

**FACTORS INFLUENCING PHYSICS PERFORMANCE AMONG
STUDENTS IN THE SELECTED SECONDARY SCHOOLS
A CASE STUDY OF BUYENGO SUB-COUNTY.**

**BY
MUKAMA NOAH.
1163-07184-08075.**



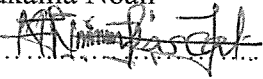
**A RESEARCH REPORT SUBMITTED TO THE COLLEGE
OF EDUCATION IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE AWARD OF BACHELOR
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Declaration.

I hereby declare that this material submitted has been compiled by me and produced to the best of my knowledge as a prerequisite to pertain a bachelor of science with education.

Name : Mukama Noah

Signature : 

Date. : October, 2nd 2019.

Dedication

To the person of my dear uncle Kayongo Daniel, who is the very reason for my success in O Level, to my Precious Mummy who by whose efforts, I have grown to what I am. To my sisters, Teddy, Babirye, Jennipher and Resty, my brothers James, Juma and John and Eri. To my pastor Moses Napandu who has exceedingly enabled my spirit to grow and granted me with the best of his heart.

Acknowledgments.

My great thanks to my God Almighty who has not forsaken me but has continuously granted me with knowledge to complete this research report.

I thank Dr Living Ounyesiga for the comments, criticism and suggestion on this research report.

My special thanks to my dear loving mother who has stood with me through this journey which has not been easy but she has struggled to see that it is a success, that constant love, care and support and above all, the prayers towards my victory.

I also wish to thank my lectures not limited to Dr Olaniyan Olatide Ademola, Prof Levi Nwankwo, Mr Laaki Samson, Madam Edith and Madam Taligoola of Kampala International university for the advice granted to me.

I express my sincere and heartfelt gratitude to whoever has assisted in the completion of this research in one way or the other.

Approval

I hereby truly recommend this research report of factors influence physics performance among students in the selected secondary school, a case study of Buyengo Sub County for approval at Kampala international university in partial fulfillment for the requirement of the award of a bachelor's degree in education.

Name : Dr. Ounyesiga Living.

Designation: Research supervisor.

Signature :.....

Date : October 2nd, 2019.

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CHAPTER ONE

Introduction.

This chapter discusses the problem to be studied in the research by looking at the following areas; the background of the study, the statement of the research problem, the purpose of the study, the objectives of the study, the research questions, significance of the study, scope and limitations of the study, the assumptions of the study and the operational definitions of the terms.

1.1. Background of the study.

Physics education is an important part of the foundation for many occupations (Van Godden and Slater, 1998) but consequently, the issue of enrolment and performance of students in physics have been a subject of discussion and research has been globally done on this (Farmer, 1993). According to Kayiga (2013) science subjects remain a burden of Uganda's education even as more efforts are put into promotion of the academic field. Results for 2012 Uganda certificate of education (UCE) exposed the continued poor performance of science subjects compared to arts subjects. In the study of Mabula (2012), it was shown that there is a continuation of failure, and poor performance in science subjects in secondary schools national examinations, and there is a continuous dropout from science subjects, the dropout is more serious in physics and chemistry subjects as compared to mathematics and biology which are compulsory to all students in O-level. And also, before thinking of doing this particular research, I made many inquiries of the hardest subjects to many senior four students and the answer I got was always physics first and some added mathematics.

Hallack (1990), states that education has been identified worldwide as an important component that determines character and social economic development of any nation. And secondary education is the foundation of the scientific and technological advancement that Africa needs to develop industrialized economies; it is also the gateway to higher education and to employment (Ndoye, 2003).

According to science education in Europe (2011) international student assessment surveys carried put under agreed conceptual and methodological frameworks with a view to providing

policy-oriented indicators, in Europe indicates that there is decrease of relative standing in the performance of science subjects among European members.

The Uganda Education commission was mandated with charting a new education policy for the country. One of its main tasks was to solve the issue of education inequality across the races and regions in the country. Despite all incentives and efforts by the Government and NGOs to enhance quality and participations in education, this sub county still doesn't perform well as it's hard to find a first grade in it, this is more worse in science subjects especially physics.

Developed nations including United States of America, china and Japan have a large number of highly skilled human labour in scientific areas. This has enabled them to not only exploit local natural resources but also to identify and negotiate for other nations resources. Science and technology are keys to social economic development in an increasingly interconnected world. And hence, secondary school education is fundamental ingredient for creating this economic development.

The current secondary school curriculum in Uganda puts emphasis on science

Subjects and this is evident with the making of science subjects including physics, biology and chemistry compulsory in the ordinary level (O-level). But yet students' performance in the science subject's compulsory in national examinations (Uganda Certificate of Education) has been consistently poor over the years. Despite the fact that the importance of physics as a basis for technology is obvious, the number of students taking physics and their performance in secondary school is really poor and only declining, as the case is in the whole of East Africa and Africa as a continent as well as the globe at large (Jidamwa, 2012).

The increased poor performance and failure in science subjects in secondary schools may lead to a big loss for both individual students whose aim was to continue with higher education and pursue a carrier, but all of that may be compromised a result of poor performance in science subjects. This may affect the nation, whose aim is to have professionals in various science fields like medicine, communication, industries and construction in order to achieve its technological development goals (Rogers and Ford 2007).

This study sought to determine the factors influencing the performance of physics in secondary schools in Buyengo Sub-county, Jinja District.

