EFFECTS OF PHYSICAL ACTIVITY ON THE ACADEMIC ACHIEVEMENT OF PUPILS IN SELECTED SCHOOLS IN NAWAIKONA SUB - COUNTY, NAMUTUMBA DISTRICT, UGANDA

BY

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BU/UP/2022/2352

A RESEARCH REPORT SUBMITTED TO THE DEPARTMENT OF EDUCATION IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A BACHELOR OF EDUCATION PRIMARYDEGREE OF BESITEMA UNIVERSITY

SEPTEMBER, 2024

DECLARATION

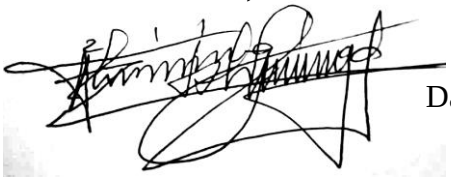
I, Kiiza Ann. declare that the work presented in this research project titled, ‘‘Effects of Physical Activity on the Academic Achievement of Pupils in Selected Schools in Nawaikona Sub - County, Namutumba District, Uganda,’’ is my original work and has not been presented in any university for any academic award.

Signature Kiiza Anna …….. Date 8th October, 2024

KIIZA ANN

APPROVAL

This research report has been done under my supervision and is hereby approved for submission to the department of education, Busitema University.

Signature  Date 10th October, 2024

MR. MUGOYA LIVINGSTONE

(University Supervisor)

DEDICATION

I dedicate this work to; my parents; my father the late Muboigi Dan and mother Ms. Nalugooti Flavia for educating me and building the foundation on which Iam adding. To my lovely husband, Mr. Kakinda Fredrick, thank you for the love and support without which this project would be in vain and to my children, Kakinda; Rose, Mathias, Bonny, and Hope, thank you for the support, encouragement and prayers. Thank you so much for withstanding my absence while pursuing this course.

ACKNOWLEDGEMENT

A special vote of thanks goes to my dear friends, Mr. Isiiko Mathias, Mr. Waiswa Fred and Ms. Batana Damalie together with my course mates; Munaalwa Justine, Kafuko Miriam, Naisikwe Christine, Mbago Sepiriano, Naiwumbwe Zaina and many others, thanks for the teamwork throughout this course.

To the staff of New Buyanga Primary School thank you for being my inspiration, challenge and encouragement all the way through my studies.

I also thank Mr. Mugoya Livingstone who has spent his time and effort during this research by teaching, mentoring and practical down to earth guidance about research work. Thank you so much and God bless you abundantly.

Lastly, I dedicate it to God who has seen what I have gone through during this course and enabled me to complete it. Ebenezar.

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LIST OF ABBREVIATIONS

AA	-	Academic Achievement
AGT	-	Achievement Goal Theory
BMI	-	Body Mass Index
BTVET	-	Business, Technical and Vocational Education and Training.
CVI	-	Content Validity Index
CDC	-	Centre for Disease Control
DV	-	Dependent Variable
ECD	-	Early Childhood Development
EV	-	Extreneous Variable
FAL	-	Functional Adult Literacy
ID	=	Independent Variable
kCal	-	kilocalorie
kJ	-	kilojoule
MOES	-	Ministry of Education and Sports
MVPA	-	Moderate – Vigorous - Physical Activity
NCDs	-	National Centre for Disease Control
PA	-	Physical Activity
PAAC	-	Physical Activity Across Curriculum
PE	-	Physical Education
PPP	-	Public Private Partnership
SDT	-	Self Determination Theory
SLT	-	Social Learning Theory
UNESCO	-	United Nations Educational, Scientific and Cultural organization
UPE	-	Universal Primary Education
UPOLET	-	Universal Post-O-Level Education and Training
UPPET	-	Universal Post-Primary Education and Training
USA	-	United States of America
USE	-	Universal Secondary Education
WHO	-	World Health Organisation

ABSTRACT

The study was undertaken with the purpose of finding out the Effects of Physical Activity on the Academic Achievement of Pupils in Selected Schools in Nawaikona Sub - County, Namutumba District, Uganda. It was guided by the study objectives to; investigate the levels of academic achievement of pupils, find out the forms of physical activity engaged in by pupils and to establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.

