The study was based on the latent trait theory of mental ability. The study employed descriptive survey design. The study targeted 6885 teachers from 874 primary schools in Homa Bay County. The sample size was obtained through Yamane model where 378 teachers from 274 primary schools formed the sample size. Multi stage sampling technique was used. A structured questionnaire was used to collect data from teachers. The research instruments was pre-tested for reliability using Cronbach's alpha (α) during piloting. Content and construct validity was ascertained by subjecting the teachers' questionnaire to the university supervisors scrutiny. Data was analyzed through correlation and regression models and results presented in tables. Teachers work habits had a statistically significant moderate positive correlation (R=.497; $p < .05$) with academic performance. Teachers work habits had a statistically significant influence on academic performance ($F_{(1,328)} = 107.137$; $p < .05$) attributing 24.7% variance. School leadership had a statistically significant moderate positive correlation (R=.508; $p < .05$) with academic performance. School leadership had a statistically significant influence on academic performance ($F_{(1,328)} = 113.610$; $p < .05$) attributing 25.8% variance. School facilities had a statistically significant weak positive correlation (R=.398; $p < .05$) with academic performance. School facilities had a statistically significant influence on academic performance ($F_{(1,328)} = 61.712$; P< .05) attributing 15.9% variance. In conclusion, teachers work habits, school leadership and school facilities had significant influence on academic performance of learners' with physical disabilities in primary schools in Homa Bay County. The study recommends: intensified use of measures which strengthens good teacher work habit, good leadership and schools infrastructure.

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OPERATIONAL DEFINITION OF TERMS

Academic performance: The average score in all subjects for three consecutive terms

Disability: This is the absence of whole physical and intellectual ability in an individual that may limit his/her power to live and function normally in a given society.

Inclusion: The act programming the society set up, home or the learning institution while removing the societal barriers so as to accommodate all the individual/persons irrespective of their social background, disabilities, religion, race, economic status and many other limiting factors in the society.

Inclusive education: This is an approach in which learners with special needs receives services and support appropriate to their individual needs within the general education setting.

Leadership: Ability to inspire, inspect, and motivate learners and teachers with focus, confidence, transparency and passionate guidance.

Physical facilities: Classrooms, dormitories, playgrounds, learning materials and suppliers, equipment that support the learning activities and constitute the learning environment.

School-based factors: These are the teachers work habits in the school, leadership skills and the physical facilities for the purpose of learning.

Special-needs education: It is a form of impacting knowledge /skills based on the adjustment of the curriculum, instructional techniques/resources and the learning environment to suit those individuals with special needs in the society.

Teachers' work habit: Regular teachers' involvements in teaching/learning activities including time management, monitoring skills, organization skills, work ethics, etc.

LIST OF ABBREVIATIONS AND ACRONYMS

APDK	Association for the Physical Disabled in Kenya
EARC	Educational Assessment Resource Centre
EFA	Education For All
FPE	Free Primary Education
IDEA	Individual with Disabilities Education Act
NACOSTI	National Commission for Science, Technology and Innovation
UNESCO	United Nations Educational Scientific Cultural Organization
UNICEF	United Nations International Children's Educational Fund

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CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

This chapter presents the introductory part of the study. It basically covers the background of the study, the statement of the problem, the purpose of the study, the objectives of the study, hypotheses of the study, significance of the study, scope, delimitation, limitations, assumptions, theoretical frame work and conceptual framework of the study.

1.2 Background of the Study

Performance is an important part in ensuring the quality of education as outlined in the Sessional Paper No. 1 of 2005 (Republic of Kenya, 2005a). This advocates for the delivery of quality education that is very important in realization of millennium development goals and vision 2030. The government reviewed the curriculum in terms of content, teaching methods, education strategies, and administration structures in order to enhance the school performance. It is in this respect that the government of Kenya in conjunction with the United Nations Education for Children Fund (UNICEF) has introduced several peer education programmes to scale up the provision of quality education through seminars and workshops for the purpose of improving pupils' performance (Orodho, 2014; UNICEF, 2008).

Many educators advocate for the performance of the learners to be very important and their performance become paramount to most educational stakeholders such as government, parents, educational professionals and to the society **(**Andaya, 2016**).** According to Mburu (2013), there has been intensified pressure for learners' academic achievement and a lot of efforts have been put by the researchers on various factors that affect the academic performance of the learners in classroom. Gudyanga, Wadesango, Eliphanos and Gudyanga (2014) and Macharia (2013) indicated that inclusive education requires

identification, reduction and elimination of the factors that may obstruct the studies within and/or without the school environment. According to Gudyanga et al., (2014) the physical look of the school leaning environment should be adjusted to care of the needs of all learners including those with special needs. Their views about inclusive education seem to be in concurrence with those of the Kenya Government.

The Ministry of Education in its strategic plan for the period between 2008 and 2011 states that successful inclusion will require additional effort particularly; pre-service training and in-servicing teachers to prepare for specialized demand of teaching the physically challenged learners in particular. Mangaliman (2004), while studying the factors affecting learners' failures in mathematics, identified demographic factors as important in influencing learners' performance. The factors in the article reported as demographic were gender, parents' educational attainment, and socio-economic status of parents. Whereby the current study involves teacher's work habit, leadership, and physical facilities and how they affect academic performance of learners with physical disabilities. The declaration of Universal Human Rights in 1948 emphasized that one of the basic human rights is that of right to education. The entrance of this right gives all children the right to education irrespective of their background, disabilities, religion, and ethnicity (UNESCO 2003).

In the study of factors that affect school achievement on a state-wide basis in the USA Domina, (2009), and Tajalli and Opheim (2004) observed that those out of school control are described as input factors while those that are in the control of the local school district were described as process factors. According to Stinebrickner and Stinebrickner (2003), the factors could be classified as "can control" and "cannot control" variables. "Cannot control" factors in their perspective may include: family income, parental educational attainment, race, and student mobility rate. Students that are physically challenged usually

suffer from mobility problems which in most cases translate negatively in their academic achievement. Process or control factors may include school size, class size, teacher experience, teacher mobility, teacher degree attainment, school promotion rate, and school suspension rate in the study; the intervening variables include teachers' competency, parental involvement, education, policy and funding. Connor, Alberto, Compton and O'Connor (2012) in their study in the US on the impact of physical impairment upon academic performance observed that students' performance are affected by various environmental psychological factors. Learners with physical disabilities have other health conditions that can militate against their classroom concentration and academic achievement.

Hunter, Nixon and Parr (2004) points out that all physically challenged learners' benefit by having access to general education, they acquire the same skills acquired by the others, and this gives them a good opportunity to compete with others in the job market. They also grow up in the same environment in which they will live and work. This prepares them for the real world; they also learn with peers who are the role models thus allowing them to develop to their maximum potential (Nordini et al., 2015).

Etsey (2005) presented a paper at a regional conference on education in West Africa on the causes of low academic performance of primary school pupils in the Shama sub-Metro of Shama Ahanta Metropolitan Assembly in Ghana. The paper looked at the school factors such as teaching and learning materials, availability of professional teachers, prompt payment of school fees, in-service training, regular staff meetings, preparation and vetting of lesson notes; and the availability of adequate infrastructure were found to affect pupils' academic performance.

In advocating for universal education, educators have continued to champion integrated system of children inclusion in all our learning set ups which has not been the case in most cases in Kenya where children with disabilities have been segregated (Kigotho, 2016; Plessis & Reenen, 2011). UNESCO (2008) reported that education systems should be designed and programmed in such a way that unique characteristics, interest, abilities and learning needs of every child is taken into account. Special Needs Education is primarily to help those with special needs to develop so that their full engagement in development is achieved. It is imperative to conduct a study that focuses on factors within the school that may impact the achievement of pupils with physical disabilities in primary schools.

Ogero (2015) conducted a study on school based factors influencing performance of children with disabilities in public primary schools in Kajiado North District, Kenya. The author identified teachers' attitudes, physical facilities, teachers' training and teaching/ learning resources as the main factors influencing performance in schools. This study looked at children with disabilities but not specifically on academic achievement of pupils with physical disabilities. In a study conducted on home based factors influencing pupils' academic performance in public primary schools in South Gucha Sub-County, Kisii County Kenya. Akeri (2015) found that despite the several interventions conducted by the government, students' performance is still very low with parents' economic status greatly impacting on the learners' academic achievement. These studies did also not look at leadership skills and work habits of teachers in the schools and their influence on academic performance of learners with special needs. The current study took place in inclusive primary schools having children with physical disabilities in Homa Bay County. The factors to be considered as influencing learners' achievement were: teachers work habits, leadership, and physical facilities.

1.3 Statement of the Problem

In Kenya education of learners with physical disabilities and other health impairments takes place in segregated settings. The government tries to provide facilities and trained personnel to promote optimal academic performance of learners with physical disabilities. There are still a number of challenges facing Special Needs Education in Kenya despite the efforts that has been put forward by the government and educational stakeholders. These challenges include lack of sufficient funding, weak policies on special education, inadequate training and/or skills in handling learners with special needs and inadequate learning/teaching resources (Ogero 2015).While, according to Cheshire (2013), maintaining children with physical disabilities in Kenya is considered too costly because of the many physical support facilities they need. The schools are to adjust the physical and social environment to fit the needs and interest of learners with physical disabilities in order to have optimum academic achievement. Therefore learners with physical disabilities in inclusive settings may face more challenges to accomplish their academic tasks. It is against this background that this study established the influence of school-based factors on academic performance of learners with physical disability in primary schools in Homa Bay County, Kenya.

1.3 Purpose of the Study

The purpose of the study was to establish the influence of school based factors on academic performance of learners with physical disabilities in primary schools in Homa Bay County

1.4 Objectives of the Study

The following were the research objectives:

i. To determine the influence of teachers work habits on academic performance of learners with physical disabilities in the primary schools in Homa Bay County.

ii. To assess the influence of school leadership on academic performance of learners with physical disabilities in the primary schools in Homa Bay County.

iii. To establish the influence of physical facilities on academic performance of learners with physical disabilities in the primary schools in Homa Bay County.

1.5 Hypotheses of the study

The study was based on the following research hypotheses:

i. H_0: There is no statistically significant influence of teachers' work habits on academic performance of learners with physical disabilities in primary schools in Homa Bay County.

ii. H_0: There is no statistically significant influence of leadership on academic performance of learners with physical disabilities in Homa Bay County.

iii. H_0: There is no statistically significant influence of physical facilities on academic performance of learners with physical disabilities in Homa Bay County.

1.6 Significance of Study

The significance of the study underscores the urgency of the project as it implies the solution to a problem and how it will impact educational theory as well as practice (Singh & Bajpai, 2008). This discusses the importance of the proposed research and its relevance (Orodho, 2003). The study revealed school based factors influencing academic performance of learners with physical disabilities so that teachers may take cognizance and make necessary adjustments to support their learning. The study provided recommendations to the Ministry of Education enlightening them on the needs of learners with physical disabilities in regular primary schools and how they can be addressed with the aim of improving performance of children with physical disabilities in schools. The

study would enlighten teachers on how school-based factors can be addressed to enhance academic performance of learners with physical disabilities.

1.7 Scope of the Study

This refers to the parameter in which the study will be operating (Orodho & Kombo, 2002). The study tackled school-based factors influencing academic performance of learners with physical disabilities in Homa Bay County with specific focus on: teachers' work habits, leadership, and school facilities. The study was conducted in inclusive primary schools in Homa Bay County. The study involved teachers and head teachers of inclusive primary schools in Homa Bay County having children with physical disabilities and the tools used were: questionnaires for teachers and interview for head teachers.

1.8 Delimitations of the Study

Delimitations are the variables defined and established by the researcher to determine the limits of the study. The researcher carefully decides on the exclusion and inclusion of variables (Copper 2000). The area of the study was within the reach of the researcher, and therefore, the researcher had ample time in conducting the research as she was well conversant with the language of the catchment area therefore, communicating with the respondents was easier. Reaching respondents in the area of study was easier as the researcher understood these people well and as such used the right approach to extract information from them. Knowing the geography of the region enabled the researcher to reach respondents conveniently

1.9 Limitations of the Study

Limitations are the restraining conditions that a researcher faces during the research process (Khan 2008). The major limitation of the study was that it was localized to selected

inclusive primary schools having children with physical disabilities in Homa Bay County. The researcher overcame this by sampling many schools in the county having learners with physical disabilities. Some respondents were fearful of giving honest information; this was overcome by using several tools of data collection and also assuring the respondents of confidentiality.

1.10 Assumptions of the Study

An assumption is a possibility taken for granted for purposes of better establishing the conditions under which the research shall be conducted (Singh & Bajpai, 2008). The main assumptions of the study were that the respondents provided reliable information, inclusive schools were equipped with adequate teaching learning materials and that teachers teaching learners with physical disabilities were trained with a bias to that category.

1.11 Theoretical Framework

According to Hoy and Miskel (2001), theory refers to ideas, assumptions and generalizations that are generally related and consistently organized to explain a given phenomenon. Theories attempts to explain facts in a manner that plays a role in forming a structure and basis for gathering of vast information under concern (Nduruma 2002). This study was based on the latent trait theory of mental ability as proposed by an American Psychologist; Charles Spearman in 1863-1945. According to this theory, there exists a relationship (correlation) between observable variables which can be explained and other small unobservable variables. The psychologist later developed a factor analysis in realizing the empirical test of Galton's theory of general mental ability (g). The Spearman's 'g' according to him could singly explain an individual performance in cognitive tests (mental energy). In these analyses, Spearman found out that the amount of an individual's specific mental capability is mental ability that remains after g is removed (Spearman, 1904).

In his theory, Spearman had three rules that were to the induction and deduction of new knowledge/ mental content. The first rule was that was that knowledge is based on experience and is majorly influenced by one's focus of attention. The second rule was that of education of relations which concentrated on a person's perceptions of how two or more things are related. While third rule was the rule of correlation .where he argued that knowledge could also arise based on how one perceive the relationship that exists between two or more things. A part from these rules, others that determines intelligence of a person include .mental energy (the basis of g conceived of as the "education of relations and correlates"); retentivity (the basis of conditioning, learning, and memory); fatigue (a refractory period following a cognitive event that produces a tendency opposing its immediate re- occurrence); conative control (the effect of drive or motivation on cognition); and primordial potencies (individual differences in each of these quantitative principles)

This theory was relevant to this study in that it focuses on mental ability of learners which determines their academic performance. As indicated by Spearman .the learners' academic achievement (mental energy, g) is powered by a number of factors that functions differently in a learning environment. In this study, the teachers' role in leaning and in the learners' academic performance was envisaged to be generally facilitation since the academic ability originates from within the learner. The teachers' work habit, school leadership style and the available learning facilities all formed powerful tools in guiding learners to realize their full potential. When these 'small factors' were put together, they determined the bigger factor which was the mental energy of the learner as revealed by his/her academic performance.