1.2. Statement of the Research problem.

Irrespective of the effort of the government of Uganda funding education of secondary schools and also encouraging the study of science subjects including physics, biology, chemistry, agriculture and mathematics. There has been continuous poor performance observed in physics at the Uganda national examinations at the ordinary level that is; UCE with more students scoring above the grade of C.6 and more in pass grades. Also, before thinking of doing this particular research, I made many inquiries of the hardest subject to many students and the answer I got was always physics first and some added mathematics. This poor performance has raised concern to the Government, parents and other educational stakeholders. Despite the many researches done on the education performances in the country, little research has been evident on factors that influence performance in physics in the national examinations; UCE in Buyengo sub-county and yet, performance has been still a concern in the area.

Due to the alarming performances exhibited, this has indulged the Mukama Noah to find out the various factors leading to such poor performance in the sub-county of Buyengo in Jinja District.

1.3. Purpose of the study.

The low grade in the Uganda National examinations that is in UCE mostly in physics in the Eastern Region has been alarming due to its repetitive occurrence. There is a big gap between the performance in the arts subjects and the science subjects that in reality has affected students in Buyengo sub-county. The purpose of this study therefore is to determine the factors that influence the academic performance of secondary school students in the physics subject in the Buyengo sub-county, Jinja district. An attempt is made to identify and critically look into the extent to which factors like students' attitude, availability of qualified science teachers, school learning environment, parent's level of education, family's economic status among others in secondary schools in Buyengo Sub-county, Jinja district.

1.4. Objectives of the study.

1.4.1. General objective.

The study will determine the factors that influence the academic performance of the students in physics.

1.4.2. Specific objectives.

- a) To determine how the availability of qualified science teachers affect the physics performance in the secondary schools in Buyengo sub-county.
- b) To measure the extent at which the family's economic status affect the physics performance in Buyengo sub-county.
- c) To investigate the extent by which parent's level of education affected the academic performance in physics for secondary school students in Buyengo Sub county.

1.5. Research Questions.

- a) How does the availability of qualified science teachers affect the physics performance in the secondary schools in Buyengo sub-county.
- b) How does the parent's economic status influence the academic performance of secondary school students in physics at Uganda national examination (UCE).
- c) How does the parent's level of education affect the performance in physics in the National examinations that is to say UCE in Buyengo Sub-county, Jinja District.

1.6. Significance of the study.

The study will be of significance to the teachers, students, parents and educational researchers due to the fact that the information collected by the researcher will surely enable them to know and understand the factors that contribute to the poor performance of students in the National examinations of secondary schools. The ministry of education and the policy makers in the education sector can as well use the findings as a basis for them to address the problem of poor performances in the subject of physics in the area of Buyengo sub-county and the region of eastern Uganda at large, where there has been rampant low performances in the same subject like Mbale, kamuli, Bukwo, Kweeni and Bulambuli, among others. To the school owners, managers, administrators and teachers, the research findings will be useful to them since they are to provide highlights on what are the factors that lead to the persistent poor performances in the physics subject in secondary schools. Also the findings of this research will help or be of use to

individuals, learners, and researchers and in various organizations and institutions since it will provide the information on what are the possible solutions or recommendations for the problem should be.

1.7. Scope and delimitations of the study.

1.7.1. Geographical scope of the study.

The study will be carried out within the confined secondary schools in Buyengo Sub County. Buyengo sub county found in kagoma constituency in Jinja district, Eastern Uganda. Both public and private secondary schools inclusive, because there are few secondary schools in the sub-county.

1.7.2. Time scope of the study.

The study will be carried out within a period of four months, starting in June to September of the year 2019.

1.7.3. Delimitations of the study.

The researcher is not certain whether the private schools will share the confidential information freely. However every effort will be made to ensure that the correct sampling method can be used during the collection of the information or data to be used when drawing the conclusions. The following groups of people are preferred by the research as his main respondents since they are directly involved in the researchers area of concern; the head teachers of the schools, the science teachers, and senior four (S.4) students.

The findings of this study will rely much on the information given out by the respondents; hence the validity of the information will depend on them. But then due to certain circumstances or some reasons like ignorance, perception, and attitudes and so on, respondents may hide the information or give false/ wrong information or refuse to respond to the researcher's questions.

1.8. Basic Assumption of the Study.

The target respondents will be expected to participate in giving the desired information for the study and that they should be truthful, honest and objective to the questionnaires especially after being assured that the information would only be used for academic purpose and is highly confidential.

1.9. Operational definition of terms used.

1.9.1. Academic performance.

According to Gibson, & Rankin (2015) define as the attainment of learning objectives. However, as per the study; Academic performance refers to the achievement in standardized tests or examinations by the student. In other words, it is the outcome of the student's assessments. This study will measure the academic performance basing on the average grades scored by students in exams (whether Distinction, Credit or Pass,).

1.9.2. Factors.

According to Webster's New World College Dictionary, 4th Edition. Copyright © 2010 by Houghton Mifflin Harcourt. A factor is any of the circumstances, conditions, etc. that bring about a result; element or constituent that makes a thing what it is. In other words, a phenomenon that affects the nature, the magnitude, or the timing of a consequence. That is to say the root cause of something.