The targeted population here included the; head teachers, Members of the School Management Committees, teachers of Primary Seven as well as the Primary seven candidates from the five selected schools. With a population of 785, research tools were issued to 403 respondents selected through the different probability sampling techniques. Out of the 403, 363 of the respondents participated meaningfully giving a response rate of 91.7% which was adequate enough for the data to be analysed. Data was collected from primary and secondary sources was sorted, organised, organised in frequency tables and percentages objective by objective.

After analysing the collected data and its trends, it was concluded that pupils are involved in sufficient PA activities such as; walking to school daily, participating in athletics, playing football playing netball, engaging in physical work like; slashing, sweeping and picking while at school though the time allocated to the teaching of Physical Education and Physical Activity in general was found to be insufficient across the schools of Nawaikona subcounty, Namutumba **district.** It was also established that an increase in the levels of PA will lead to a better AA among the Primary school pupils. It was established with evidence that, involvement in PA, increases pupils' interest in school, helps to keep pupils' alert in class, enables pupils to complete given work at school, helps pupils to perform well in tests and exams, improves pupil' health for better learning and enables pupils to remain in school until they complete the primary school.

It was recommended that Schools should reinforce the involvement of learners in a variety of Physical Activity for a better and improved academic performance. Learners should enjoy participating in such PA activities as; walking, running, ball games, athletics, games of low organisation as well as water games like bottle filling, wading and swimming. Learning at the Primary school should be programmed through play way. Play is the most effective way(method) of teaching because through play; a natural PA activity, all senses of the body are involved in the learning process, hence' realistic and more meaningful concept development.

The teaching of Physical education and other PA activities in Primary Schools should be allocated time as guided by the World Health Organisation, thus, at least 60 minutes of Moderate to Vigorous Activity (MVA) per week. Schools, especially at the primary level, should ensure that pupils are involved in the timetabled Physical Education lessons without deviations or omissions

regardless of the class levels. The study also recommended future studies on the causes of school dropouts in the Primary schools as well as the factors affecting the teaching of Physical Education in the Primary Schools of Nawaikona subcounty, Namutumba district.

CHAPTER ONE

INTRODUCTION

1.0 Introduction.

The chapter presented the background to the study, statement of the problem, general objective of the study, specific objectives of the study, research questions, scope of the study, significance of the study, and conceptual frame work.

1.1 Background to the study

Many children do not engage in sufficient physical activity, and schools provide a unique venue for children to reach their recommended 60 daily minutes of moderate-to-vigorous physical activity (MVPA).

Participation in sports activities, encompassing both team sports like soccer or basketball and individual sports like swimming or track and field, has been extensively studied in relation to academic performance. Engaging in sports can positively impact academic achievement by enhancing physical fitness, which in turn promotes cognitive function and academic readiness (Hillman, Erickson, & Kramer, 2018).

Furthermore, involvement in sports cultivates essential life skills such as discipline, time management, and goal-setting, all of which are transferable to academic settings and contribute to improved study habits and academic outcomes (Duckworth & Seligman, 2017). Additionally, participation in team sports fosters social skills like cooperation, communication, and leadership, creating a conducive environment for academic success (Eime, Young, Harvey, Charity & Payne, 2013).

According to CDC (2013), Physical activity (PA) in children is essential because it contributes to the healthy growth and development of musculoskeletal tissues, coordination, and socio-psychological wellbeing. These benefits track into adulthood reducing the risk for premature all-cause mortality, development of Non-Communicable Diseases (NCDs), and improving mental health well-being.

Today, however, children spend much of their time in school seated during lessons or later doing homework. As such, very little time is left for children to participate in physical activities (PA) outside school; yet children aged 5-17years should accumulate, on average, 60minutes of moderate - to vigorous-intensity physical activity daily, including muscle and bone strengthening.