1.12 Conceptual Framework

A conceptual framework captures the concepts to be used in the study as well as their relevance, operationalization and their applicability to the study, (Khan, 2008). In this section, a conceptual framework linking school based factors and academic performance was been constructed. This is illustrated in figure 1.1.

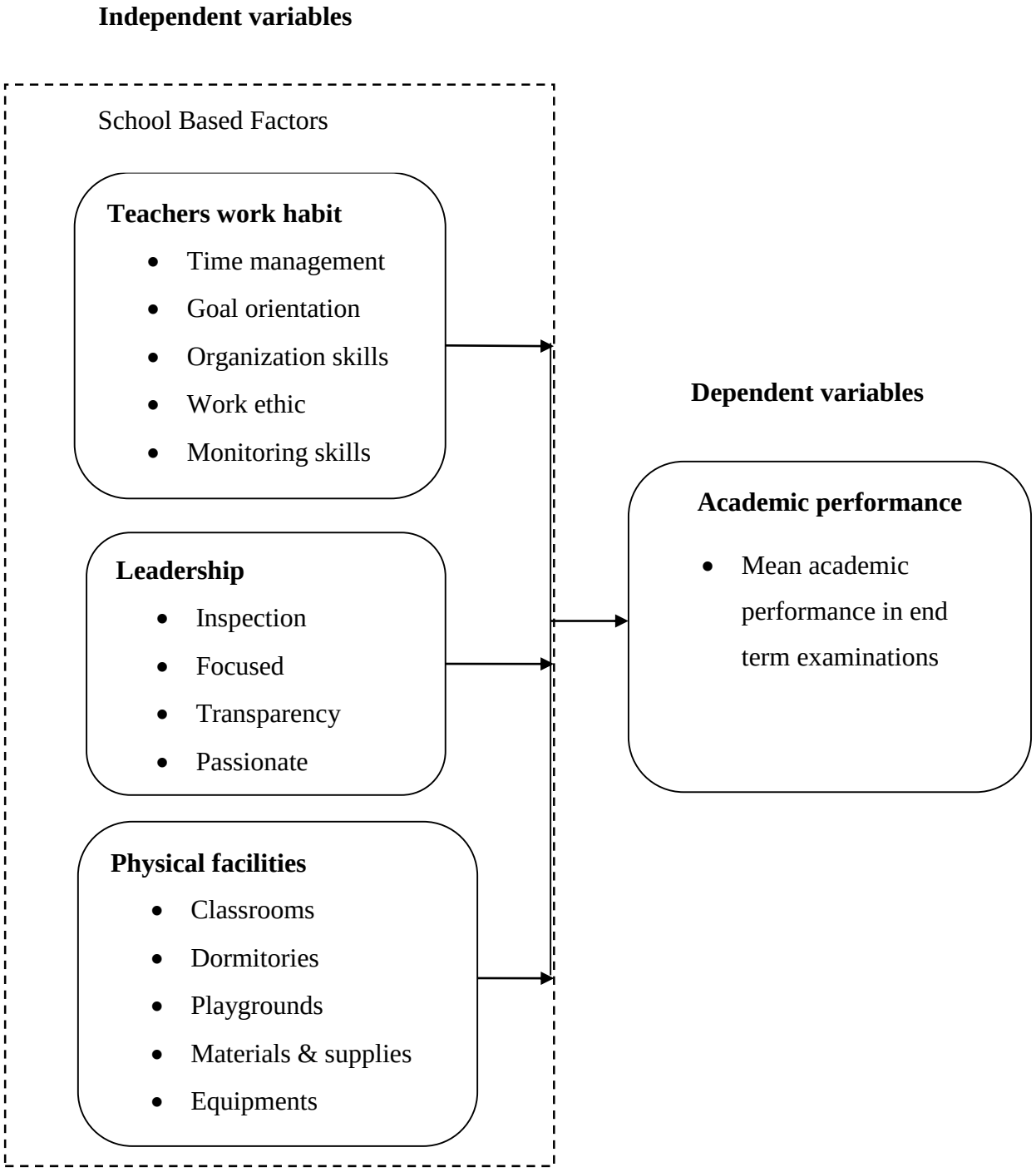

Figure1.1: School-based factors influencing academic performance (Source: Researcher, 2018)

Figure 1.1 is a conceptual framework for school-based factors and academic performance of learners with physical disabilities in Homa Bay County. School-based factors are the explanatory variables while academic performance is the response variable. School-based

factors are experienced at institutional level during which they take the forms: teacher work habits; leadership; and school facilities. Academic performance indicators include. reading pro-efficiency, numeracy, class attendance, passes in core subjects, and transition rate. It is believed that any change in school based factors may cause change in academic performance of learners with physical disabilities in schools.

In the schools where teachers are competent in their work, they usually have good work habits, avail the teaching resource in advance and prepare well, therefore uplifting the academic performance of the school. However, when the teachers are not competent even if they have good work habits, they will not help the learners to achieve their optimal performance. Parents always play a major role in school by contributing funds for any development in school; therefore if the school leader can cooperate well with them, then the academic performance will be uplifted. However, if the head teachers will not coordinate with the parent they will shy off and not contribute to the school.

The education policy in Kenya EFA – UNESCO Report (2016) is giving chance to all children to go to school and the opportunity to get quality education. This can only be applicable when the head teachers make the environment conducive for learners to attend and access the learning materials while providing the needed motivation to the teachers. The government is supporting educational sections by providing funds for general purpose in schools in Kenya and buying text books thereby uplifting academic performance. The funding in primary schools is also intended to improve infrastructure, teaching and learning resources and registration fees thus for all candidates thus getting equal opportunity to all learners in schools.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on the school-based factors and their effects on academic performance of learners with physical disabilities, the school-based factors reflect on the teachers work habits, leadership and school facilities. This section outlines the previous studies and points out the existing gaps that have not yet been filled. It also includes an empirical literature review.

2.2 Empirical Literature Review

In this section, empirical literature review is discussed. In particular, it discusses .teachers work habits, leadership, and school facilities.

2.2.1 Teachers' Work Habits

The learner's academic performance and academic achievement is directly affected by the input of the teachers. The nature and level of the teachers' contribution affects the quality of the students' performance. Learning in schools occurs effectively based on the quality delivery of the syllabus content to the learners by the teachers. Teaching and learning are concomitant learning educational process and a teacher needs to adequately understand the basic principle underlying the teaching process to be able to effectively impact on the student's academic performance. Hence a competent teacher is expected to contribute a deal toward the success of students in their academic works Andaya (2014).

Andaya (2016) studying the factors affecting the academic performance of indigenous people students of Philippines normal University-North Luzon revealed that instructional factor has the highest rank in affecting academic performance of most learners. The findings in the study was in line with the author's earlier study in 2014 that showed that teachers' input have a great impact on the academic performance of learner (Andaya,

2014). The study further showed that for a meaningful and effective learning to occur, the students should be provided with a constructive learning activity. While this study involved students in the normal university, it failed to relate to activities under basic education. Moreover, the study did not consider learners with physical disabilities in its findings.

According to Barry (2005), the teacher is the essential feature in the delivery system of teaching and learning process. The study in Washita State University looked at teachers' effectiveness on students' achievement although it did not focus on academic performance of learners with physical disabilities which was the intention of the present study. The results showed little effect of the instructional factors like medium of instruction, teachers' motivation, and teacher's competence on teacher's effectiveness. Burke and Sass (2008) and Balili (2013) observed the simplest fact was that many teachers teach different groups in the same manner, but students' success varies in enhancing need for a study that is specific to learners with physical disabilities in regular primary schools.

Churcher, Asiedu and Boniface (2016) carried out a study on teachers' teaching styles and students study habits on academic achievement in Mathematics among Junior High Schools in Upper East Region of Ghana in which they found that both the learners and teachers have responsibilities which they must perform in order for students to achieve academic excellence. In this study, Churcher et al., (2016) found that it is the role of teachers to teach using the recommended learning and teaching materials, and to create extra time with learners outside class hours to assist and encourage weak learners. Optimal use of the allocated time by the teachers is also crucial in realizing success in academics.

A study conducted by Schumm and Vaughn (1992) found that time taken by teachers in preparation for classroom lessons was very important when it comes to curriculum content

delivery. They asserted that time was very critical especially in cases where a teacher is to handle learners with different learning disabilities. Westwood and Graham (2003) also found out that adequate time is needed by the teacher to amply prepare for class in an inclusion setting since learners is such classes require diverse teaching strategies. The teacher needs to develop individualized programming and complex behavior management plans that suits the needs of the respective learners. Instructors require additional time to attend to learners especially those with varied learning disabilities. In inclusive learning environment, learners have different learning capabilities and individualize attention to weak student significantly improve their academic performance (Avramidis, Bayliss, & Burden, 2000; Kimani, Kara & Njagi' 2013; Westwood & Graham, 2003).

In 2007, Nyabuto observed that one of the contributing factors to poor academic performance among learners is the absenteeism among teachers. This results in untimely coverage of syllabus and inadequate preparedness of learners for both internal and external examination (Nyabuto, 2007). In cases where the syllabus is not adequately covered, learners may examined on content they have not fully understood which results in poor academic achievement (Nakhanu, 2012).

According to the study of Mwangi (2002) on preparation of teaching materials (lesson plan, lesson notes, schemes of work), the teaching methodologies and participation of the physically challenged learners in public primary, the classroom teacher is very key in making the process all inclusive irrespective of the disabilities of the learners with special needs especially in regular classroom. The teachers may make it possible for the learners to be accepted by the other learners by demonstrating positive and supportive attitudes to the learners. The teacher enhance the inclusion of physically challenged learners into the classroom by encouraging other learners to support him/ her in and outside of the class

time, working closely with the learners parents, adjusting class work to meet the learners need and making the learners feel welcome and important member of the class. This study was concerned with the academic performance of learners with physical disabilities in Homa-Bay County, Kenya.

A study conducted by Pichi (2012) in Maseno Division in Kenya on factors affecting students' academic performance pointed out that there is need to closely monitor the progress of learners. He opined that in overcrowded classes, teachers may find it difficult to pay individual attention to learners. Teacher – pupil ratio greatly affect learners academic achievement.

2.2.2 Leadership and Academic Performance

Leadership in schools is directly in the domain of principals and head-teachers. Due to their position and management responsibility, head teachers are the ones on whom the students' academic performance directly falls. In this section, literature on leadership as a school-based factor influencing learners' performance is sought.

In any learning environment, institutional leadership plays a crucial role in coordination of the dynamics of the learning environment. According to Chirchir, Kemboi, Kirui and Ngeno (2014), a good leadership strategy require the combination of both transformational and transactional leadership attributes in providing positive impact on stakeholders' commitment in attaining the institutional goals. School academic performance is largely dependent on school's leadership style, and therefore, a good leadership is necessary in realizing quality education (Ali, 2017). Leadership responsibilities lie squarely on schools' head-teachers who are the school managers. Head-teachers are in particular, needed to have the right skills, commitment and of good moral standing to positively impact on the

academic performance of the learners. They must therefore be persons with skills, dedication and good character to mold students. They must also be able to face the challenges of management and leadership. Leaders in educational institutions face the same challenges as leaders in other organizations (Chirchir et al., 2014).

A study conducted by Gay (2010) on leadership in schools reveled that to clearly understand the effectiveness and success on any given school in a society, school leadership in very important. Leadership is not simply about the quality of individual leaders, but it is also about the role they play, style of leadership, leaders' orientation towards the institutions' vision, values and goals, and their attitude to change. Since education in itself is dynamic, so is the leadership in these institutions (Cole, Bedeian, & Bruch, 2011). Linking leader behavior and leadership consensus to team performance: Integrating direct consensus and dispersion models of group composition. Schools therefore need dynamic leaders to assist in propelling the school in achieving good academic performance. It is the responsibility of the head teacher to ensure that the school has adequate learning and teaching resources needed in realizing efficient and effective learning (Cole et al., 2011; Lydiah & Nasongo, 2009).

A study conducted by Ross and Gray (2006) on school leadership and student achievement in Canada, and tested a model that postulated the contributions of principals on students' academic performance through teachers' involvement. The researchers unearthed that principals actually contribute to the academic performance of the students as revealed by the 250 schools that were included in the study. In schools where the extent of transformational leadership is above average, teachers in such schools tend to be more committed in realizing the school goals and objectives; they remain focus to the school mission and vision thus contributing positively to the overall achievement of the school.

The study was on principals' leadership and students' achievement as a homogeneous group but did not embrace the unique needs and interest that would enhance academic achievement of learners with physical disabilities.

A study conducted by Rautiola (2009) in Northern Michigan University, in the USA on the effects of leadership styles on student academic achievement sought to identify the direct/indirect influences of school leadership on learning. It its findings, the study showed that there is a direct link between the students' academic performance and the school leadership style. These indirect influences led to increased collective efficacy and improved school culture which led to improved learners achievement. The study, however, was conducted among students at a university and ignored the inclusion of schools for the physically handicapped.

The recommendation of the Council of Exceptional Children (CEC) 2004 in Eastern Europe stated that for physically challenged learners can be empowered when teachers are equipped with the relevant knowledge and skills in dealing with such learners, this could be done through training of teachers in special education. This study however, was conducted on teachers work habit as related to academic performance of learners with physical disabilities. The intended study focused on regular primary schools.

A study conducted to measure the impact of effective principals on learners' performance in schools funded by US Federal Government in the US showed that a good principal is important to successful schools. The results indicated how effective management and leadership style of the school managers (head-teacher) can positively impact the students' academic performance within six months of a student being in a particular school (Gregory, Eric & Steven, 2013). The implication of this study is that leadership is very pivotal in

improving learners' school achievement, and this could also be the same in schools for the physically handicapped which the study failed to address. The current study would establish the effect of head-teachers' leadership skills and academic performance of learners with physical disabilities.