1.9.3. Physics:

According to Tighana (2018); physics is the science that studies measurable magnitude and phenomena that transforms them without changing their natures. According to the digital encyclopedia Microsoft Encarta, Physics is defined as a major science dealing with the fundamental constituents of the universe, the forces they exert on one another, and the results produced by these forces.

1.9.4. Performance.

According to Kane (1988); performance is defined at the level of each individual within the organization or at organization level. It is perceived as an understanding of the achieved results.

CHAPTER TWO

LITERATURE REVIEW.

2.1. Introduction.

In order to conceive the research in a way that permits a clear formulation of the problem, some background information will be necessary. This will be obtained mainly by reading whatever has been published that seems to be relevant to the research topic. The process is also referred to as Literature review. Review of the literature bears significance on providing the researcher with deeper insight into the topic of research.

2.2. Parents' Level of Education, influence on Students' Academic Performance.

Generally traditional research has revealed that more highly educated parents and especially mothers have greater success in providing their children with cognitive and language skills that contribute to success in school (Stich and McDonald, 1990). Parents' level of education is important to schooling as parents want their children to maintain the status quo (Mallan, 2009). It's also believed that parents with higher educational levels have stronger confidence in their children's academic abilities and they also have higher expectations of their children. They expect that their child will earn good grades behave well in school and attend college. These expectations and confidence in their children motivate them to do well at school. The confidence parents have in their children also helped them to build their own confidence and self-concept which is important in their education (Mallan, 2009). However, parents' over expectations might also cause stress to their children which translates to poor educational attainments.

Eccles (2005) pointed out that children learn by example often through observations at home. If a child's parents are reading books, attending ongoing educational classes and taking them along to the museums, libraries- all activities educated parents are more apt to do- they are engaging the child in a number of direct learning experiences that will help him or her to achieve the best in education.

Rana (2015) carried out a study on the relationship between the parents' level of education and academic performance of their children in South Punjab town, Pakistan.

The result showed that there was a significant positive relationship between parents' level of education and students' academic performance.

Jamila (2009) conducted a study on the effect of parental level of education on students' academic performance in Norway. The results of the study indicated that there was a positive correlation between parental level of education and their children's academic achievement.

2.3. Parents' economic status and Students' Academic Performance.

Zhang (2012) examined students and their families' income in China. He studied in their early years (lower primary school children). The study measured students reading skills, verbal interaction and phonological awareness in relation to their families' level of income. The results showed that low income children exhibited lower levels of cognitive linguistic skills, lower verbal interactions and lower phonological awareness and generally lower academic performance than their counterparts from high and middle income families. It also showed that children from high income families were more proficient in reading skills than in low income families although the research only examined early childhood pupils but this research focused on students in secondary schools.

Sean (2013) presents in his comprehensive study how students from families with high income are having best performance than those from low income families. His study took place in United States of America. He posited that the impact of the parents' income can be shown in the early timing of the students' learning. He maintained that parents of higher income take their children to school earlier than their lower income counterparts. They can afford to take their children through preschool learning and this have greater impact in their later educational outcomes since it provides them with the required cognitive and social development. This is unlike their low income counterparts who do not afford preschool learning for their children and prefer having their children commence learning from class one (grade one) onwards. However, the researcher is aware that low income parents are also as eager and desire to take their children to school earlier as their counterparts in high income families.

2.4. The student's attitude.

This may have an effect on student performance in secondary school physics in ordinary level physics. Despite the fact that high school students who take physics are generally exceptional as a group, tending to have high grade point averages, to perform well on standardized tests and tend to rank high in mathematical ability (Porter & Czujko, 1986), institutional, cultural and social factors affect a student's decision to take physics in high school. For instance, at Robeson High School in Chicago, simply a neighborhood school which all types of students attends; every student must take four years of science and four years of mathematics which includes physics. While good students generally will do well in most circumstances, when students of different learning styles and background are in high school physics, the teaching or the curriculum can become important in student success.

Many high school students have difficulty learning high school physics and Ida and Cranial (1985) developed a remedial teaching method consisting of immediate and frequent feedback in a natural classroom setting. This method resulted in significantly higher achievement indicating that teaching method remains a factor in successful problem solving and therefore, success in high school physics. Supporting this research is the work of Halloun and Hesterenes (1987) who contend that the poor performance typical of most students in secondary school physics suggest that conventional methods for teaching problem solving are far from optimal. By contrasting the traditional lecture method to the dialectical large diagnostic test gains of low competence students and gains in test performance in the course were found. Minstrell (1984) has shown that the intensive dialectical method has resulted in success in teaching Newtonian mechanics.

Wright and Williams (1986) found that a problem solving strategy (WISE) increased student and instructor perceptions of accuracy and promoted organization as well as performance. Although the greatest success of the WISE method was with those who had high math skills, students with low mathematics skills also showed improved performance. The curricular aspect of a physics course may determine if a student passes or fails after renewed interest in science courses at all levels due to Sputnik, two new courses were developed in high schools. PSSC Physics was an upgrading of the high school course with a view toward training future scientists and emphasized student observations and conclusions based on experimental evidence. Project Physics was more humanistically oriented and aimed at increasing physics enrollments at high school. PSSC was