Most of the studies on PA in children worldwide, including those in Uganda, focus on an individual child's activity. However, as insufficient PA in children continues to increase

worldwide contexts, such as schools, in which school-going children spend the majority of their time, need to be assessed to see if they are providing adequate opportunities for PA to help children achieve their daily recommended PA (Mpalampa et al, 2023).

The school setting is therefore ideal for promoting PA because there is easy access to a large number of children at the same time, and the PA interventions can easily emphasize good health practices which can be sustained Nakabazzi et al (2020). Emphasis on PA in schools stems from the World Health Organization (WHO) target to reduce the global prevalence of physical inactivity in adolescents and adults by 15% by 2030; as such, guidelines and policies have been written for countries to either adopt or develop their national policies or action plans to help them meet the target.

However, despite the presence of international guidelines and targets, as well as the Ministry of Education and Sports' (MoES) promotion of physical education in Uganda, insufficient PA in children persists. Limited studies have assessed the opportunities schools provide for PA to help the children achieve their daily recommended PA. The, study therefore, aimed at determining the; ''Effects of Physical activity on the academic achievement of pupils in selected schools in Nawaikona sub - county, Namutumba district, Uganda.''

This study examined whether student-level characteristics (gender, race/ ethnicity, free/reduced-price lunch status) and school-level characteristics (proportion of students

qualifying for free/ reduced-price lunch, physical activity environment and opportunities) moderate the relationship between MVPA and academic achievement, under the title; ''Effects of Physical activity on the academic achievement of pupils in selected schools in Nawaikona sub - county, Namutumba district, Uganda.''

In the research area, thus Nawaikona sub county, five Primary Schools were targeted during the study. This was because of the presence of the indicators of insufficient Physical activity in the last 7 consecutive years, thus from 2018 to 2024. The study was therefore instituted to find out the extent to which Physical activity affects academic achievement of pupils in selected schools in Nawaikona sub - county, Namutumba district, Uganda.

1.2. Statement of the problem

Despite numerous studies examining the relationship between Physical activity and academic achievement of pupils in primary schools in, there remains a need for further investigation into its specific effects on academic outcomes, particularly among primary school pupils. While some research suggests a positive correlation between PA and academic achievement, other studies

have reported mixed or inconclusive findings, leaving gaps in our understanding of the mechanisms underlying this relationship (Carlson, Winsler, & Smith, 2020).

Moreover, existing literature often fails to account for potential confounding variables such as socioeconomic status, school environment, and individual differences in academic ability, which may influence the observed effects of sports participation on academic performance (Hillman, Erickson, & Kramer, 2018). Furthermore, there is a lack of research focusing on the differential impact of various types of sports activities, such as team sports versus individual sports, on academic outcomes in adolescents. Understanding how different forms of sports engagement may contribute to academic success can inform targeted interventions and policies aimed at promoting holistic development and well-being among adolescents (Duckworth & Seligman, 2017).

Additionally, the majority of existing studies have predominantly focused on Western contexts, limiting our understanding of American. Therefore, a comprehensive investigation into the effects of PA on academic performance in Primary school pupils, considering both individual and contextual factors, is warranted to provide valuable insights for educators, policymakers, and practitioners aiming to optimize pupils' development and academic success.

1.3. General objective of the study.

To examine the Effects of Physical activity on the academic achievement of pupils in selected schools in Nawaikona sub - county, Namutumba district, Uganda

1.4. Specific Objectives of the study.

The study was conducted to;

- i) To investigate the levels of academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.

ii) To find out the forms of physical activity engaged in by pupils of selected grant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda.

iii) To establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.

1.5. Research questions

The study was conducted to try to answer the following questions: -

i) What is the level of academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.

ii) What are the forms of physical activity engaged in by pupils of selected grant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda.

iii) What is the effect of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.

1.6. The scope of the study.

The study addressed the; geographical, content, and time scope of the study.

1.6.1 Geographical scope.

The study was carried out in Nawaikona subcounty, Namutumba district. Five government grant- aided primary schools were identified across all the four parishes and involved in the study, namely; New Buyanga Primary school – School A (Bukonte Parish), Bukonte Primary school – School B (Bukonte Parish), Bulagala Primary school - School C (Kivule Parish), Nawaikona Primary school – School D (Nawaikona Parish) and Nakawunzo Primary school – School E (Nakawunzo Parish). The factor considered for inclusion in the study was consistent participation of the school in the different sports an games competitions at the, zonal, district and national levels.