Nyannyonjo (2007) conducted study on the analysis of factors influencing learning achievement in Public Secondary Schools in Uganda and found that school performance is influenced by head teachers' characteristics such as; qualification, age, experience and tenure of service in the school. The study also indicated that good leadership styles were significant factors influencing learners' academic performance. The findings of this study were in line with those of Sushila (2004) on the role of the head teachers in influencing school performance in Kuria District, Kenya.

A study by Musungu and Nasongo (2008) on the instructional leadership role of secondary school head teachers found that head teachers supervised teachers' work by inspecting records such as schemes of work, lesson books, records of work covered, class attendance records, and clock in/clock out register.

A study conducted by Mwangi (2016) about the impact of school leadership on academic achievement in Kenyan secondary schools primarily focused on school leadership. The study established that in the high performing schools, principals were thoroughly engaged, demonstrated commitment, sensitive and focused on continuous improvement. They were open to information and diverse views that impacted on student performance. The results analyzed quantitatively, indicated that school leadership had moderate but significant indirect effects on student achievement. This study was confined to performance in high schools and did not say anything about primary schools. Moreover, the study did not report

whether the study was conducted in schools' for the physically handicapped or not. Training of teachers in Kenya is mostly geared towards a given direction which in most cases lack diversification as echoed by Eleweke (2001) but very segregated unlike in Uganda where training of teachers done based on the needs of students. In Uganda emphasis is put in on the unique needs of the learners with special needs at the initial training level therefore, this study is based on teachers, leadership (Randiki, 2002).

According to the study of Nannyonjo (2007) on factors influencing learning achievements in Uganda, the study found that head-teachers characteristics such qualifications, in service training, age experience and duration in a station do influence students achievement together with supervision strategies and administration styles employed by the principals while intended study is on leadership of head teachers in primary school.

According to Twoli (2006) on factors that influence poor performance in K.C.S.E in Mwingi District found that poor performance was influenced by students' attitude, lack of teaching staff and student indiscipline while this study would focus on school based factors that may influence performance of learners with physical disabilities in inclusive schools such as leadership.

2.2.3 School Facilities and Academic Performance

Learners with physical disabilities in inclusive schools require special attentions which include modifications in the school environment. Adaptive learning environment ensures safety of learners thus ensuring effective learning activity (Schwartz & Gurung, 2012; UNESCO, 2008). Learners with physical disabilities in inclusive schools have diverse needs and inaccessible learning environment may contribute in excluding them from learning institutions.

A Status Report on Implementation of the Rights of Persons with Disabilities in Kenya, From Norm to Practice by Kenya National Commission on Human Rights, July 2014 showed that one of the key factors that can be used to enhance the success of learners with physical disabilities is the available physical facilities. The report further indicated physical facilities in most of inclusive schools were not best fitted to take interest of learners with physical disabilities, and that the available physical facilities were inadequate. In some cases for example, the available desks and tables were either too low or too high for such learners.

A study conducted on the influence of school based on learners academic performance by Motanya (2011) indicated that performance is greatly influenced by the existing learning environment including the physical facilities. Increased enrolment in schools since the introduction of the free primary education has resulted over stretch of the available learning resources since the physical facilities in most schools were not expanded in the ratio of increased enrolment. A study conducted by Ayoo (2002) showed that physical facilities such as classrooms, desks and books directly affect learners' academic performance.

In 1996, Carron and Chau conducted a study in India in which they sampled 59 schools out of which, only 49 schools had physical facilities that were adapted to all types of learners including learners with physical disabilities. The study further indicated that schools which had better physical facilities registered higher academic performance than those that were in schools with poor physical facilities. Quality and adequate learning facilities strengthen and encourage better academic performance of schools and quality of learning environment is strongly correlated with pupils' achievement (Carron & Chau, 1996; Taylor & Vlastor, 2009).

Karemera (2003) in South Carolina State University, US found that students' performance is significantly correlated with academic environment satisfaction such as facilities in libraries and computer laboratory in the institution. With regard to background variables, Karemera found no statistical evidence of significant association between family income level and academic performance of the student. The study was confined to a university set up but not at the primary school level. Moreover, the study did not report anything on whether the institution was for the physically handicapped. The proposed study was destined to establish the influence of school facilities and academic performance of learners with physical disabilities in regular primary schools and would not be confined to one institution as the above study.

Ali, Jusoff, Ali, Najah & Salamt (2009) studied the *factors influencing students' performance at University Teknologi MARA Kedah, Malaysia'*. It revealed that an effort from student and the proper use of facilities provided by the institution and a good match with students' learning style positively affected the student's academic performance. It was therefore necessary to establish how school facilities may influence academic performance of learners with physical disabilities in primary schools in Homa Bay County.

A study conducted by Saenz, Marcoulides, Junn & Young (1999) in the US on the relationship between college experience and academic performance among minority held the view that learners performance are directly linked with use of library and level of their parental education. The use of the library was found to have positively affected the student performance. The study was conducted in a college context. This meant that the key participants in the study were adults. There was, therefore, need to relate school facilities to respondents in schools with learners with physical disabilities.

Kirmani and Siddiquah (2008) identified and analyzed the factors affecting students' achievement in higher education in colleges in the US. The results revealed that academic environment is an effective variable for students' performance. It further found out that academic environment learners are exposed had a positive relationship with their academic achievement. It can be imperative if a study on academic environment learners with physical disabilities was also done which includes school facilities.

Etsey (2005) at the regional conference on education in West Africa presented a paper on the causes of low academic performance of primary school pupils in the Shama Sub-Metro of Shama Ahanta East Metropolitan Assembly in Ghana. Chi-square test was used to show the relationship between teaching-learning materials and academic performance. The results showed that high-achieving schools had more teaching-learning materials than low achieving schools. Further, Etsey observed a significant relationship between availability of textbooks and results of high achieving schools. While the study considered causes of academic performance in primary schools, it did not specify whether such schools were for the physically handicapped.

A study conducted by Martha (2009) on students' academic performance in Uganda showed that class size and textbook availability have a great impact on learners' academic achievement. In 2013, Achieng carried out a study on factors contributing to completion rate of pupils in pubic primary schools within in Kenya. The study found that the availability of learning materials and other facilities have great impact upon pupils' academic achievement. Lack of adequate classroom resources and unmanageably high class enrolments were greatly blamed for pupils' poor academic performance in the study. The studies conducted by Achieng and that of Martha (2009) were all done among normal

learners and did not cover learners with physical disability which has been the focus of this study.

2.3 Literature Summary and Gaps

The reviewed literature on teachers' work habit indicated that teachers work habits including medium of instruction, use of the recommended teaching materials, allocation of extra teaching time, teachers' motivation, and competency affect learners academic performance (Andaya, 2014; Barry, 2005; Balili, 2013; Burke & Sass, 2008; Churcher *et al*., 2016; Nakhanu, 2012; Nyabuto, 2007; Mwangi, 2002). The reviewed literature on school leadership which is squarely the role of head teachers; is important in determine the learners academic performance. Head teachers' characteristics such as; qualification, age, experience and tenure of service in the school affect their leadership styles, and good leadership skills and dedication assist in modeling learners characters. Leadership role in any society including the learning institutions are presented with different unique challenges all of which eventually impact on the academic performance of learners (Ali, 2017; Chirchir *et al*., 2014; Cole *et al*., 2011; Eleweke, 2001; Gay, 2010; Gregory *et al*., 2013; Lydiah & Nasongo, 2009; Musungu & Nasongo, 2008; Mwangi, 2016; Nyannyonjo, 2007; Randiki, 2002; Rautiola, 2009; Ross & Gray, 2006; Sushila, 2004; Twoli, 2006). The reviewed literature on physical facilities and students' academic performance also found that availability, adequacy and efficiency of physical facilities in schools influenced students' academic performance (Achieng, 2013; Ali *et al*., 2009; Ayoo, 2002; Carron & Chau, 1996; Etsey, 2005; Gurung, 2012; Karemera, 2003; Kirmani & Siddiquah, 2008; Martha, 2009; Motanya, 2011; Saenz *et al*., 1999; Schwartz, 2008; Taylor & Vlastor, 2009).

Despite the literature reviewed covering studies on school-based factors influencing students' academic performance, most of these studies had been done in regular schools with no special attention to learners with physical disabilities in inclusive schools. Furthers, a number of these studies were done in areas with different characteristics with those of Homa Bay County. This study therefore aimed at bridging this gap by looking at the effects of school-based factors on academic performance of learners with special needs.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the research design and the research site. A detailed description of the target population, the sampling technique and sample size, research instruments, data collection methods and data processing analysis are also outlined in this chapter.

3.2 Research Design

Research design is an outline or a framework through which the answers to the research questions are generated (Orodho, 2003). Research design gives a plan which will be employed in the course of the research taking into consideration the possible variables that may jeopardize the reliability and validity of the research findings (Kothari, 1990).

The researcher adopted a descriptive survey design employing both quantitative and qualitative study approaches. According to Wambalaba (2009), a descriptive survey is normally employed in research to describe attitudes, beliefs, and opinions among other personal attributes. The descriptive design was suitable for this study since it allowed the researcher to describe the occurrence of the study variables as they actually exist without manipulation as cited by Miima, Ondigi and Mavisi (2013).

3.3 Research Site

Stevens and Olsen (2004) indicate that research sites deals with the actual geographical location of the research and the reasons why the site preferred, taking into considerations the ethical legal and cultural issues. The study was conducted in Homa Bay County of Kenya (Appendix VIII). Homa Bay County is found in the Western part of Kenya. the former Nyanza Province with geographical coordinates of 0° 31' 0" South, 34° 27' 0" East. According to the 2009 census report, the county's population is 963,794 with an approximated geographical area of 3,154.7 km². Homa Bay borders Lake Victoria to the

north and west. Other counties that border Homa Bay County include Migori to the south; Kisii and Nyamira to the east; and Kericho and Kisumu to the north east. In particular, the study will be conducted in inclusive primary schools within Homa Bay County.

3.4 Target Population

A population is a complete set of elements, persons or objects that possess some common characteristics. Target population is a particular group of people that is identified as the recipient for the purpose of a study or a set of elements having a trait of concern that are being investigated (Mugenda & Mugenda, 2003). The target population of the study was 874 primary schools in Homa Bay County with an aggregate of 6885 teachers. The distribution of the target population by Sub County is shown in table 3.1.

Table 3.1: Distribution of the target population by Sub-County

Sub-County	Schools	Schools (%)	Teachers	Teachers (%)
Rachuonyo North	167	19.11	919	13.35
Mbita	111	12.70	679	9.86
Homa Bay	70	8.01	709	10.30
Rachuonyo South	82	9.38	800	11.62
Rachuonyo East	94	10.76	885	12.85
Rangwe	103	11.78	822	11.94
Ndhiwa	152	17.39	1183	17.18
Suba	95	10.87	888	12.90
Total	**874**	**100**	**6885**	**100**

Source: Homa Bay County Education Department (2018)

3.5 Sampling Technique and Sample Size

Sample design is a joint procedure of identifying the population of interest, estimating the sample size, deciding on appropriate sampling strategy and selecting representatives from the population. The procedure should be made such that error of estimation is minimized as much as possible and the fractional part selected provides only an estimate of the population characteristics (Yogesh, 2006). In order to arrive at the desired sample size, the

Yamane's model $n = \frac{N}{1 + N(e)^2}$ was used (Yamane, 1967). In the model n is the desired ample size; N is the population size; and e is the level of precision. At 5% precision level, the sampled number of schools was $\frac{874}{1 + 674(0.05)^2} \approx 274$ while the sampled number of teachers was $\frac{6885}{1 + 6885(0.05)^2} \approx 378$. The sample distribution was shown in table 3.2.

Table 3.2: Distribution of the sample size by Sub-County

Sub County	Schools	Schools (%)	Teachers	Teachers (%)
Rachuonyo North	52	19.11	50	13.35
Mbita	35	12.70	37	9.86
Homa Bay	22	8.01	39	10.30
Rachuonyo South	26	9.38	44	11.62
Rachuonyo East	29	10.76	49	12.85
Rangwe	32	11.78	45	11.94
Ndhiwa	48	17.39	65	17.18
Suba	30	10.87	49	12.90
Total	**274**	**100**	**378**	**100**

Source: Homa Bay County Education Department (2018)

The study adopted two stage sampling technique. At first stage, a sample of 274 schools was randomly selected from the Sub- Counties shown in table 3.2. At the second stage, a sample of 378 teachers were randomly selected from the schools randomly chosen in stage one as shown in table 3.2. The method was deemed adequate because of its cost effectiveness and use of inferential mode of analysis whose results can be inferred on the population of the study.

3.6 Research Instruments

The data was collected using questionnaires and interview schedule.

3.6.1 Questionnaires for teachers

A questionnaire is an instrument that is widely used to gathering data especially when the respondents can be readily reached and their cooperation is guaranteed (Cooper, 2000).

The study used semi-structured questionnaires (Appendix ii) containing both closed and open ended questions that were administered to teachers. Questionnaire was appropriate for this study due to its low cost and its ability to enable the researcher to gather a considerable amount of data at a considerable amount of time (Denscombe, 2007). In particularly, standardized questionnaire showing school based factors indicators and academic performance indicators was constructed. The questionnaires were divided into 6 sections. Section A: General information of the School; Section B: Bio data of the respondents; Section C: Teachers' work habits; Section D: Leadership; Section E: School facilities and Section F: Academic performance of the learners.

3.6.2 **Interviews for head teachers**

Interviews entail the conversation between two or more people on questions or topics of interest to the researcher orally (Avoke, 2005). Interviews enable the researcher to have control over the line of questioning and also allow the probing questioning by both the parties involved. An interview guide (Appendix iii) was developed for the head teachers which sought information on teachers' work habits and academic performance, leadership, and academic performance, school facilities, and academic performance.

3.7 Piloting

Reliability is the extent to which research results are consistent and replicable (Amin, 2005; Kothari, 2011). Reliability is the consistency of scores when the research instrument is administered from one set of items to another, and also from one point in time to another (Frankel and Wallen, 2006**)**. The instruments was be pre-tested for reliability using Cronbach's alpha (α) approach with a sample of 10 teachers randomly selected from the target population. The number 10 was chosen for pre-test because it is the smallest number

that yields meaningful results in data analysis of a survey research (Kathuri & Pals, 1993)**.** The results are shown in table 3.3.