primarily laboratory centered course, while Project Physics aimed at people interested in history, languages, music and so on. Later, courses were developed such as the PSI based on individualized instruction Pal hand & Lid Enfield (1985). While the PSSC and Project physics have had their impact on contemporary secondary school physics, both courses have not succeeded in becoming adopted. In a nationwide survey by the Educational Testing Service, approximately 9% of United States High Schools used PSSC, 30-40% used Project Physics and the conventional course using Modern Physics as a text, was adopted by about 54%. Since passing physics course is a test of problem solving in physics, it should be noted that an ETS survey of 1981 showed that there is no great difference between students who had taken different kinds of courses (Pallrand and Lid Enfield, 1985). The basis for this conclusion is the College Board Physics Achievement Tests. The average for students who had taken the PSSC course was consistently higher by a small amount, but it is not certain if the difference was due to the course or to student selection since the PSSC is usually reserved for the better students. A survey taken by the American Institute of Physics found that 25% of those who earned bachelor degrees in 1983-1984, took PSSC physics in high school, and 12% took Project Physics (Pallrand & Linden field). Since problem solving in physics is a measure of who will pass a physics course, it appears that the type of course i.e. traditional, PSSC, or Project Physics has little bearing. In conclusion, factors which may affect success in secondary school physics, typically including cognitive structure such as formation of problem solving schemata. It appears that Piagetian concepts such as concrete and abstract reasoning are not as important as the visual-spatial abilities, induced cognitive structures of sex roles, and external factors such as teaching style and, to some degree, curriculum. There is evidence that all are important in passing a physics course as measured by problem solving of physics problems.

2.5. Students ' Academic Performance in Buyengo sub county.

Teachers were required to give the overall mean grade of their classes in the previous end of term two 2019 physics examination. The following data was obtained as recorded in the table below:

Table 4.7 Students' Academic Performance

Mean Grade	Mean Grade.	Frequency.	Percentage (%)
F9	00	00	00
P8	8.213	02	33
P7	7.461	03	50
C6	00	00	00
C5	5.9487	01	17
C4	00	00	00
C3	00	00	00
D2	00	00	00
D1	00	00	00
Total	7.207	06	100

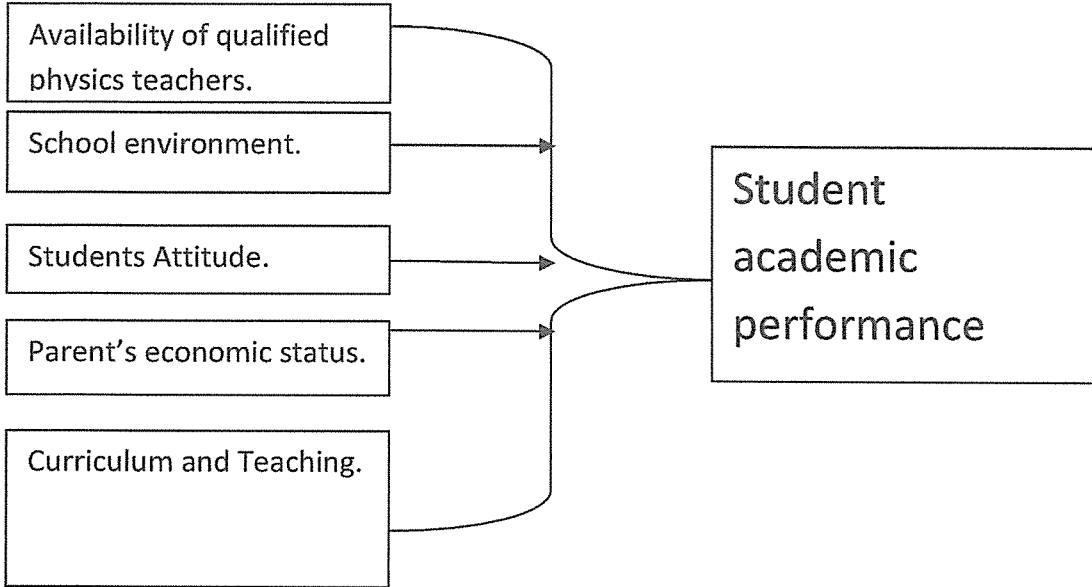
Source: Primary data, 2019

The above table shows that majority of teachers (50%) stated that their class had mean grade of C7 in the previous end term examination. Followed by 33% of teachers who had their classes with a mean grade of P8. The remaining 17% of the teachers stated that their classes had mean grade of C5. Meaning the other grade had no teacher who would attain them. This shows that majority of students in the Buyengo sub county have a poor academic performances in physics.

2.2. Conceptual Framework.

Independent Variables.

Dependent Variable



CHAPTER THREE.

Methodology.

Research methodology defines the research methods and logic steps, what to do and how to solve the problem and achieve the proposed objectives. Therefore the methodology of this study has been chosen in order to acquire information and deduce conclusions about the factors influencing the academic performance of secondary school students in physics.

3.1. Research design.

According to Lokesh (2007), research design refers to making orderly and systematic decisions on how to collect information and data to guide generated answers to research questions. The study will be cross-sectional in nature. The researcher will use qualitative research design because the research has studied variables in their natural settings and meanings of terms people attached to them. The researcher will use qualitative research approach in order to gain in-depth understanding of the concepts variable of the studied subjects.

3.2. Data collection.

For the purpose of the study, and for the researcher to achieve the objectives, data will be collected from the respondents. And data will be collected from the respondents in the area of study through questionnaires.

3.3. Sampling Design.

According to Black and Champion (1976), a sample is a portion of elements taken from a population and this considered to be a representative of the population. Ideally one may want to study the entire population; however, this is usually impossible to do, so one has to settle for a sample.