1.6.2 Content scope.

The study examined the effect of physical activity as the independent variable (IV) on the academic achievement as the Dependent Variable (DV) of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.

The indicator here was the yearly performance of the pupils in the games and sports competitions organized at different levels.

1.6.3 The time scope.

This study covered publications for a period of 7 years, thus from 2018-2024 that were relevant. This period was considered to be longer enough for the effect of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda, to be realized by all the stakeholders.

1.7 Justification of the study

This study is important in a way that it is a requirement to be fulfilled by the student in order to be a warded a Degree in Education primary of Busitema University.

1.8. Significance of the study.

To the Ministry of Education, and Sports, the findings of this study will be useful in a way that it will be the bench mark as far as policy amendment will be concerned, in regards to the need to improve the Education sector. As well, the findings will be used to evaluate the effect of physical activity on the academic achievement of pupils in all primary schools of Uganda.

To the NGOs involvement in promoting formal Education; the findings of this study will be useful to them in a way that it will be the bench mark for their re-planning as gaps were identified in this study in relation to physical activity and academic achievement of pupils in selected grant – aided primary schools of Uganda.

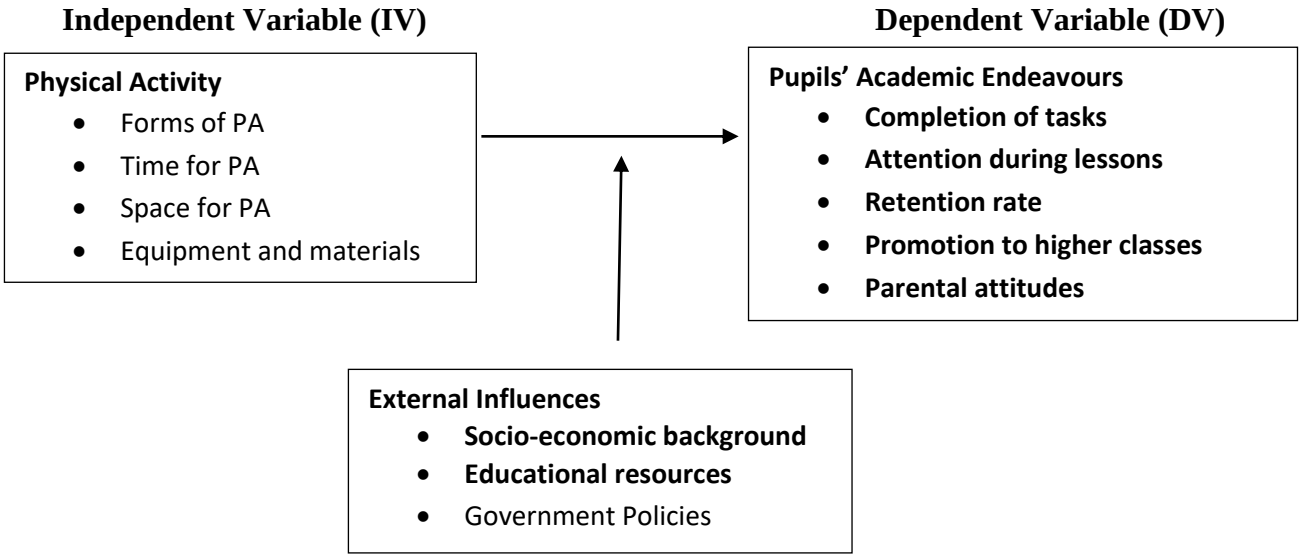
To the parents in Namutumba District; the study findings will enable them to know the extent to which physical activity affects the academic achievement of pupils in the primary schools of in the district and Uganda at large.

To the future researchers, this research report will be the source of secondary literature to those who may carry out studies in the similar topic in future.