Table 3.3: ***Reliability index of variables***

Scale variables	**Cronbach's Alpha Value**
Teacher work habits	.794
School leadership	.877
School facility	.860
Academic performance	.813

Table 3.3 shows that all the Cronbach Alpha reliability index as greater than 0.7. The value was adequate because it was greater than the minimum Cronbach Alpha (α) value of 0.7 considered appropriate for Likert scale questions (Mohsen & Reg, 2011).

3.8 Data Collection Method/ Procedure

Orodho and Kombo (2002) indicate that data collection procedure is the process of gathering and measuring information on variables of interests, in an established systematic fashion that enables one to answer stated research questions, test hypothesis and evaluate outcome. Before the administration of the research instruments, there was need to seek for permission from those in authority to conduct the survey. The researcher first obtained a letter from African Nazarene University after a successful defense and approval of the research proposal. This letter was then used by the researcher to seek a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) to carry out this research. The NACOSTI research permit was presented by the researcher to the relevant authorities such as Homa Bay County Director of Education during the

research period for further permission to use schools for the study. Then to the Homa Bay county commissioner for further research authorization.

Notification letters were thereafter sent to head teachers of the selected schools. While doing this, the researcher needed to be cautious that short-circuiting proper channels of authority could be dangerous and obtaining permission from appropriate authorities could take some time (Denscombe, 2007). The questionnaires were administered to the sampled teachers of the sampled schools. The researcher first explained to the respondents the purpose of the research before giving out the questionnaires which were then filled by the respondents and collected.

The researcher was assisted in administering the questionnaires by 2 research assistants who underwent training on research ethics and use of the research instruments employed in data collection. A check list was used to monitor the despatch and return of questionnaires. The questionnaires were administered through drop-and-pick approach. This method was deemed useful because it gave the respondents ample time to respond to the questions (Saunders et al., 2006). The targeted head teachers were visited by the researcher and interviewed using the interview guide.

3.9 Data Processing and Analysis

Data analysis is the examination of what has been collected and making deductions and inferences hence a process which involves uncovering underlying structures, extracting important variables, detecting any anomalies and testing any underlying assumptions (Yogesh, 2006).

Preliminary to entering data in Statistical Package for Social Sciences version 20 ready for processing, completed questionnaires were edited for consistency and coded to enable the responses to be grouped into appropriate categories. Both descriptive statistics and

inferential statistics were used to analyze quantitative data. Descriptive statistics was used to analyze demographic characteristics while inferential statistics was used to analyze data on school-based factors and academic performance. In particular, for descriptive statistics, the study made use of frequencies, percentages, mean, standard deviation, skewness and kurtosis. The results were presented in properly interpreted tables to bring out clarity and consistency. Objectives one to three were analyzed through simple linear regression models to assess the extent each of the school-based factors influence academic performance. This was necessary to obtain *regression coefficients* that estimate change in academic performance attributed change in each of the school-based factors. The general simple linear regression model was

$$Y = \beta_0 + \beta_1 X + \varepsilon \tag{3.1}$$

In model 3.1, Y is academic performance while X stands for each of the school-based factors; namely, teacher work attitude, school leadership and school facility. The term ε is the *residual* or *error and* represents the divergence of the observed value of academic performance from that estimated by the model. β_0 *and* β_1 were determined constants. The error terms were assumed to have a normal distribution with variance σ^2. The results were presented in tables with clear interpretations.

3.10 Instrument Validity

Instruments validity indicates the accuracy of the instrument and ensures that the instruments measure what it is supposed to measure (Orodho, 2004). The researcher employed triangulation in validating the study. Triangulation is the use of two or more methods in data collection and is good in showing concurrent validity of qualitative and quantitative data (Cohen *et al*., 2000). Questionnaires and interviews were used in this

study. This enabled the researcher to check on the content, construction of items and criterion of the research instruments.

The validity of the instruments was proved by use of randomization procedures in selecting the sample for study. This helped to eliminate any bias and thus gave all the responses reflected the true image of the targeted population. The pilot study that was also conducted further assisted in guaranteeing instruments validity.

3.11 Instrument Reliability

Reliability deals with the level at which the research instruments used in a study can produce consistent results after repeated trials (Amin, 2005; Kothari, 2011). The instruments were pre-tested for reliability using Cronbach's alpha (α) approach during the pilot study. In order to ascertain reliability of the research instrument, the numbers constructs for each variable was expanded. An alpha value was expected to be greater than 0.7 to be accepted as reliability index as indicated by Litwin (1995).

3.12 Legal and Ethical Considerations

Ethical issues entail a belief that deals with one's conduct and serves as a guide to one's behavior (Mugenda & Mugenda, 2005). According to Yogesh (2006), it is the responsibility of the researcher to carefully assess the possibility of harm to research participants and to the extent that it is possible; the possibility of harm should be minimized. In conducting the study, permission to collect data from respondents was sought from County Director of Education in Homa Bay County through Africa Nazarene University. Permission was also sought from NACOSTI to authorize the research in the schools. Confidentiality of information gathered was observed by not revealing the identity of the respondents; the privacy of respondents was observed and all operations were

conducted within the policies exercised by the schools visited and the Government of Kenya.

In order to ensure informed consent, a letter of authority to conduct research was availed to research participants through the attachment of copies to the questionnaires. They were held with information that the study is purely for academic purpose and that any information given by them would held with utmost confidentiality.

CHAPTER FOUR

RESULTS AND ANALYSIS

4.1 Introduction

In this chapter, the results of the study are presented. The analysis of variables was done through descriptive and inferential statistics. Descriptive analysis was done through frequencies, percentages, means, standard deviations, kurtosis and skewness while inferential analysis was done through linear regression equations. In particular, the chapter presents results on response rate; demographic characterizations and school-based factors influencing academic performance of learners.

4.2 Response Rate

In this section, data was provided on the extent teachers participated in the study. The details are shown in table 4.1.

Table 4.1: Response Rate

Categories	Teachers	Teachers (%)
Response	329	87.04
None response	49	12.96
Total	378	100

Source: Survey data (2018)

Table 4.1 shows that out of 378 questionnaires distributed; 87.04% (329) were properly filled and returned. The non response accounted for 12.96% (49). According to Mugenda and Mugenda (2003) a response rate of at least 50% is considered adequate for data

analysis. In this regard, the response rate for this survey was considered enough to generate accurate results.

4.3 Demographic characterization

In this section, demographic characteristics of the teachers are presented. In particular, gender of the teachers, age of the teachers, educational level of the teachers, position in the school and years in the school are presented.

4.3.1 Gender of the teachers

In this sub section, data on gender of the teachers was sought. This was necessary to show whether teacher distribution in the schools surveyed was gender sensitive; that is, recognize the roles of both males and females in the schools operations. The details are provided in table 4.2.

Table 4.2: Gender distribution of the teachers

Category	Teachers	Teachers (%)
Male	157	47.7
Female	172	52.3
Total	**329**	**100.0**

Source: Survey data (2018)

Table 4.2 shows that of the 329 teachers who participated in the survey, 47.7% (157) were males while 52.3% (172) were females. It shows that there was almost gender parity in participation in the study. The schools therefore recognized the roles of both males and females in operations.

4.3.2 Age of Teachers

In this case, data was sought on the age of the teachers in the schools surveyed. Age was important as a matter of mental maturity in understanding and responding to items in the questionnaire. The results are shown in table 4.3.

Table 4.3: Teachers' Age Brackets

Category	Teachers	Teachers (%)
<20	6	1.8
20 - 29	58	17.6
30 - 39	177	53.8
40 - 49	60	18.2
>49	28	8.5
Total	**329**	**100.0**

Source: Survey data (2018)

Table 4.3 shows that 1.8% (6) of the teachers were below 20 year of age while 98.2% (323) were aged 20 to 50 years of age. Thus a large proportion of the teachers was in vibrant and energetic age and could adequately and quickly respond to items in the questionnaire.

4.3.3 Educational level of the teachers

In this sub section, data was sought on the highest educational level of the teachers. In particular, the levels included were primary, secondary, tertiary and university. This was necessary for intellectual capability of teachers in responding to questionnaire items. The details are shown in table 4.4.

Table 4.4: Highest level of formal education

Levels	Teachers	Teachers (%)
Primary	6	1.8
Secondary	12	3.6
Tertiary	182	55.3
University	129	39.2
Total	**329**	**100.0**

Source: Survey data (2018)

Table 4.4 shows that out of the 329 teachers who took part in the survey, 55.3% (182) had tertiary level of education, and 39.2% (129) had university education. This shows that a significant proportion of the teachers had good qualifications and could respond adequately to the constructs in the questionnaire.

4.3.4 Position in the school

In this sub section, data was sought about the position of the teachers in the schools. This was necessary because it demonstrated seniority and experience in school operations. As such, they could respond candidly to the questionnaire items. The results are shown in table 4.5.

Table 4.5: Position in the school

Category	Teachers	Teachers (%)
Head teacher	57	17.3
Deputy head teacher	44	13.4
Senior teacher	22	6.7
Ordinary teacher	206	62.6
Total	**329**	**100.0**

Source: Survey data (2018)

Table 4.5 shows that of the 329 respondents who took part in the survey, 17.3% (57) were head teachers, 13.4% (44) were deputy head teachers, 6.7% (22) were senior teachers, and 62.6% (206) ordinary teachers. The respondents consisted of a blend of all cadres of teachers and therefore had enough knowledge, experience and skills about school operations and could clearly understand items in the questionnaire**.**

4.3.5 Years in the school

Data was sought on years the teachers had been in their schools. This was necessary to gauge their understanding of school based factors influencing academic performance. The results were shown in table 4.6.

Table 4.6: Years in the school

Years	Teachers	Teachers (%)
<4	154	46.8
5-7	98	29.8
8-10	42	12.8
>10	35	10.6
Total	**329**	**100.0**

Source: Survey data (2018)

Table 4.6 revealed that of the 329 teachers who took part in the survey, 46.8% (154) had been in their schools for less than four years while 53.2% (175) had been in the schools for more than four years. The distribution showed that a large proportion of the teachers had stayed in their schools long enough. They therefore had adequate understanding of the factors influencing academic performance in their schools.

4.4 School-Based Factors Influencing Academic Performance in Schools

In this section, an empirical analysis of school-based factors influencing academic performance of learners with physical disabilities in primary schools is conducted. In particular, analyzed are the influence of teachers' work habits on academic performance of learners with physical disabilities, the influence of school leadership on academic performance of learners with physical disabilities, and the influence of school facilities on academic performance of learners with physical disabilities.

4.4.1 Teachers' Work Habits and Academic Performance of Learners

In this case, the influence of teachers' work habits on academic performance of learners with physical disabilities is analyzed and interpreted. The descriptive statistics showing valid data items percentages, skewness, kurtosis, means and standard deviations for each variable is analyzed. The researchers requested the respondents with the help of likert scale to indicate the level in which they agreed or disagreed with statements on teachers' work habits and academic performance of learners with physical disabilities. Likert scale were provided to the respondents in which the questionnaire responses were coded with Strongly agree rated 5, Agree-4, Neutral-3, Disagree – 2 and Strongly disagree-1. The results are shown in table 4.7.

Table 4.7: Descriptive Information for Teachers Work Habits and Performance

Constructs		SA	A	N	D	SD	Ske	Kur	Mean	S.D
Teachers arrive to school on time thus plan well for the day's activities impacting positively on academic performance of learners with physical disabilities	f	124	205	0	0	0	0.5	-1.8	4.38	0.03
	%	37.7	62.3	0.0	0.0	0.0				
Teachers attend to learners with physical disabilities in class on time	f	173	147	5	4	0	-1.0	1.9	4.49	0.03
	%	52.6	44.7	1.5	1.2	0.0				
Teachers end classes at the required time but assist learners with physical disabilities in their academic task thus improving their academic performance	f	59	86	16	103	65	0.1	-1.5	2.90	0.08
	%	18.0	26.1	4.9	31.3	19.8				
Teachers do not leave school before time thus having more apple time with learners with physical abilities.	f	163	109	0	36	21	-1.4	0.7	4.09	0.07
	%	49.5	33.1	0.0	10.9	6.4				
Teachers' activities are geared towards learners with physical abilities' academic success.	f	144	98	3	44	40	-0.9	-0.6	3.80	0.08
	%	43.8	29.8	0.0	13.4	12.2				
Teachers prepare lesson notes, lesson plans, schemes of work, and record of work with learners' with physical disabilities in mind impacting positively on their academic performance.	f	187	135	7	0	0	-0.6	-0.8	4.55	0.03
	%	56.8	41.0	2.1	0.0	0.0				
Teachers frequently monitor learners' with physical disabilities activities in the school and subsequently give individual attentions to such learners.	f	95	200	0	34	0	-1.2	1.5	4.08	0.05
	%	28.9	60.8	0.0	10.3	0.0				
Teachers understand the needs of learners with physical disabilities and integrate these needs in their teaching strategies thus improving their academic performance.	f	0	18	0	178	133	1.4	2.7	1.71	0.04
	%	0.0	5.5	0.0	54.1	40.4				
Overall aggregated									**3.75**	**0.05**

Key: SA-Strongly agree, A-Agree, N-Neutral, D-Disagree, SD-Strongly disagree, Ske- Skewness, Kur-Kurtosis, S.D-Standard deviation
Source: Survey data (2018)

Table 4.7 indicated that all the respondents were of the opinion that “Teachers arrive to school on time thus plan well for the day’s activities impacting positively on academic performance of learners with physical disabilities”. Of these, 37.7% (124) and 62.3% (205) of the repondents strongly agreed and agreed respectively with the satement.

The study further revealed that there was evidence that teachers attend to learners with physical disabilities in class on time. 52.6% (173) of the respondents strongly agreed while 44.7% (147) agreed that there was punctuality in class attendance. Only 1.5% (5) and 1.2% (4) of the respondents were neutral on teachers’ punctuality in class and disagreed respectively. The mean response on this statement was 4.49 with S.D of 0.03.

The respondents generally felt that teachers did not create extra time after classes to attend to learners with physical disabilities (mean = 2.90 and S.D = 0.08). Of the respondents that took part in the study, only 44.1% of the respondents felt that teachers created more time to attend to learners with physical disabilities, while majority of the respondents (51.1% (168) were of the opinion that teachers did not create extra time to attend to learners with physical disabilities. 4.9% (16) of the respondents were of neutral opinion.