In order to collect the primary data, the questionnaire survey is used. For the purpose of this research, random probability sampling is selected. Roscoe (1975) cites a sample size which is appropriate to be between 30 and 500 for most research.

3.4. The interview survey.

The technique of personal interviewing will help the researcher to reach the objectives as it is the most versatile and productive method of communication selected. For the purpose of the study, face to face interview will be conducted involving three interest groups including the head teachers, physics teachers and the senior four students. But the technique is disadvantageous in that it's very costly time consuming and can bring about bias as the respondent try to please the researcher.

3.5. The questionnaire survey.

Cohen (1989) defines a questionnaire as the self-report instrument used for gathering information about variables of interest to an investigation. In this research, a closed ended questionnaire is designed to call for responses.

The questionnaires will help the researcher to analyse the data easily as the responses can be directly compared and easily.

They are versatile and surveys can be among people of different age and are replicated from one subject to another (Aaker and Day, 1990; kotler, 1994). Many questions can be answered in a short time.

3.6. Data Analysis.

According to Polit and Hungler (1997), data analysis means to organize, provide structure and elicit meaning. Data is qualitative and will be collected using questionnaires will be analysed using Statistical Package for Social Sciences and Descriptive statistical techniques that is; means, frequencies distributions and percentages) will also be employed to analyze field data from questionnaires to assist in the interpretation of data.

3.7. Location of the study.

The research is planned to be carried out in Buyengo sub-county, Kagoma constituency in Jinja district. Buyengo sub-county comprises of four parishes and these are Iziru parish, Buyengo parish, Butamiira parish and Bulugo parish.

3.8. Target population.

The population targeted by the researcher in this study will be the respondents in the research area including the physics teachers and senior four students in the secondary schools of Buyengo sub-county. In a population of two hundred seventy five, the sample size will be ninety five respondents where eighty nine students and six teachers of physics.

3.9. Area of study.

The was aimed at studying the situation in the following schools of Buyengo sub county including Buyengo Senior secondary school, Exodus secondary school and Nsozibiri secondary school. Given the fact that they very few schools as its evident.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION.

4.1. *Introduction.*

This chapter presents the data analysis and discussion of the findings as well as answering the research questions listed in chapter one of this document. The main rationale of this chapter is to present the analysed data and its interpretation.

4.2. *Questionnaires Return Rate.*

A total of ninety five respondents where eighty nine of them were students and six being teachers participated in the study. The results of questionnaires return rate are as presented in the table 4.1 below:

Table 4.1. Questionnaires Return Rate

Respondents	Returned	Not returned
Students	89(100%)	0(0%)
Teachers	06(100%)	0(0%)
Total	95(100%)	0(0%)

Source: Primary data, 2019.

The table 4.1 above shows that all the questionnaires were returned by both the students and teachers in this study. This shows that data was collected from all the intended sample of students (89) and teachers (06) therefore was a good representation as proposed by the researcher. The researcher made a follow up of the distributed questionnaires so as to ensure that respondents returned them.

4.3. *Background Characteristics of the Respondents*

4.3.1. Respondents Distribution by Gender

The gender of sampled students and teachers was obtained and presented as shown in the table 4.2 below:

Table 4.2. Respondents Distribution by Gender

Respondents	Male	Female
Students	47(53%)	42(47%)
Teachers	05(83%)	01(17%)
Total	52(55%)	43(45%)

Source: Primary data, 2019

From the table 4.2 above it is evident that majority of the interviewed students were male with 53% while female students were 47%. 83% of the teachers were male while 17% were female.

4.3.2. Distribution of Students by Age

Data on the distribution of students by age is shown in table given below:

Table 4.3. Distribution of Students by Age.

Age in years	Frequency	Percentage (%)
Below 16	0	00%
16-18	78	88%
Above 18	11	12%
Total	89	100

Source: Primary data, 2019.

Tables 4.3 above indicates that majority (88%) of the students were 16-18 years of age while the minority (12%) were above 18 years of age. Those below 16 years were not found in the total number of students.

4.3.3. Distribution of Teachers by age

Data on the distribution of teachers by age is shown in the table below:

Table 4.4 Distribution of Teachers by age.

Age in years	Frequency	Percentage (%)
Below 20	0	0.0
21-35	4	67
36-50	2	33
Above 50	0	0.0
Total	06	100

Source: Primary data, 2019

The table 4.4 above shows that majority (67%) of the teachers were 21-35 years of age while 33% were 36-50 years of age.

4.3.4 Teachers' Professional Qualification

Data on the Professional qualification of teachers who took part in this study is presented in the table below:

Table 4.5 Teachers' Professional Qualification

Category	Frequency	Percentage (%)
Master's degree	0	0.0
Bachelor's degree	2	33
Diploma	4	67
Certificate	0	0.0
Total	06	100

Source: Primary data, 2019

Table 4.5 above indicates that minority (33%) of the teachers had bachelors' degree while only (67%) had a diploma. However no teacher had Master's degree and certificate.

4.3.5 Teachers' Working Experience

The data on teachers' working experience is presented in the table below:

Table 4.6 Teachers' Working Experience in Years

Category in years	Frequency	Percentage
Less than 5	3	50
6-10	2	33
11-15	1	17
16-20	0	0.0
21 and above	0	0.0
Total	06	100

Source: Primary data, 2019

Table 4.6 above shows that majority (50%) of the teachers that participated in this study had a working experience of less than five years while (33%) had a working experience of 6-10 years and 17% of the teachers had an experience of 11-15years.