1.9. Conceptual framework

The relationship of Physical Activity, PA(IV) and other factors (MD) on Academic Achievement, AA (DV) was illustrated in the figure below: -

1.7 Conceptual framework



Extraneous Variables (EV)

Figure 1. 1 Conceptual frame work

Figure 1.1 shows the conceptual framework that includes clearly defined variables, such as independent, dependent and moderating. This frame work presented the concepts or variables of the study and shows how they are connected. It states that for the Independent Variable to create a positive change in Dependent Variable, effective and efficient supply of moderator variable should be provided. This therefore means that Moderator Variable is the determinant of positive, or negative responses in order for Dependent variable to be realized as illustrated in figure 1.9

1.10. Definition of operational terms.

1.10.1 Observation; this refers to time when a head teacher or deputy head teacher visits a teacher in class during instruction to evaluate the teachers' pedagogical skills with the aim of identifying areas of improvement if need be.

1.10.2 Instruction; this refers to a constant provision of direction on how to do work better for the benefit of the beneficiaries.

1.10.3 Physical activity; Physical activity is defined as any bodily movement produced by skeletal muscles that results in energy expenditure. It involves people moving, acting and

performing within culturally specific spaces and contexts and influenced by a unique array of interests, emotions, ideas, instructions and relationships.

1.10.4 Academic Achievement; in general, refers to the degree or level of success of proficiency, attained in some specific area, concerning scholastic or academic work. Academic or Educational age, accomplishment quotient or achievement quotients are the most commonly used means to interpret the level of Academic Achievement of pupils in a specific given subject matter

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This second chapter of the study reviews related literature from other studies conducted on the same or related topic. It captures conceptual, theoretical, and objective by objective review of the available literature works.

2.2 Conceptual review

The effect of physical activity on the academic achievement of pupils is a unique concept to handle especially among the primary school going children. Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university

Physical activity is defined as any bodily movement produced by skeletal muscles that results in energy expenditure. The amount of energy required to accomplish an activity can be measured in kilojoules (kJ) or kilocalories (kcal); 4.184 kJ is essentially equivalent to 1 kcal (1). Technically, the kJ is preferred because it is a measure of energy expenditure; however, historically the kcal, a measure of heat, has been employed more often.

2.3 Theoretical review

The relationship between Physical Activity and Academic Achievement is complex and multifaceted. Effective Physical Activity can significantly influence Academic Achievement rates while poor management can deter. So, understanding and application of relevant theoretical frameworks by school managers can create motivating, accessible and positive experiences that encourage lifelong engagement in Physical Activity. The study was guided by; the Self-Determination Theory (SDT), Social Learning Theory (SLT) and Achievement Goal Theory (AGT)

2.3.1 Self-Determination Theory (SDT)

As developed by Deci and Ryan, SDT focuses on intrinsic motivation, autonomy and competence as key factors influencing behaviour and psychological well-being. In the context of Physical Activity and Academic Achievement in adolescents, SDT suggests that engagement in PA activities may promote intrinsic motivation and feelings of autonomy, which in turn can positively impact academic outcomes (Ryan & Deci, 2020). Adolescents who participate in PA may experience a sense of competence and mastery, leading to increased confidence and resilience in academic settings.

2.3.2 Social Learning Theory (SLT)

Originated by Bandura, SLT emphasizes the role of observational learning, imitation, and social reinforcement in shaping behaviour. In the context of PA and academic performance, SLT

suggests that adolescents learn academic skills and behaviours through observation and modelling of peers and coaches in the sports environment (Bandura, 2018). Positive social interactions and supportive relationships may facilitate the development of study habits, time management skills, and academic motivation among adolescents.

2.3.3 Achievement Goal Theory (AGT)

Developed by Nicholls and later refined by Dweck, AGT focuses on the goals individuals pursue in achievement contexts and their impact on motivation and behaviour. In the context of PA and academic achievement, AGT suggests that adolescents may adopt different goal orientations (e.g., mastery goals, performance goals) in both domains, which can influence their engagement and achievement outcomes (Dweck, 2019). For example, adolescents with a mastery orientation in sports may transfer this approach to academics, seeking to learn and improve rather than simply striving for grades or external rewards.