49.5% (163) and 33.1% (109) of the respondents strongly agreed and agreed respectively that teachers do not leave school before time thus having more time with the learners with physical disabilities. However, 10.9% (36) and 6.4% (21) disagreed and strongly disagreed with the same statement. The mean response was 4.09 and S.D was 0.07.

The study generally revealed that 73.6% (242) of the repondents agreed that teachers’activities in the school are geared towards learners with physical abilities’ academic success (mean = 3.80; S.D = 0.08), only 0.9% (3) could not ascertain (neutral) the link between the teachers’ activities and academic success of learners with physical

disabilities while 13.4% (44) and 12.2% (40) disagreed and strongly disagred with the statement.

Consequently, majority (97.8%) of the respondents (mean = 4.55 and S.D = 0.03) agreed that: “Teachers prepare lesson notes, lesson plans, schemes of work, and record of work with learners’ with physical disabilities in mind impacting positively on their academic performance”. Only 2.1% (7) of the respondents were neutral on the relationship between teachers’ preparation for class lessons and academic performance of learners with physical disabilities.

28.9% (95) of the repondents further strongly agreed while 60.85% (200) agreed with the statement that ‘Teachers frequently monitor learners’ with physical disabilities activities in the school and subsequently give individual attentions to such learners thus influencing their academic performance positively’. Of all the respondents, only 10.3% (34) disagreed with the statement. The study generaly revealed an overwhelming agreement (mean = 4.08, SD = 0.05).

Finally, the respondents felt that teachers did not understand the needs of the learners with physical disabilities and as such not integrated in their teaching strategies (mean = 1.71 and S.D = 0.04). Only 5.5% of the respondents were of the opinion that: ‘Teachers understand the needs of learners with physical disabilities and integrate these needs in their teaching strategies thus improving their academic performance’. 54.1% (178) and 40.4% (133) of the respondents disagreed and strongly disagreed respectively.

There was a general concurrence that teachers in the schools manifested lukewarm work habits (aggregate mean = 3.75 and S.D = 0.05). From table 4.7 descriptive analyses showed

that teachers' work habits affected academic performance of learners with physical disabilities.

Some the head teachers interviewed expressed very positive attributes about work habits of the teachers while others made reserved comments. For example, some head teachers interviewed reported that:

> Teachers are usually punctual; assess learners regularly; engage learners in candid counseling sessions; and have high positive work habits. (Head Teacher 2).
>
> Teachers are reliable. They report to duty on time. We work as a team and continuously learn from each other. Motivated teachers tend to work smart. The work habits have improved learners performance. (Head Teacher 3).
>
> Our teachers have good classroom attendance. They give more contact hours to learners. They monitor activities of learners well. The positive work habits can be enhanced through organized teacher workshops and benchmarking with better performing schools. (Head Teacher 5).

However, some head teachers interviewed reported more negative view in their assessment.

> Our teachers come to school late; leave school before time; show signs of laziness; and lack preparedness on professional documentation. The laxity can be discouraged by organizing counseling sessions for teachers. (Head Teacher 10).
>
> Some of our teachers exhibit absenteeism and have poor syllabus coverage. The teachers should be taken to seminars and workshops to discuss issues related to proper work ethics. (Head Teacher 15).

Linear regression analysis was consequently sought. The regression model explored was

$$Y = \beta_0 + \beta_1 X + \varepsilon \qquad (4.1)$$

The variable Y represented performance and the variable X represented teachers' work habits. The residual ε represented divergence of practical values of performance from what the model could estimate.

Preliminary tests were done on model 4.1. Table 4.8 showed no correlation between adjacent residuals. This was justified by Durbin-Watson statistic value of 1.796 falling within the recommended interval of 1 to 3 (Field, 2009). Table 4.8 also showed statistically significant positive correlation coefficient between teachers' work habits and academic performance (R=.497; P<.05) justifying linearity. Table 4.7 showed teachers' work habits had skewness and kurtosis values falling within the recommended interval of -2.0 and +2.0 justifying normality of the distributions (Tabachnick & Fidell, 2007).

The preliminary assumptions were satisfied. The influence of teachers work habits on academic performance was therefore examined. At 5% significance level, a hypothesis that there is no statistically significant influence of teachers work habits on academic performance of learners' with physical disabilities in primary schools in Homa Bay County was tested. The findings were shown in table 4.8.

Table 4.8: Linear regression analysis for the influence of work habits on performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.203	.205		5.871	.000
	Work habits	.620	.060	.497	10.351	.000
	Goodness of fit: $R = .497$ $R^2 = .247$ Adjusted $R^2 = .244$ $F(1,328) = 107.137$ $P < .05$ Durbin-Watson: 1.796					

a. Dependent Variable: Performance
b. Independent Variable: Work habits
Source: Survey data (2018)

Table 4.8 showed a statistically significant a moderate degree of positive correlation (R=.497; P<.05) between teachers work habits and academic performance. The value of R-

square .247 was used to measure fraction of academic performance, which was attributed to teachers work habits. It revealed that roughly 24.7% of the variation in academic performance was explained by teachers work habits**.** The value of the adjusted R square provided suggestions of globalizing the model. It should have been as near to the value of R-square as may be appropriate if not identical. In the current study, the divergence from the final model was small; that is, .003 or else .3%. This meant that if the model was derived from the study population as a substitute to a sample; then it could have explained roughly .3% less variation in results. The value $F_{(1,328)}$ = 107.137; P< .05 revealed that the regression model was statistically significant. The null hypothesis was therefore rejected. Standardized beta coefficients revealed that for one standard deviation improvement in teachers work habits, academic performance was improved by roughly .497 grade points. Table 4.8 and model 4.1 also revealed teachers work habits and academic performance had an optimal linear regression equation

$$Y = 1.203 + .620X \qquad (4.2)$$

The linear regression model 4.2 revealed that teachers work habits had a statistically significant moderate correlation (R = .497; P<.05) with academic performance. The variations in the model were 24.7% attributed to the variations in teachers work habits. The linear regression model also revealed that when no proper teacher work habits was implemented, academic performance was significantly 1.203 points and when proper teacher work habits was being implemented and increased by an extra unit, academic performance was improved by .620 points.

4.4.2 School leadership and academic performance of learners

In this case, the influence of school leadership on academic performance of learners with physical disabilities was analyzed and interpreted. The descriptive statistics showing valid data items percentages, skewness, kurtosis, means and standard deviations for each variable was analyzed. The respondents were asked with the help of likert scale to indicate the level in which they agreed or disagreed with statements on school leadership and academic performance of learners with physical disabilities. Likert scale was coded such that: Strongly agree rated 5, Agree-4, Neutral-3, Disagree – 2 and Strongly disagree-1. The results are shown in table 4.9.

Table 4.9: Descriptive information for leadership and performance

Constructs		SA	A	N	D	SD	Ske	Kur	Mean	S.D
Activities in the school are continuously inspected to influence the performance of learners with physical disabilities.	f	114	95	11	65	44	-0.5	-1.2	3.52	1.47
	%	34.7	28.9	3.3	19.8	13.4				
Leadership in the school is focused on set goals that influence the academic performance of learners with physical disabilities.	f	188	141	0	0	0	-0.3	-1.9	4.57	0.50
	%	57.1	42.9	0.0	0.0	0.0				
Leadership qualities in the school exude confidence in managing academic affair of learners with physical disabilities.	f	62	48	6	111	102	0.6	-1.3	2.57	1.52
	%	18.8	14.6	1.8	33.7	31.0				
There is commitment among school leaders to enhance academic performance of learners with physical disabilities.	f	163	109	0	36	21	-1.4	0.7	4.09	1.23
	%	49.5	33.1	0.0	10.9	6.4				
School administers promotes networks with other institutions to serve the needs and interest of learners with physical disabilities in the school.	f	55	71	0	99	104	0.4	-1.4	2.62	1.52
	%	16.7	21.6	0.0	30.1	31.6				
Leaders in the school encourage teacher career development to promote performance of learners with physical disabilities.	f	187	135	7	0	0	-0.6	-0.8	4.55	0.29
	%	56.8	41.0	2.1	0.0	0.0				
Child to child support encourages learners in the classroom to interact with their peers especially during class discussion to promote performance of learners with physical disabilities.	f	123	167	0	39	0	-1.2	0.9	4.14	0.91
	%	37.4	50.8	0.0	11.9	0.0				
Teachers and learners with physical disabilities are motivated to perform well academically.	f	148	181	0	0	0	0.2	-2.0	4.45	0.50
	%	45.0	55.0	0.0	0.0	0.0				
Teachers and learners are included in decision making process with the view to motivate learners with physical disabilities to perform well academically.	f	55	71	0	99	104	0.4	-1.4	2.62	1.52
	%	16.7	21.6	0.0	30.1	31.6				
Administration work with teachers to improve academic performance of learners with physical disabilities.	f	190	133	0	6	0	-1.4	3.5	4.54	0.60
	%	57.8	40.4	0.0	1.8	0.0				
The administration source for suitable teaching/ learning materials for use by learners with physical disabilities in the classroom.	f	123	167	0	39	0	-1.2	0.9	4.14	0.91
	%	37.4	50.8	0.0	11.9	0.0				

Key: SA-Strongly agree, A-Agree, Un-Undecided, D-Disagree, SD-Strongly disagree, Ske- Skewness, Kur-Kurtosis, S.D-Standard deviation

Source: Survey data (2018)

Table 4.9 showed that 34.7% (114) strongly agreed, and 28.9% (95) agreed that 'Activities in the school are continuously inspected to influence academic performance of learners with physical disabilities'. This formed over three-fifth (209) of all the respondents. 3.3% (11) of the respondents were neutral on this matter with 19.8% (65) and 13.4% (44) of the respondents disagreed and strongly disagreed with the statement respectively. The mean of this item was 3.52 and SD was 1.47 indicating that majority of respondents were in agreement that school management contionuosly inspected the activities in school with a view of influencing the academic performance of with physical disabilities.

The respondents overwelmingly agreed 100% (mean = 4.57 and S.D 0.50) that the: 'leadership in the school is focused on set goals that influence the acdemic performance of learners with physical disabilities. Of these responses, 57.1% (188) and 42.9% (141) strongly agreed and agreed respectively with the statement.

Qualitative data from the head teachers affirmed these findings. One of the head teachers acknowledged that:

> Activities in the schools are continuously inspected. Leadership in the schools is focused on set goals….. (Head teacher 20).

Majority 213 forming 64.7% of the respondents were of the opinion the 'leadership qualities in the school did not exude confidence in managing academic affair of learners with physical disabilities. This was made up of 111 (33.7%) and 102 (31.0%) disagreed and strongly disagreed with the statement respectively. Only 33.4% of the respondennts had confidence on the leadership qualities in the school in relation to creating confidence in managing academic affairs of learners with physical disabilities, and 1.8% (6) of the

respondents remained neutral on this matter. The mean response was 2.57 and S.D was 1.52.

Most, 49.5% and 33.1% (forming 82.5%) of respondents were agreeing that ‘there is commitment among school leaders to enhance academic performance of learners with physical disabilities’. 10.9 (36) and 6.4% (21) of the respondents were however disagreeing and strongly disagreeing respectively with the staement. In general, teachers acknowledged the commitment of school leadership in enhancing academic performance of learners with physical disabilities in Homa-bay county (mean = 4.09, S.D = 1.23).

The study revealed that there was generally low level of promotion of network with other instittions with the aim of serving the needs and interest of learners with physical disabilities (mean = 2.62, S.D = 1.52). Specifically, only 38.3% of the respondents affirmed the existence of collaboration with other institutions. The rest (61.7%) of the respondents were of a different opinion.

Qualitative data from head teacher interview however reported a different opinion concerning institutional networking. One of the head teachers reported that:

> We promote networks with other institutions and the type of leadership we have in school encourages the inclusion of all stakeholders of likeminded… We strive for the success of all our learners. (Head teacher 20).

The statement that ‘Leaders in the school encourage teacher career development to promote performance of learners with physical disabilities’ got a majority support of 97.8% (constituted of 56.8% and 41.0% strongly agreeing and agreeing respectively) of the respondents with a mean of 4.55 and S.D of 0.29. Of all those who took part in the study, only 2.1% (7) of the respondents were neutral on this matter.

> The type of leadership encourages teacher career development and motivates teachers and learners. (Head teachers 16).

Similarly, most (88.2%) of the respondents felt that child to child support encourages learners in the classroom to interact with their peers especially during class discussion to promote performance of learners with physical disabilities. Only 11.9% (39) of the respondents felt otherwise. The mean response was 4.14 with a S.D of 0.91.

The respondents unanimously (100%) agreed that teachers and learners with physical disabilities were encouraged to perform well academically (mean = 4.45 and S.D = 0.50). Only 16.7% and 21.6% of the respondents strongly agreed and agreed respectively that there inclusive decision making process in the school with a view to motivate learners with physical disabilities to perform well academically. Majority (61.7%) of the respondents were however feeling that they were not included in decision making process targeting improvement of academic performance of learners with physical disabilities.

This however did not conform to the report from head teachers interviewed. Two of the head teachers interviewed asserted that:

> Our school has free and open type of leadership. This has created motivation, openness and peaceful co-existence among teachers. (Head teacher 6).

> Our school exhibit democratic type of leadership. This has created positive impact in school management because everyone owns his/her opinion. It takes time to use such leadership approach because everyone wants his/her opinion to be implemented…. (Head teacher 10).

Nearly all the respondents (98.2%) felt that the school administration work with teachers to improve academic performance of learners with physical disabilities (mean = 4.54 and S.D = 0.60). Only 1.8% (6) of the respondents disagreed with the statement.

Finally, most (88.2%) of the respondents were of the opinion that 'the administration source for suitable teaching/ learning materials for use by learners with physical disabilities in the classroom'. Only 11.9% (39) disagreed on suitable teaching/learning resource acquisition.

Though there was agreement that the schools exuded leadership that affected the academic performance of learners with physical disabilities as ascertained from descriptive analyses.