4.4. School Type

All the schools (100%) that were selected to participate in this study were mixed day and boarding schools. However the boarding section mostly concentrates in candidate class.

4.5. Discussion of Research Objectives.

The research objectives in this study were discussed in relation to other studies in the literature review.

4.5.1. Availability of qualified physics teachers and students academic performance.

The first objective of the study was determining the influence of availability of qualified physics teachers on the academic performance in physics. In order to achieve this objective, 89 students and 6 teachers were required to state their views on the given questions. Students were required to fill a 5- liker scale with strongly agree (SA)=5, agree (A)= 4, neutral (N)=3, disagree (D)=2, strongly disagree (SD) =1 and the results were presented in the table below.

Table 4.7. Student's views on the availability of qualified teachers and students academic performance in physics.

Availability of qualified physics teachers and students academic performance	5 SA	4 A	3 N	2 D	1 SD	Total.
Do high qualified teachers use better techniques that make students to learn than lowly qualified ones?	69 (78%)	15 (17%)	3 (03%)	2 (02%)	00 (0.0%)	89 (100%)
Do high qualified teachers have enough content to give learners than lowly qualified teachers?	65 (73%)	21 (24%)	00 (0.0%)	03 (03%)	00 (0.0%)	89 (100%)
A good relationship between teachers and students encourages high performance than poor relationship between them.	62 (70)	22 (25%)	03 (03%)	01 (01%)	01 (0.0%)	89 (100%)
Does a high qualified teacher create a conducive classroom for learners than lowly qualified teachers?	62 (70%)	18 (20%)	04 (05%)	02 (02%)	03 (03%)	89 (100%)
Does high qualified teachers give learners well explained work than lowly qualified teachers	57 (64%)	25 (28%)	05 (06%)	02 (02%)	00 (0.0%)	89 (100%)
Mean response.	63 (71%)	20 (23%)	03 (03%)	02 (02%)	01 (01%)	89 (100%)

Source: Primary data, 2019.

According to table 4.7 above, the majority of the students (71%) strongly agreed with the statements given to them, 23% agreed, 03% were undecided, 02% disagreed and also 01% strongly disagreed. This means that most students (71%) strongly agreed that parents' economic status influences students' academic performances in physics.

Teachers were also required to give their views on the influence of the availability of physics teachers on students' academic performance. Wherefore they were required also to fill a 4- Liker scale with Strongly agree (SA) =4, Agree(A) =3, Disagree(D)=2 and strongly disagree(SD)=1.

Table 4.8. Teachers views on the availability of qualified physics and Students' Academic Performance.

Availability of qualified physics teachers and students academic performance	5 SA	4 A	2 D	1 SD	Total.
Do high qualified teachers use better techniques that make students to learn than lowly qualified ones?	3 (50%)	2 (33%)	01 (17%)	00 (0.0%)	06 (100%)
Do high qualified teachers have enough content to give learners than lowly qualified teachers?	4 (66%)	01 (17%)	01 (17%)	00 (0.0%)	06 (100%)
A good relationship between teachers and students encourages high performance than poor relationship between them.	5 (83%)	01 (17%)	00 (0.0%)	00 (0.0%)	06 (100%)
Does a high qualified teacher create a conducive classroom for learners than lowly qualified teachers?	3 (50%)	2 (33%)	01 (17%)	00 (0.0%)	06 (100%)
Does high qualified teachers give learners well explained work than lowly qualified teachers	3 (50%)	2 (33%)	01 (17%)	00 (0.0%)	06 (100%)
Mean response.	3 (50%)	2 (33%)	01 (17%)	00 (00%)	06 (100%)

Source: Primary data, 2019.

According to table 4.8 above, majority of the teachers say (50%) strongly agreed with the given statements, 33% agreed, 17% disagreed and none strongly disagreed. This means that half of the teachers (50%) strongly agreed that availability of qualified teachers influences their students' academic performances in physics.

4.5.2. Parents' economic status and Students' Academic Performance

The second objective of this study was to determine the influence of parents' economic status on students' academic performance in public secondary schools. In order to achieve this objective, 89 students were also required to state the approximate level of their parents' income and their corresponding academic performance (mean grade) in the previous end of term two 2019 examination. Cross tabulation was done and the data is presented in the table below:

Students were also asked to give their views on the influence of parents' economic status on students' academic performances in physics. And, they were required to fill a 5- Likert scale with Strongly agree (SA) =5, Agree(A) =4, Neutral (N)=3,Disagree(D)=2 and Strongly disagree(SD)=1. The responses are presented in the table below:

Table 4.9. Student's views on Parents' economic status and Students' Academic Performance

Parents' Income Status and students' performances in physics.	5 SA	4 A	3 N	2 D	1 SD	Total
a) High income parents are more involved in their children's education than low income parents.	32 (36%)	22 (25%)	05 (5%)	13 (15%)	17 (19%)	89 (100%)
b) Students who come from poor family background have lower self-esteem than those from rich families.	35 (39%)	22 (25%)	6 (7%)	16 (18%)	10 (11%)	89 (100%)
c) My parents struggle financially to cater for my educational needs.	75 (84%)	12 (14%)	0 (0.0%)	2 (2%)	0 (0.0%)	89 (100%)
Mean Responses	47 (53%)	18 (21%)	04 (4%)	10 (12%)	09 (10%)	89 (100%)

Source: Primary data, 2019

According to table 4.9 above, majority of the students (53%) strongly agreed with the statements given to them, 21% agreed, 04% were undecided, 10% disagreed and also 09% strongly disagreed. This means that most students (53%) strongly agreed that parents' economic status influences students' academic performances in physics.