2.4 Objective one: Levels of academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba

Jayawardena P.R (2020***),*** considers Academic Achievement of learners as an aspect of their total behaviour. It is the product of the interaction of the learner, as an individual with his environment, namely school, teachers and peers. Good (1959) defines Academic Achievement as the knowledge attained or skill developed in the school subjects, usually designated by test scores or marks assigned by the teachers.

Academic performance is defined as a learner's ability to complete academic assignments, and it is assessed using objective criteria such as final course grades and grading point average (Naser, & Hamzah, 2018; Olivier et al., 2019). There are a number of factors that have a direct effect on a student’s academic achievement; varying from person to person and society to society the most prevalent of them are the following: -

2.4.1 Learner – related Factors

As the main stakeholders, learners have a major role in their academic achievement. Indeed, researchers such as Konstantopoulos (2009) and Shores, Shannon, and Smith (2010) concluded that learner - related factors influence learners’ academic achievement. Kang and Keinonen (2018) and other researchers explained that learners’ time management, self-motivation, engagement, behaviour, and attitudes are the key factors governing their academic success.

2.4.2 Teacher – related Factors

Many studies have provided empirical evidence of the positive correlation between teacher factors and students' achievements. For instance, Suleiman A. H., (2023), in his study titled; ''Factors That Affect Students' Academic Achievement in the Faculty of Social Science at the University of Bossaso, Garowe, Somalia,'' showed that an effective teacher can dramatically alter students' educational and thus economic outcomes. On the other hand, if the teacher lacks the necessary training and teaching experience as well as knowledge of effective teaching methods in higher education, the learners will undoubtedly face numerous academic challenges.

2.4.3 School Factors

There is a growing consensus, based on pragmatic evidence, that positive influence of successful leadership and school environment in general can have a positive effect on school performance and learners' achievement (Allen, Grigsby, & Peters, 2015; Beare, Caldwell, & Millikan, 2018). Actually, it is revealed that school leaders can improve learners' achievement in different ways varying from; direct and indirect effect on teaching and learning, involving different stakeholders (such as parents) in school staff skills and leadership as well as providing a proper ethos and climate, which eventually impact learners' academic achievement.

Nakabazzi B, et al (2020) in their study on the Prevalence and socio-demographic correlates of accelerometer measured physical activity levels of school-going children in Kampala city, Uganda; found that peers influence each other's learning attitudes, motivation, engagement and behaviour. They also aver that a similarity in intrinsic motivation and behaviour for learning also leads to similarity in academic achievement between peers. They argue that learners' close friends are important influences on the individuals' Physical Activity and Academic Achievement. Family factors, including parental involvement, family interaction styles, socio – economic status, family cultural capital, and the family social environment play a big role in shaping learners' academic achievement (Mpalampa L. et al, 2023).

2.4.4 Cultural Factors

According to Suleiman A. H., (2023), Cultures have a great effect on schooling as it determines how we see the world, how we try to understand it, and how we behave throughout our academic studies. As a result, culture has a large influence on both learning and teaching styles. Most African cultures are stiff, and students are expected to be extremely humble while learning. Such socio-cultural behaviour may affect a student's academic success. On the other hand,

memorization-based examinations are bad practice in which students memorize lessons, which causes them to fail to apply what they have learnt to society and answer realistic social problems.

2.4.5 Economic Factors

Financial ability determines a learner's educational choices through the course selection. In education, economic status is an important factor for the learners' schooling and academic career. In addition to that, Elizabeth Doll & Samuel Y. Song (2023), concluded that learners with high socioeconomic status perform better than those with low socioeconomic status. However, other researchers such as; Pedrosa, Dachs, Maia, and Andrade (2006) found that students coming from disadvantaged socioeconomic and educational homes perform relatively better than those coming from higher socioeconomic and educational strata. They called this phenomenal educational resilience. Low socioeconomic status students study hard compared to others but they might face study fees difficulties.