Linear regression analysis was consequently sought to find out the relationship between leadership and academic performance of learners with physical disabilities. The regression model explored was

$$Y = \beta_0 + \beta_1 X + \varepsilon \qquad (4.3)$$

Model 4.3 shows that the dependent variable Y was academic performance and the independent variable X was leadership. The residual ε represented divergence of empirical measures of academic performance away from what the model could approximate.

Preliminary tests were done on model 4.2. Table 4.10 showed no correlation between adjacent residuals. This was justified by Durbin-Watson statistic value of 1.590 falling within the recommended interval of 1 to 3 (Field, 2009). Table 4.10 showed statistically significant positive correlation coefficient between leadership and academic performance ($R=.508$; $P<.05$) justifying linearity. Table 4.10 showed that school leadership had skewness and kurtosis values falling within the recommended interval of -2.0 and +2.0 justifying normality of the distributions (Tabachnick & Fidell, 2007).

Preliminary assumptions were satisfied. The influence of leadership on academic performance was therefore examined. At 5% significance level, the hypothesis that there is no statistically significant influence of school leadership on academic performance of learners with physical disabilities in primary schools in Homa Bay County was tested. The findings were shown in table 4.10.

Table 4.10: Linear regression analysis for the influence of leadership on performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.218	.198		6.158	.000
	Leadership	.563	.053	.508	10.659	.000
	Goodness of fit:					
	$R = .508$					
	$R^2 = .258$					
	Adjusted $R^2 = .256$					
	$F(1,328) = 113.610$					
	$P < .05$					
	Durbin-Watson:1.590					

a. Dependent Variable: Academic performance

b. Independent Variable: Leadership

Source: Survey data (2018)

Table 4.10 showed a statistically significant moderate degree of positive correlation (R=.508; P<.05) between school leadership and academic performance. The value of R-square .258 revealed fraction of academic performance that was attributed to school leadership. It showed that roughly 25.8% of the variations in academic performance were attributed to variations in school leadership practices**.** The value of adjusted R-square

provided a suggestion of the way the model could have been globalized. It ought to have been near the value of R-square as may be appropriate if not identical. In the study, the divergence from the final model was very small; that is, .002 or else .2%. This meant, if the model would have been derived from the study population as an alternative to a sample, it may well have explained roughly .2% less value in results. The value $F_{(1,328)} = 113.610$; P< .05 revealed that the linear regression model was statistically significant. The null hypothesis was rejected. Standardized beta coefficients, showed that for one standard deviation increase in school leadership practices, academic performance improved by .508 points.

Table 4.10 and model 4.3 also revealed an optimal regression equation

$$Y = 1.218 + .563X \quad (4.4)$$

The linear regression model 4.4 showed that school leadership had a statistically significant moderate positive correlation (R = .508; P<.05) with academic performance. The model was 25.8% explained by the variation in school leadership. The regression model 4.4 also revealed that when school leadership was ignored academic performance improved by 1.218 points and when school leadership practices was intensified by one extra unit academic performance improved by .563 points.

4.4.3 School facilities and academic performance of learners

In this case, the influence of school facilities on the academic performance of learners with physical disabilities is analyzed and interpreted. The descriptive statistics showing valid data items percentages, skewness, kurtosis, means and standard deviations for each variable is analyzed. The researchers requested the respondents with the help of likert scale to indicate the level in which they agreed or disagreed with statements on the influence of school facilities on the academic performance of learners with physical disabilities. Likert

scale was coded such that: Strongly agree rated 5, Agree-4, Neutral-3, Disagree – 2, and Strongly disagree-1. The results are shown in table 4.11.

Table 4.11: Descriptive information for school facilities and performance

Constructs		SA	A	N	D	SD	Ske	Kur	Mean	S.D
There are enough classrooms in the school which are of standard sizes and adapted to the needs of all learners especially of those with physical disabilities.	f	24	32	0	176	97	1.3	0.8	2.12	1.2
	%	7.3	9.7	0.0	53.5	29.5				
Classrooms have enough adapted seats for those with physical disabilities making them comfortable hence promoting their academic performance.	f	39	43	5	155	87	0.9	-0.5	2.37	1.31
	%	11.9	13.1	1.5	47.7	26.4				
There are enough dormitories of standard sizes in the school with adequate space for mobility for learners with physical disabilities.	f	59	86	16	103	65	0.1	-1.5	2.91	1.44
	%	18.0	26.1	4.9	31.3	19.8				
There are enough beds with adaptation for learners with physical disabilities in the dormitories enabling them to have enough rest thus promote their academic performance.	f	21	36	0	109	163	1.3	1.0	2.22	1.08
	%	6.4	10.9	0.0	33.1	49.5				
There are enough playgrounds in the school with adapted courts to learners with physical disabilities impacting in their academic performance.	f	40	44	3	98	144	0.9	-0.6	2.20	1.43
	%	12.2	13.4	0.9	29.8	43.8				
There are enough support systems for learners with physical disabilities in the school.	f	3	7	0	201	118	1.6	6.0	1.71	0.67
	%	0.9	2.1	0.0	61.1	35.9				
Learning materials are adequate in the school.	f	0	34	0	95	200	1.7	1.8	1.60	0.93
	%	0.0	10.3	0.0	28.9	60.8				

Key: SA-Strongly agree, A-Agree, Un-Undecided, D-Disagree, SD-Strongly disagree, Ske-Skewness, Kur-Kurtosis, S.D-Standard deviation

Source: Survey data (2018)

From Table 4.11, only 7.3% (24) of the repondents who took part in this study strongly agreed and 9.7% (32) of the respondents agreed that ‘there are enough classrooms in the school which are of standard sizes and adapted to the needs of all learners especially of those with physical disabilities’. Majority however, were of the opinion that available classrooms were not enough. Specifically, 53.5% (176) and 29.5% (97) disagreed and strongly disagreed respectively. The mean response was 2.12 and the S.D was 1.2.

Sample reports from the head teachers interviewed also confirmed this:

> ……the classrooms we have around are not enough and cannot comfortably accommodate all the learners enrolled in school. Moreover, they were built without having learners with physical disabilities in mind. (Head Teacher 11).
>
> There is overcrowding in classrooms……. Poor performance is therefore common phenomenon (Head Teacher 25).

It was evidently revealed that the available classrooms did not have enough adapted seats for learners with physical disabilities as was depicted by majority (74.7%) of the respondents. Only 11.9% and 13.1% strongly agreed and agreed that the classroom seats were adequate while 1.5% remained neutral on this matter.

This study further indicated that 18.0% (59) and 26.1% (86) of the repondents strongly agreed and agreed respectively that ‘There are enough dormitories of standard sizes in the school with adequate space for mobility for learners with physical disabilities’. Majority (51.1%) disagreed with the statement whiles 4.9% remained neutral. Mean response was 2.91 with a S.D of 1.44.

Qualitative data obtained from head teacher affirmed the use of lip-reading as a form of verbal communication as indicated by two of the head teachers that:

> We emphasize the use of lip-reading in our school….. This is especially encouraged in classes which have learners with HI. (Head-teacher$_1$).
>
> My school has some learners who have nearly lost their hearing ability, but the use of lip-reading has been instrumental in keeping such learners in school. Such learners can lip-read well and I encourage my teachers to assist them to further develop their lip-reading…… (Head-teacher$_2$).

Subsequently, 6.4% (21) of the repondents strongly agreed while 10.9% (36) agreed with the statement that: 'There are enough beds with adaptation for learners with physical disabilities in the dormitories enabling them to have enough rest thus promote their academic performance'. Majority, 33.1% (109) and 49.5% strongly disagreed and disagreed respectively (mean = 2.33, S.D = 1.08).

29.5% (38) of the repondents further strongly agreed and 46.5% (60) agreed with the statement that'Verbal communication allows for teacher – learner interaction…' 18.6% (24) of the respondent were undecided while 5.4% (7) disagreed with the statement.

Adequacy of the playgrounds with adapted courts to learners with physical disabilities did not get the support of many respondents. Only 25.6% of the respondents indicated that the available playgrounds were enough and had adaptations for learners with physical disabilities. Most responded (73.6%) disagreed with 0.9% of the respondents remaining neutral with a mean response of 2.20 and S.D of 1.43. There was overwhelming agreement (97.5%) that the available support systems for learners with physical disabilities in the school (mean = 1.71 and S.D = 0.67). Only 3.0% of the respondents indicated that they were enough.

Qualitative data obtained from head teacher affirmed that inclusive primary schools in Homa Bay county did not have adapted systems for learners with physical disabilities. It was reported that:

> The physical environment is not well adapted to suit the needs of the physically handicapped. This has negative impact on the learners' performance" (Head Teacher 8).

Finally, majority (89.7%) of the respondents indicated that learning materials were not adequate (mean = 1.60 and S.D = 0.93). Only 10.3% indicated they the available learning materials were adequate. Qualitative data from the head teachers agreed with this finding. It was asserted by three different head teachers that:

> Playgrounds, learners' support systems, standard classrooms, seats and boarding facilities to support learners with disabilities are inadequate. This is made worse by meager development funds disbursed from the ministry. (Head teacher 23, Head teacher 18 and Head teacher 40).

Linear regression analysis was consequently sought. The regression model explored was:

$$Y = \beta_0 + \beta_1 X + \varepsilon \qquad (4.5)$$

Model 4.5 shows that the dependent variable Y was academic performance and the independent variable X was school facilities. The residual ε represented divergence of empirical measures of academic performance away from what the model could approximate.

Preliminary tests were done on model 4.5. Table 4.12 showed no correlation between adjacent residuals. This was justified by Durbin-Watson statistic value of 1.695 falling within the recommended interval of 1 to 3 (Field, 2009). Table 4.12 showed statistically significant positive correlation coefficient between school facilities and academic performance ($R=.398$; $P<.05$) justifying linearity. Table 4.11 showed that school leadership

had skewness and kurtosis values falling within the recommended interval of -2.0 and +2.0 justifying normality of the distributions (Tabachnick & Fidell, 2007).

Preliminary assumptions were satisfied. The influence of school facilities on academic performance was therefore examined. At 5% significance level, the hypothesis that there is no statistically significant influence of school facilities on academic performance of learners with physical disabilities in primary schools in Homa Bay County was tested. The findings were shown in table 4.12.

Table 4.12: Linear regression analysis for the influence of facilities on performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.341	.127		18.481	.000
	Facilities	.327	.042	.398	7.856	.000
	Goodness of fit:					
	$R = .398$					
	$R^2 = .159$					
	Adjusted $R^2 = .156$					
	$F(1,328) = 61.712$					
	$P < .05$					
	Durbin-Watson:1.695					

a. Dependent Variable: Academic performance

b. Independent Variable: Facilities

Source: Survey data (2018)

Table 4.12 showed a statistically significant weak degree of positive correlation (R=.398; P<.05) between school facilities and academic performance. The value of R-square .159

revealed fraction of academic performance that was attributed to school facilities. It showed that roughly 15.9% of the variations in academic performance were attributed to variations in school facilities**.** The value of adjusted R-square provided a suggestion of the way the model could have been globalized. It ought to have been near the value of R-square as may be appropriate if not identical. In the study, the divergence from the final model was very small; that is, .003 or else .3%. This meant, if the model would have been derived from the study population as an alternative to a sample, it may well have explained roughly .3% less value in results. The value $F_{(1,328)} = 61.712$; $P < .05$ revealed that the linear regression model was statistically significant. The null hypothesis was rejected. Standardized beta coefficients, showed that for one standard deviation increase in school facilities, academic performance improved by .398 points.

Table 4.12 and model 4.5 also revealed an optimal regression equation

$$Y = 2.341 + .327X \tag{4.6}$$

The linear regression model 4.6 showed that school facilities had a statistically significant weak positive correlation ($R = .398$; $P<.05$) with academic performance. The model was 15.9% explained by the variation in school facilities. The regression model 4.6 also revealed that when school facilities are not available academic performance improved by 2.341 points and when the provision of school facilities was intensified by one extra unit, academic performance improved by .327 points.

CHAPTER FIVE

DISCUSSION, SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this Chapter, the discussion of the research findings, summary of the key findings, conclusions, recommendations and suggestions for further research are outlined.

5.2 Discussion

This section presents the discussions of the research findings as per the research objectives.

5.2.1 Influence of teachers work habits on academic performance of learners with physical disabilities

The first objective of the study was to determine the influence of teachers work habits on academic performance of learners with physical disabilities in primary schools in Homa Bay County.

The study reveled that teeachers in Homa-bay county reported to school early. This was indicated by all those who took part in the study (100%). Timely arrival in schools allowed teachers to adequately plan for the day's activities which ultimately impacted positively on the academic performance of learners with physical disabilities. This finding was inline with those of Schumm and Vaughn (1992) who opined that teachers required that ample time was necessary for teachers to adequately prepare early enough before stepping in classroom. Qualitative data also indicated that some of the head teachers interviewed concurred that with good classroom attendance, enhanced contact hours with the learners and monitoring activities of learners there is likelihood of improved performance schools. The results is further in concurrence with the work of Andaya (2014) which revealed that learning in schools occurs effectively based on the quality delivery of the syllabus content to the learners by the teachers.

The study also found that teachers attended class lessons in time 52.6%) and did not leave school before time (82.6%) this allowed for enough time as stipulated in the timetable for timely syllabus coverage. The result of this study concur with those of Westwood and Graham (2003) who found that teachers need to attend to class lessons at stipulated time. Timely class attendance was necessary for syllabus coverage which very important in academic performance of learners. This also affirmed earlier findings by Nakhamu (2012) who asserted that in cases where the syllabus is not adequately covered, learners may examined on content they have not fully understood which results in poor academic achievement.

A study conducted Barry (2005) revealed that the teacher is an essential feature in the delivery system of teaching and learning process. This is in concurrence with the results of the current study where some of the head teachers interviewed revealed that some of the teachers exhibited absenteeism in schools and did not create time to cover for such lesson, and led to poor syllabus coverage (mean = 2.90 and S.D = 0.08), the results did not conform with the findings of Avramidis, Bayliss, and Burden (2000), Kimani, Kara and Njagi (2013) and Westwood and Graham (2003) all of whom posit that teachers create extra time to assist weak learners and this have positive influence on their academic performance. While Barry (2005) for instance was confined to university set up and did not bring out the metric measures of the influence of teachers work habits on academic performance, the present study was confined to the basic education sector and clearly brought out the metric measure of influence as 24.7%.