Teachers were then requested to give their views on the influence of parents' economic status on students' academic performance. Therefore they were required also to fill a 4-Liker scale with Strongly agree (SA) =4, Agree(A) =3, Disagree(D)=2 and strongly disagree(SD)=1. The responses were analyzed and presented in the table below:

Table 5.0. Teachers views on Parents' economic status and Students' Academic Performance.

Parents' economic status and students' performance.	4 SA	3 A	2 D	1 SD	Totals
a) High income parents are more involved in their children's education than low income parents	2 (34%)	2 (33%)	2 (33%)	0 (0.0%)	06 (100%)
b) Students who come from poor family background have lower self-esteem than those from rich families.	3 (50%)	2 (33%)	1 (17%)	0 (0.0%)	06 (100%)
c) My students' parents struggle financially to cater for their educational needs.	4 (67%)	2 (33%)	0 (0.0%)	0 (0.0%)	06 (100%)
Mean Response	03 (50%)	02 (33%)	01 (17%)	00 (0.0%)	06 (100%)

Source: Primary data, 2019

According to the table 5.0. Above, majority of the teachers (50%) strongly agreed with the given statements about parents' economic status and students' academic, performance.

33% agreed, 17% disagreed and none of the teachers strongly disagreed with the statements given. This means that most teachers (50%) strongly agreed that parents' income influences students' academic performance.

4.5.3. Parents' Level of Education and Students' Academic Performance

The second objective was to determine the relationship between parents' level of education and students' academic performance in the Secondary Schools in Buyengo Sub-County. In order to achieve this objective;

The researcher also requested teachers' views on the influence of parents' level of education on students' performance. Teachers' views are presented in the table below:

Table 5.2. Teachers' Responses on Parents' Level of Education and Students' Academic Performance (Basing on Teachers' Responses)

Parents' level of education and students' performance.	4 SA	3 A	2 D	1 SD	Total
a) Educated parents are more involved in their children's education than uneducated parents.	5(83%)	01(17%)	0(0.0%)	0(0.0%)	6(100%)
b) Parents with higher level of education are able to set a more conducive learning environment at home than those with low/ no level of education.	4(67%)	2(33%)	0(0.0%)	0(0.0%)	6(100%)
c) Children whose parents are highly educated are more proficient in language than those whose parents have low/ no level of education.	3(50%)	3(50%)	00(0.0%)	0(0.0%)	6(100%)
Mean Responses	4(67%)	2(33%)	0(0.0%)	0(0.0%)	6 (100%)

Source: Primary data, 2019

Table 5.2 above shows that majority of the teachers (67%) strongly agreed with the given statements about parents' level of education and students' academic performances in physics. 33% agreed, and none of the teachers disagreed or strongly disagreed with the statements given unto them. This means that more of the teachers (67%) strongly agreed that parents' level of education influences students' academic performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter discusses summary of the findings, conclusions, recommendations and suggestions for further research following research objectives.

5.2. Summary of the findings.

The purpose of this study was to investigate the factors that influence the student's academic performances in physics in secondary schools in Buyengo Sub-County, Jinja. Data were collected using questionnaires. Teachers and students filled the questionnaires. The data collected was coded and analyzed using Statistical Package of percentages and frequencies. The summary of the findings is discussed below:

a) Availability of qualified teachers influences students' academic performance in Buyengo Sub County.

The first objective for this study was to assess the extent to which the availability of qualified physics teachers influences students' academic performance in the secondary schools in Buengo Sub-County. The results from this study shows that 71% of the students and 50% of the teachers strongly agreed with the statements in the questionnaires. Therefore, there is a high influence of availability of qualified physics teachers on students' academic performance.

b) Parent's economic status Influences Students' Academic Performance in Buyengo Sub-county.

The first objective for this study was to determine the extent to which parents' income influences students' academic performance in public secondary schools in Buyengo Sub-County. The 53% of the students and 50% of the teachers strongly agreed meaning that there is an influence of parents' economic status on students' academic performance in Buyengo Sub-County. In other words increase in parent's economic status enhances student's' academic success.

c) Parent's level of education influences students' academic performance in Buyengo Sub-County.

The third objective for the study was to establish the extent to which parents' level of education influences students' academic performance in the secondary schools in Buyengo Sub County. This study results showed 80% of the students and 67% of the teachers strongly agreed that parent education level influence academic performances of students in physics.

5.3 Conclusions of the study

The conclusions of this study were drawn basing on the research objectives as shown below:

a) Availability of qualified teachers and Students' Academic Performance

It can also be concluded that there is a significant influence between the teacher's qualifications and students' academic performance. Schools with qualified teachers showed a higher academic performance than those with less qualified teachers. This is due to the professional ability they possessed in the handling of lessons.

b) Parents economic status and Students' Academic Performance

From the findings of this study the researcher concluded that there is a significant and high influence of parents' economic status on students' academic performance in Buyengo Sub- County. This is because higher economic status enables parents to be able to pay school fees in time, avail the necessary learning materials and set a more conducive learning environment at home unlike low income parents who do not have financial ability to cater for students' educational needs.

c) Parents' Level of Education and Students' Academic Performance

The researcher also concluded that there is a significantly higher influence of parents' level of education on students' academic performance in Buyengo Sub County. This is because parents with high level of education highly appreciate the value of education and thus set a more conducive learning environment for their children and can help their children with assignments/homework and holiday packages as compared to their counterparts with lower educational level.