2.4.6 Political Factors

According to Mehmet Ozcan (2021), Politics has a significant direct and indirect influence on education. Think about how a learner's academic achievement can be a place of political turmoil or a country in which the government's budget for education is lower than 7%. Different studies and fact-findings have shown that the deteriorating quality of education is due to the low government support for education as well as the poor quality of lecturers.

Poor management of institutions as well as poor facilities such as laboratory and library facilities have added to the deteriorating quality of education. Furthermore, poor learning environments, the content of the curriculum, poor infrastructure, growing privatization and inconsistent government policies regarding higher education have all had negative effects on the quality of education. In one way or another, politics affects all the above-mentioned contests which are challenging our learners' academic achievement.

A culmination of all the above factors yields a higher academic achievement among the learners. However, the levels of academic achievement in Nawaikona subcounty of Namutumba district seem to suggest that these factors are non-existent. Pupils at all class levels in the Primary schools of Nawaikona sub county, are performing below the expected levels.

In its PLE Report on the work of candidates 2023, UNEB; the National Assessment body at the Primary school level lowly rated Namutumba district. Of the 5674 registered candidates for PLE 2023, only 221(3.9%) passed in division one, 2074(36.9%) in division two, 1554(27.6%) in division three, 823(14.6%) in division four, 956(17.0%) were ungraded or failed while 46(0.8%)

were absent and missed the examinations. From these results, it was clear that a total of 3849(67.84%) candidates passed in divisions; one, two and three good enough to progress to the next level under the government funded Universal Secondary Education (USE) and Business Training and Vocational Education and Training (BTVET) programs. This, in effect, meant that a total of 1825(36.16%) of the registered candidates either sat and failed or missed the examinations and can not progress to the Post Primary level of education.

Comparing these results with the national figures reveals a low rate of academic achievement and transition. In the same examination 575,671(77.24%) of the 745309 registered candidates had scored a third division required for progress to the USE and BTVET programs. Likewise, a total of 169638(22.76%) candidates in the whole country were in divisions; four, ungraded and absent from the examination. These comparative figures reveal that the rate of academic achievement of pupils at the level of PLE were lower than the one at the national level.

2.5 Objective two: Forms of physical activity engaged in by pupils of selected grant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda.

At the Primary school level, Physical Activity (PA) is always in form of; walking to school, Physical education lessons, Voluntary play at break and lunch time as well as preparation and participation in intra- school and inter-school games and sports competitions. The quality and quantity of PA provided by a school to her learners highly depends on the availability of; space, time, personnel and equipment as discussed below: -

2.5.1 Availability of space for Physical Activity (PA).

In their study on Factors associated with provision of physical activity in primary schools in Makindye Division in Kampala, Uganda, Mpalampa L., et al (2023) found out that only 52.8% of the sampled schools had space within the school in which the learners could play and do Physical Education (PE). For those without space, most of them went to a neighbouring field either by bus 4 (21%) or on foot 12 (63%) and 2 did the PE in class with the teachers improvising activities to get the children physically moving. 4 (11%)2. schools had a swimming pool; 2 schools had a tennis court and only 1 had an indoor gymnasium.

2.5.2 Time for physical activity

Carlson, M., Winsler, A., & Smith, K. (2020) who studied PA among the Adolescents of the USA, Mpalampa L., et al (2023), studying factors for PA in primary schools of Makindye division, Kampala, Uganda as well as Fisher C.A & Eileen A., (2023), while investigating the Effect of a Physically Active Academic Intervention on the Physical Fitness and Mathematical

Performance of Grade 1 Learners in Cape Town, South Africa agreed in their findings that only a few schools (up to (22.2%)) provided sufficient time for PA according to the WHO guidelines of more than 60 min per day.

2.5.3 Time for Physical Education (PE)

Just like other subjects in the Primary School curriculum, PE should be scheduled on the school timetable. In the study by Mpalampa L., et al (2023), 97.2% of the Sampled schools allocated some time to the teaching of Physical Education. In these schools, PE was compulsory with 44% schools scheduling PE after lunch and 13.9% of them time tabling PE all through the day depending on the day of the week.