The activities of the teachers in Homa Bay county was found to be geared towards the academic success of learners with physical disabilities (73.6%). This indicated that learners academic output was greatly impacted by the input of teachers. This finding was in line

with the study documented by Andaya (2014) who indicated that the nature and level of the teachers' contribution affects the quality of the students' performance. In contrast, while the study by Andaya (2014) and Nakhanu (2012) involved students in the normal university, it failed to relate to activities in basic education. Moreover, the study did not consider learners with physical disabilities in its findings and did not bring out the metric contribution of teachers work habits which the current study has clearly elicited.

Teachers in inclusive schools min Homa Bay county were found to adequately prepare lesson notes, lesson plans, schemes of work, and record of work. This positively influenced that academic performance of learners with physical disabilities in the county. This finding was in line with the study of Mwangi (2002) timely preparation of needed learning materials including lesson plans, lesson notes and schemes of work is very key in making the learning process all inclusive, affecting the academic performance of the learners.

It was further revealed that teachers monitored the activities of the learners with physical disabilities in the county and this ainfluenced the academic performance of learners with physical disabilities. This result was in line with the study by Pichi (2012) who indicated that there is need to closely monitor the process of learners. A study conducted by Mwangi (2016) also revealed that the classroom teacher is very key in making the process all inclusive irrespective of the disabilities of the learners with special needs especially in regular classroom. The teachers may make it possible for the learners to be accepted by the other learners by demonstrating positive and supportive attitudes to the learners. The results are in concurrence with the findings of the current study since it was conducted in a basic education facility set up. More so, the results obtained from head teachers interviewed revealed that if teachers monitor activities of learners well thus improving academic

performance in schools. However, these studies did not bring out the metric influence of teachers work habits on academic performance which the current study has emphasized.

5.2.2 Influence of school leadership on academic performance of learners with physical disabilities

The second objective of the study was to assess the influence of school leadership on academic performance of learners with physical disabilities in primary schools in Homa Bay County.

The study found that continuous inspection of school activities by the management of the schools in Homa Bay influences academic performance of learners with physical disabilities. This ensured that the school remained in track at all times. This result agreed with that of Musungu and Nasongo (2008) on the instructional leadership role that asserted that head teachers supervised teachers' work by inspecting records such as schemes of work, lesson books, records of work covered, class attendance records, and clock in/clock out register all of which affect academic performance of the learners. The same results were also posted by Nannyonjo (2007) who indicated that supervision strategies and administration styles employed by the principals had great influence on the academic achievement of learners.

It was also found that leadership in the schools in the county is focused on set goals that influence the acdemic performance of learners with physical disabilities (mean = 4.57 and S.D 0.50). Sample head teachers interviewed also affirmed this finding that when activities in the schools are continuously inspected and the leadership in the schools is focused on set goals. These findings were in line with the results of a study conducted by Ross and Gray (2006) in Canada which unearthed that principals' leadership styles actually

contribute to the academic performance of the students. In schools where the extent of transformational leadership is above average, teachers in such schools tend to be more committed in realizing the school goals and objectives; they remain focused on the school mission and vision thus contributing positively to the overall achievement of the school. However, while the current study succinctly brought out the metric influence of school leadership on performance as 25.8%, Ross and Gray (2006) study did not do so.

It was found that leadership qualities/style employed by school managers did not exude confidence in managing academic affair of learners with physical disabilities (mean = 2.57 and S.D = 1.52) this influenced the academic performance of such learners negatively. This findng was in concurence with a study conducted by Mwangi (2016) established that for a school to realize good academic performance, its leadership should thoroughly be engaged in school related activities and demonstrate commitment, sensitive and focused to continuous academic improvement.

The level of promotion of networking with other institution with the aim of promoting the acdemic performance of learners with physical disabilities was found to be below average (mean = 2.62, S.D = 1.52). This limited the sharing of knowledge related to improvement of academic performance of such learners. This finding affirmed the findings by Mwangi (2016) that for a school to realize good academic performance, its leadership must remain open to information and diverse views from related institution that impacted on student performance.

Career development was found to be very pivotal in realization of good academic performance among schools in Homa Bay county, and the school leaderships in these schools encouraged career development. Career development of teachers promoted academic performance of learners with physical disabilities in Homa Bay county (mean =

4.55 and S.D = 0.29). This study agreed with the recommendation of the Council of Exceptional Children (CEC) 2004 in Eastern Europe that physically challenged learners can be empowered when teachers are equipped with the relevant knowledge and skills in dealing with such learners, this could be done through training of teachers in special education.

A study conducted by Rautiola (2009) in Northern Michigan University, showed that there is a direct link between the students' academic performance and the school leadership style. These led to increased collective efficacy and improved school culture which led to improved learners achievement. This is in concurrence with the findings of the current study where it was observed that schools with free and open type of leadership have created motivation, openness and peaceful co-existence among teachers with improvement in performance. However, while the current study has brought out the metric measure of 25.8% of the extent school leadership influences academic performance, the study by Rautiola (2009) failed to do so. Moreover, the study by Rautiola (2009) was conducted among students at university and ignored the inclusion of primary schools.

A study conducted by Gregory, Eric and Steven (2013) revealed that school leadership is very pivotal in improving learners' achievement. This is in agreement with the findings of the current study where it was revealed that 25.8% of the variation in academic performance was attributed to leadership styles. More so, the results of the head teachers interviewed in the current study revealed that when a school exhibits democratic type of leadership positive impact in school management is realized because everyone owns his/her opinion.

5.2.3 Influence of physical facilities on academic performance of learners with physical disabilities

The third objective of the study was to establish the influence of physical facilities on academic performance of learners with physical disabilities in primary schools in Homa Bay County.

The research findings indicated that classrooms which are standardized and adapted to the needs of all learners especially of those with physical disabilities in inclusive schools in Homa Bay County were not enough. The mean response was 2.12 and the S.D was 1.2. The classroom seats which were found in these schools were not inadequate and were not adapted for use by learners with physical disabilities. In affirming this, the report of sample head teachers' interviews showed that there is overcrowding in classrooms making poor academic performance a common phenomenon among learners with physical disabilities. These results conform to the earlier Status Report on Implementation of the Rights of Persons with Disabilities in Kenya, From Norm to Practice by Kenya National Commission on Human Rights, July 2014 showed that physical facilities in most of inclusive schools were not best fitted to take interest of learners with physical disabilities, and that the available physical facilities were inadequate. In some cases for example, the available desks and tables were either too low or too high for such learners. These results if further in agreement with a study conducted by Achieng (2013) that found that availability of learning materials and other facilities have great impact in pupils' academic achievement. Lack of adequate classroom resources and unmanageably high class enrolments were greatly blamed for pupils' poor academic performance in the study.

It was also noted that the were not enough dormitories of standard sizes in the school. The ones which were available did not have adequate space for mobility for learners with

physical disabilities and this affected their academic performance. It was also noted that there was inadequacy of the playgrounds with adapted courts to learners with physical disabilities. This was also affirmed by reports from interviews of sampled head teachers in which it was indicated that the physical environment is not well adapted to suit the needs of the physically handicapped. These findings corroborates earlier findings by Carron and Chau (1996) who conducted a study in India in which they sampled 59 schools out of which, only 49 schools had physical facilities that were adapted to all types of learners including learners with physical disabilities and that schools which had better physical facilities registered higher academic performance than those that were in schools with poor physical facilities. Similarly, Motanya (2011) in another study indicated that performance is greatly influenced by the existing learning environment including the physical facilities.

Using a correlation analysis it was found that there was a statistically significant relationship ($R=.398$; $p<.05$) between school facilities and academic performance. This was in concurrence with a study conducted by Karemera (2003) in South Carolina State University, in the US in which he found that students' academic performance is significantly correlated with academic environment satisfaction such as physical facilities in the institution including libraries and computer laboratory.

This study also indicated that learning materials were inadequate in the school (89.7%). This affected the academic performance of learners with physical disabilities. This concurred with a similar study conducted by Etsey (2005) and analyzed using chi-square test also revealed a relationship between teaching-learning materials and academic performance. The results showed that high-achieving schools had more teaching-learning materials than low achieving schools. Further, Etsey observed a significant relationship between availability of textbooks and results of high achieving schools. Both studies

revealed that with availability of physical facilities, there is likelihood of achieving better results.

This is consistent with the results of the current study where there was a statistically significant relationship (R=.398; P<.05) between school facilities and academic performance. However, Karemera (2003) study was confined to a university context for students and ignored primary schools setting where the current study was confined. However, Karemera (2003) study was confined to a university context for students and ignored primary schools setting where the current study was confined.

A study conducted by Young (1999) in the US revealed that learners' performances are directly linked with use of library. The use of the library was found to have positively affected the student performance. The results concurred with the findings of the current study where school facilities, library included were found to have a positive influence on learners' performance. However, while a study by Young (1999) was conducted in a college setting where participants in the study were adults the current study was conducted in a primary school setting.

5.3 Summary of Key Findings

First, the study proposed to determine the influence of teachers work habits on academic performance of learners' with physical disabilities in primary schools in Homa Bay County. The hypothesis of the study was that there is no statistically significant influence of teachers work habits on the academic performance of learners with physical disabilities in primary schools in Homa Bay County. The findings revealed teachers' work habits had a statistically significant moderate degree of positive correlation (R=.497; P<.05) with academic performance. Teachers' work habits attributed roughly 24.7% of the variation in

academic performance. The linear regression model relating teachers' work habits to academic performance was statistically significant *(*$F_{(1,328)}$ = 107.137; P< .05). The null hypothesis was rejected. Teachers' work habits had a statistically significant influence on academic performance of learners' with physical disabilities in primary schools in Homa Bay County.

Second, the study proposed to discover the influence of school leadership on academic performance of learners with physical disabilities in primary schools in Homa Bay County. The hypothesis of the study was that there is no statistically significant influence of school leadership on the academic performance of learners' with physical disabilities in primary schools in Homa Bay County. The results revealed a statistically significant moderate degree of positive correlation (R=.508; P<.05) between school leadership and academic performance. School leadership explained approximately 25.8% of academic performance. The linear regression model between school leadership and academic performance was statistically significant ($F_{(1,328)}$ = 113.610; P< .05). The null hypothesis was therefore rejected. There was a statistically significant influence of school leadership on academic performance of learners' with physical disabilities in primary schools in Homa Bay County.

Third, the investigation was set to establish the influence of school facilities on the academic performance of learners with physical disabilities in primary schools in Homa Bay County. The hypothesis of the study was that there is no statistically significant influence of school facilities on the academic performance of learners with physical disabilities in primary schools in Homa Bay County. The results revealed a statistically significant weak degree of positive correlation (R=.398; P<.05) between school facilities and academic performance. School facilities explained approximately 15.9% of academic

performance. The linear regression model between school facilities and academic performance was statistically significant ($F_{(1,328)} = 61.712$; $P < .05$). The null hypothesis was therefore rejected. There was a statistically significant influence of school facilities on academic performance of learners with physical disabilities in primary schools in Homa Bay County.

5.4 Conclusions

Teachers' work habits had a statistically significant moderate degree of positive correlation with academic performance of learners in primary schools. Teachers work habits also attributed to the variation in academic performance of learners in primary schools and was statistically significant. Teachers' work habits therefore influenced academic performance of learners with physical disabilities in primary schools in Homa Bay County.

School leadership had a statistically significant moderate degree of positive correlation with academic performance. School leadership also attributed to the variations in academic performance and was statistically significant. School leadership therefore influenced academic performance of learners with physical disabilities in primary schools in Homa Bay County.

School facilities had a statistically significant weak positive correlation with academic performance. Schools' facility also attributed to the variation in academic performance and was statistically significant. Schools' facility therefore influenced academic performance of learners' with physical disabilities in primary schools in Homa Bay County.

5.5 Recommendations

Based on research findings, the recommendations are as follows:

Teacher work habits affect academic performance of the learners' with physical disabilities in primary schools in Homa Bay County according to the findings of this study. Schools should therefore intensify measures which strengthens good teacher work habit such as coming up with policies that ensures that teachers arrive in schools early like the provision of breakfast to teachers.

School leadership affects academic performance of the learners' with physical disabilities in primary schools in Homa Bay County. Head teachers who are the primary managers of the schools should carry out their professional role in curriculum supervision through continuous assessment of teachers' professional documents and supervising teachers as they carry out their teaching duties.

School physical facilities greatly affect academic performance of learners with physical disabilities. The government through the Ministry of Education should therefore improve the capital allocation to schools with inclusive units to assist in improving the available infrastructures to the levels that are accommodative to the learners who are physically challenged.

5.5 Suggestions for Further Research

First, the current study has revealed weak effect of school facilities on academic performance. Future researchers should therefore intensify investigations to find out why there has been weak effect of school facilities on academic performance in schools.

Second, future researchers should engage in joint analysis of teacher work habits, school leadership and school facilities to bring out joint contribution to academic performance in schools. More so, teacher work habits, school leadership, and school facility is a subset of

the multiple factors that could affect academic performance. Future researchers should identify other factors and study their effect on academic performance.

Last, the current study was based on school based factors and academic performance in schools. Future researchers should therefore introduce external factors in the study to bring out how they interact with the school based factors to affect academic performance in schools.

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APPENDICES

APPENDIX I: INTRODUCTORY LETTER

Dear respondent,

I am student at Africa Nazarene University. I am carrying out a research on “influence of school-based factors on the academic performance of learners with physical disabilities in primary schools in Homa Bay County” as a partial requirement for the award of the degree of Masters of Education in the department of Education, school of Humanities and Social Sciences of Africa Nazarene University. The questionnaire has been designed to gather information from teachers in the schools. Your views as a teacher in the school are considered as valuable part of this study. Kindly complete the questionnaire to the best of your ability and return it to the researcher as soon as may be possible. The information provided shall be treated with strict confidentiality.

Sincerely yours

Josephine Akinyi Orwa

Cell phone: 0720695359

APPENDIX II: QUESTIONNAIRE FOR TEACHERS

SECTION A: GENERAL INFORMATION

Kindly write the right response in the spaces provided.

$A_{1:}$ Name of your school: …….……

$A_{2:}$ Sub-County your school is located: …….……

A_3: Number of girls in your class: …….……...

A4: Number of boys in your class: ……...