5.4. Recommendations of the study

The recommendations of this study were formulated basing on the research objectives as shown below:

a) Availability of qualified science teachers and students' academic performance.

The researcher found out that most teachers in Buyengo Sub-County were diploma holders who need support for further studies. The study also found that teachers influenced the students' performance in Physics through their missing of classes, poor relationship with students, and poor methods of teaching. From this point of view, it was recommended that the government and the head teachers should encourage their teachers to upgrade their academic status through providing them with ample time for studying so as to get the skills needed in handling learners and conducting lessons.

b) Parents' economic status and students' academic performance.

Due to low parent's economic status in Buyengo Sub-County as established in this study the researcher recommended that the government should at least construct another secondary school in the sub county so as to accommodate the high number of learners from poor families within the locality, retain them in school and enhance their academic performance.

c) Parents' level of education and students' academic performance

It was established in this study that most of the parents in Buyengo Sub-County are uneducated and that their low level of education limits their involvement in students' academic performance. In light of this fact it was recommended that schools in Buyengo Sub County should put in place appropriate systems to enhance parental involvement in education.

5.5. Recommendation for further research

In relation to this study, further research should be done on the following areas of interest that were not a concern in this study.

- a) Influence of Parent's economic status on students' academic performance in public secondary schools in Buyengo Sub-County.
- b) How School environmental factors influence students' academic performance in public secondary schools in Buyengo Sub-County.
- c) How parent's participation in academics influence student's performance in secondary schools in Buyengo Sub-County.
- d) To determine how the student's attitude influence their academic performance in Physics in Buyengo Sub-county.

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Appendix

Student's questionnaire.

Name of the school:.....,

Class;.....

Sex; Female..... Male.....

Age ; Mark in your age blacked.

Below 16		16-18		Above 18	
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In the table below, you're required to answer by ticking your best choice among the following options as stated besides every question given.

Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

A	Availability of qualified teachers in schools.	SA	A	N	D	SD
1	Do high qualified teachers use better techniques that make students to learn than lowly qualified ones					
2	Do high qualified teachers have enough content to give learners than lowly qualified teachers					
	A good relationship between teachers and students encourages high performance than poor relationship between them.					
3	Does high qualified teachers create a conducive classroom for learners than lowly qualified teachers					

4	Does high qualified teachers give learners well explained work than lowly qualified teachers					
B	Parent's economic status.	SA	A	N	D	SD
1	High income parents are more involved in their children's education than low income parents					
2	Students who come from poor family background have lower self-esteem than those from rich families					
3	My parents struggle financially to cater for my educational needs					
C	Parent's level of education.	SA	A	N	D	SD
1	Highly educated parents are more involved in their children's education than lowly/ uneducated parents.					
2	Parents with higher level of education are able to set conducive learning environment at home than those with lower level of education					
3	Children whose parents are highly educated are more proficient in language (English) than those whose parents have low level of education					

Appendix

Teachers Questionnaire.

Name of the school.....

Subject of the teacher:.....

Sex; Female..... Male.....

Age; Below 20.....21-3536-50.....Above 50.....

Qualification: mark appropriately in the table below.

Master's Degree	Bachelor's Degree	Certificate.

Number of years taught:

Less than 5		6- 10		11-15		16-20 <input checked="" type="checkbox"/>	21 and above	
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In the table below, you're required to answer by ticking your best choice among the following options as stated besides every question given.

Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

A	Availability of qualified teachers in schools.	SA	A	D	SD
1	Do high qualified teachers use better techniques that make students to learn than lowly qualified ones?				
2	Do high qualified teachers have enough content to give learners than lowly qualified teachers				
	A good relationship between teachers and students encourages high performance than poor relationship between them.				
3	Does high qualified teachers create a conducive classroom for				

	learners than lowly qualified teachers				
4	Does high qualified teachers give learners well explained work than lowly qualified teachers				
B	Parent's economic status.	SA	A	D	SD
1	High income parents are more involved in their children's education than low income parents				
2	Students who come from poor family background have lower self-esteem than those from rich families				
3	My parents struggle financially to cater for my educational needs				
C	Parent's level of education.	SA	A	D	SD
1	Highly educated parents are more involved in their children's education than lowly/ uneducated parents.				
2	Parents with higher level of education are able to set conducive learning environment at home than those with lower level of education				
3	Children whose parents are highly educated are more proficient in language (English) than those whose parents have low level of education				



Appendix

Budget.

Item	Unit cost.	Final cost.
Books.	3	3,3000=
Printing.	3	1,6500=
Transport.		60,000=
Airtime.	Airtel & MTN.	8,000=
Others.		20,000=

Time flame.

The table below shows the number of activities performed and their respective duration

Months.	First Month.	Second Month.	Third Month.	Fourth Month.
Research proposal writing and Planning.				
Data collection.				
Data analysis, interpretation and presentation.				
Summary, conclusion and recommendations.				