SECTION B: BIO DATA OF THE RESPONDENTS

Kindly tick (√) in the box next to the right option

B_1: Gender Male [ ] Female [ ]

B_2: Age <20 [ ] 20–29 [ ] 30-39 [ ] 40-49 [ ] >49 [ ]

$B_{3:}$ Your level of education Primary [ ] Secondary [ ] Tertiary [ ]
University [ ]

B_4: Your position in the school Head teacher [ ] Deputy Head teacher [ ]
Senior teacher [ ] Teacher [ ]

B_5: Years in the school <4 [ ] 5-7 [ ] 8-10 [ ] >10 [ ]

C: TEACHERS WORK HABITS AND ACADEMIC PERFORMANCE

This subsection shows a series of expected constructs on teachers work habits as practiced in your school and their influence on academic performance of learners with physical disabilities. Please indicate your level of agreement/disagreement by ticking (√) against each of them in the space provided.

Key: Strongly Disagree (**SD**); Disagree (**D**); Neutral (N); Agree (**A**); and Strongly Agree (**SA**).

	Constructs	**SD**	**D**	**N**	**A**	**SA**
a.	Teachers arrive to school on time thus plan well for the day's activities impacting positively on academic performance of learners with physical disabilities					
b.	Teachers attend to learners with physical disabilities in class on time					
c.	Teachers end classes at the required time but assist learners with physical disabilities in their academic task thus improving their academic performance					
d.	Teachers do not leave school before time thus having more apple time with learners with physical abilities.					
e.	Teachers' activities are geared towards learners with physical abilities' academic success.					
f.	Teachers prepare lesson notes, lesson plans, and schemes of work and record of work with learners' with physical disabilities in mind impacting positively on their academic performance.					
g.	Teachers frequently monitor learners' with physical abilities activities in the school and subsequently give individual attentions to such learners.					
h.	Teachers understand the needs of learners with physical disabilities and integrate these needs in their teaching strategies thus improving their academic performance.					

D: LEADERSHIP AND ACADEMIC PERFORMANCE

This subsection shows a series of constructs on the influence of **leadership qualities observance** in your school on academic performance. Please indicate your level of agreement/disagreement by ticking (√) against each of them in the space provided.

Key: Strongly Disagree (**SD**); Disagree (**D**); Neutral (N); Agree (**A**); and Strongly Agree (**SA**).

	Constructs	**SD**	**D**	**N**	**A**	**SA**
a.	Activities in the school are continuously inspected to influence the performance of learners with physical disabilities.					
b.	Leadership in the school is focused on set goals that influence the academic performance with physical disabilities.					
c.	Leadership qualities in the school exude confidence in managing academic affair of learners with physical disabilities.					
d.	There is commitment among school leaders to enhance academic performance of learners with physical disabilities.					
e.	School administers promotes networks with other institutions to serve the needs and interest of learners with physical disabilities in the school.					
f.	Leaders in the school encourage teacher career development to promote performance of learners with physical disabilities.					
g.	Child to child support encourages learners in the classroom to interact with their peers especially during class discussion to promote performance of learners with physical disabilities.					
h.	Teachers and learners with physical disabilities are motivated to perform well academically.					
i.	Teachers and learners are included in decision making process with the view to motivate learners with physical disabilities to perform well academically .					
j.	Administration work with teachers to improve academic performance of learners with physical disabilities.					

k.	The administration source for suitable teaching/ learning materials for use by learners with physical disabilities in the classroom.					

E: SCHOOL FACILITIES AND ACADEMIC PERFORMANCE

This subsection shows a series of constructs the influence of **physical facilities** in your school on academic performance of learners with physical disabilities. Please indicate your level of agreement/disagreement by ticking (√) against each of them in the space provided.

Key: Strongly Disagree (**SD**); Disagree (**D**); Neutral (N); Agree (**A**); and Strongly Agree (**SA**)

	Constructs	**SD**	**D**	**N**	**A**	**SA**
a.	There are enough classrooms in the school which are of standard sizes and adapted to the needs of all learners especially of those with physical disabilities.					
b.	Classrooms have enough adapted seats for those with physical disabilities making them comfortable hence promoting their academic performance.					
c.	There are enough dormitories of standard sizes in the school with adequate space for mobility for learners with physical disabilities.					
d.	There are enough beds with adaptation for learners with physical disabilities in the dormitories enabling them to have enough rest thus promote their academic performance.					
e.	There are enough playgrounds in the school with adapted courts to learners with physical disabilities impacting in their academic performance.					
f.	There are enough support systems for learners with physical disabilities in the school.					
g.	Learning materials are adequate in the school.					

SECTION F: ACADEMIC PERFORMANCE OF LEARNERS

This section shows **measures of academic performance of learners with physical disabilities compared to the class mean score in examination mark sheet in your school**. Academic performance of learners with physical disabilities: Excellent (80 - 100%) Good (60-79%), Average (50 – 59%), Below Average (40-49%), Poor (39% and bellow).

Subject	Good	Average	Below Average	Poor	Comment
Maths					
English					
Kiswahili					
Social studies					
Science					
Class mean score					

Thanks for your cooperation

APPENDIX III: INTERVIEW GUIDE FOR HEAD TEACHERS

Teachers Work Habits

1) What teacher work habits are prevalent in your school that affects academic performance of learners with physical disabilities?
2) Why are these work habits prevalent in your school?
3) How have the teachers work habits prevalent in your school impacted on academic performance?
4) Are there ways the current work habits can be improved?

LEADERSHIP

1) What leadership skills are practiced in your school?
2) How has the leadership skills practiced in your school impacted on academic performance?
3) What challenges do you encounter in implementing such leadership skills in your school?

PHYSICAL FACILITIES

1) What is the status of physical facilities in your school?
2) What challenges do you encounter in acquiring physical facilities in your school?
3) What challenges do you encounter in using physical facilities in your school?
4) How have physical facilities in your school impacted on academic performance? This part comes in the appendices.

APPENDIX IV: INTRODUCTION LETTER FROM ANU

AFRICA NAZARENE
UNIVERSITY

12th June, 2018

RE: TO WHOM IT MAY CONCERN

[illegible] is a bonafide student at Africa Nazarene University. He/She has finished his/her course work and has defended his/her thesis proposal entitled "*School Based Factors that Affect Academic Performance of Learners with Physical Disabilities in Primary Schools in Homa-Bay County, Kenya*"

Any assistance accorded to him/her to facilitate data collection and finish his/her thesis is highly welcomed.

Prof. Rodney Reed
Deputy Vice Chancellor, Academic Affairs

APPENDIX V: NACOSTI RESEARCH AUTHORIZATION LETTER

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/18/22253/23975**

Date: **11th July, 2018**

Josephine Akinyi Orwa
Africa Nazarene University
P.O. Box 53067-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"School-based factors that affect academic performance of learners with physical disabilities in primary schools in Homa-Bay County, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **Homa Bay County** for the period ending **10th July, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Homa Bay County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Homa Bay County.

The County Director of Education
Homa Bay County.

APPENDIX VI: RESEARCH PERMIT FROM NACOSTI

THIS IS TO CERTIFY THAT:
MS. JOSEPHINE AKINYI ORWA
of AFRICA NAZARENE UNIVERSITY,
128-40303 RANGWE,has been permitted
to conduct research in *Homabay County*

on the topic: *SCHOOL-BASED FACTORS THAT AFFECT ACADEMIC PERFORMANCE OF LEARNERS WITH PHYSICAL DISABILITIES IN PRIMARY SCHOOLS IN HOMA-BAY COUNTY, KENYA.*

for the period ending:
10th July,2019

.....
Applicant's Signature

Permit No : NACOSTI/P/18/22253/23975
Date Of Issue : 11th July,2018
Fee Recieved :Ksh 1000

.....
Director General
National Commission for Science, Technology & Innovation

CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.

REPUBLIC OF KENYA

NACOSTI

National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No.A 19320

CONDITIONS: see back page

APPENDIX VII: RESEARCH AUTHORIZATION LETTER FROM MINISTRY OF EDUCATION

MINISTRY OF EDUCATION

STATE DEPARTMENT OF BASIC EDUCATION

Telegrams: "SCHOOLING" Homa Bay
Telephone + 254722767574
When replying please quote
cdehomabay@gmail.com

COUNTY DIRECTOR OF EDUCATION
HOMA BAY COUNTY
P.O BOX 710
HOMA BAY
DATE: 15TH AUGUST, 2018

REF: MOEST/CDE/HBC/ADM/11/VOL.2/86

JOSEPHINE AKINYI ORWA
AFRICA NAZARENE UNIVERSITY
P.O BOX 53067 – 00200
NAIROBI

RE: RESEARCH AUTHORIZATION.

Following your application for authority to carry out research on ***"School - based factors that affect accdemic performance of learners with physical disabilities in primary schools in Homa Bay County, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in Homa Bay County for the period ending **10th July, 2019.**

Kindly accord her necessary assistance and note that all ethical practices should be observed.

COUNTY DIRECTOR OF EDUCATION
HOMA BAY COUNTY
P. O. Box 710 - 40300, HOMA BAY
Email: cdehomabay@gmail.com

MR. JARED M. NYAMWEYA
FOR: COUNTY DIRECTOR OF EDUCATION

Cc.

1. **County Commissioner**
   Homa Bay County.

APPENDIX VIII: RESEARCH AUTHORIZATION LETTER FROM HOMABAY COUNTY COMMISSIONER

THE PRESIDENCY

MINISTRY OF INTERIOR & CO-ORDINATION OF NATIONAL GOVERNMENT

Telephone: Homa Bay 22104 or 22105/Fax: 22491
E-mail-cc_homabay@yahoo.com
When replying please quote

THE COUNTY COMMISSIONER
HOMA BAY COUNTY
P. O. BOX 1 – 40300
HOMA BAY

REF: ED.12/1/VOL.IV/8

13TH AUGUST, 2018

TO WHOM IT MAY CONCERN
HOMABAY COUNTY

RE:RESERARCH AUTHORIZATION: MRS. JOSEPHINE AKINYI ORWA

This is to confirm to you that the above named student has been authorized to carry out research on ***'School based factors that affect academic performance of learners with physical disabilities in primary schools in Homa Bay County, Kenya'*** for a period ending 10thJuly,2019 as per Permit No.NASCOSTI/P/18/22253/23975 of 11th July,2018.

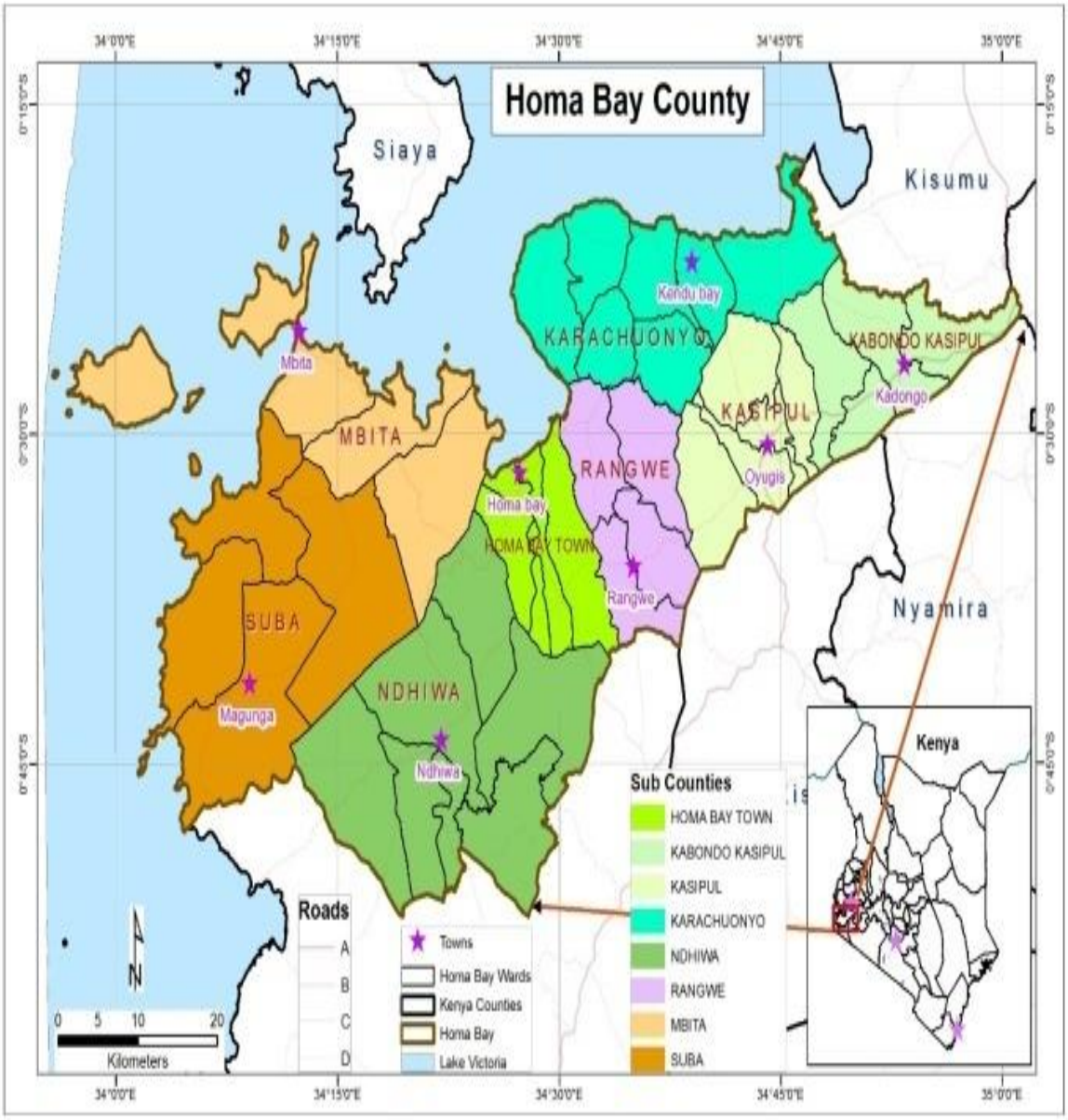
The purpose of this letter is therefore to ask you to assist her where necessary.

TOM M. AKETCH
FOR:COUNTY COMMISSIONER
HOMA BAY COUNTY

CC

THE COUNTY DIRECTOR OF EDUCATION
HOMA BAY

APPENDIX IX: RESEARCH SITE MAP



Map of Homa Bay County Source: GoK, 2013