However, even when it was timetabled, PE lessons were not followed as timetabled. It was sometimes cancelled (mainly due to exams and rain) in all schools. In one school, there was more time for PE during exam time, because afternoons were free.

2.5.4 Physical activity during break and lunch time

Following Mehmet Ozcan (2021), in his study on Factors Affecting Students' Academic Achievement according to the Teachers' Opinion, all schools provided breaks during the day. In the sampled schools, 77.7%of them provided 30 minutes for morning break, while 11.11% provided 20 minutes, and 8.33% provided 45 minutes. In all the sampled schools, half the break time was used for snacks and half the time was available for the students to engage in active play.

2.5.5 Teacher and class related factors

Fredricks, J. A., & Eccles, J. S. (2018 in their study emphasized the contribution of a teacher's competence on both the learners' PA and AA. The average size of a class was 41 learners and the number of teachers per PE session was 2.25. Only 25% of the sampled schools had specialist PE teachers teaching the PE lessons. In 58.3% of schools, class teachers taught PE, and in 16.7% of the schools, it was both the class teacher and the specialist PE teacher.

2.5.6 Equipment and after-school activities for PA

Equipment plays a key role in the implementation of PA for the effective AA of the learners of all levels. The WHO. (2020) found out that most schools (up to 55.6%) did not have enough equipment for PE, but since classes were on different days, they had some to use. Some schools (6%) were found improvising equipment.

In the Guidelines for improving the conduct of Physical education and sports in educational institutions, the MoE &S (2008) recommended that Repairs and maintenance on sports equipment had to be done on time usually dependent on the budget made at the beginning of each term.

2.5.7 Types of physical activities offered during PE and after-school activities

T Piggin Joe (2020), in his paper titled, ‘‘*What Is Physical Activity? A Holistic Definition for Teachers, Researchers and Policy Makers,’’* he identifies the types of PA the children were involved in during the scheduled PE time and the after-school activities. These were categorized into those using balls, doing athletics, and gymnastics.

Relatedly, Nakabazzi B, et al (2020) clarified that in all the schools that participated in their study, 94% of the schools met the Uganda MoE &S guidelines of offering at least 2 items in the ball games category with all the 36 schools offering football. For the athletics category, 19 52.8% schools offered at least 2 options of activities while 44.4% of the schools did not offer any activity in the gymnastics category. Swimming was offered in only 11.1% of the schools, all of which were private

2.6 Objective three: Effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda

Regular physical activity during childhood, Carlson, M., Winsler, A., & Smith, K. (2020), is associated with positive health outcomes including but not limited to strong bones and muscles, cardiometabolic health, healthier weight, increased cardiorespiratory fitness, and reduced risk of depression.

Physical activity habits during childhood may also have implications for health and activity levels during adulthood, further highlighting the importance of promoting active lifestyles early in life Fisher C.A & Eileen A., (2023). Despite the well-known benefits of being active, most US children do not meet physical activity guidelines of 60 minutes of Moderate to Vigorous PA per day.

As elementary-aged children in America spend about seven hours per day in a school environment, there is great potential to promote healthy behaviours and provide learner physical activity opportunities in this setting. With pressures to meet academic standards, many schools aim to increase academic instructional time, often at the expense of physical education and recess time. However, there is no evidence suggesting that physical education time has adverse academic

or cognitive effects. Evidence of a positive association between school-based MVPA and academic achievement in addition to the well-cited health benefits may encourage school administrators to adjust policies for further promotion of MVPA in schools. Research examining the efects of engaging in MVP

Fisher C.A & Eileen A., (2023), Of the few studies that have been conducted on physically active academic interventions, Donnelly et al. (2011) "Physical Activity Across the Curriculum" (PAAC) learners had a positive impact on changes in Boby Mass Indicator (BMI) and scholastic performance, specifically spelling, reading, mathematics and overall academic scores.

2.7 Gaps in the literature

A review of the literature revealed a variety of gaps that ought to not only justify the need of this current study but also need to be fixed as enumerated below: -

Carlson, M., Winsler, A., & Smith, K. (2020) who studied PA among the Adolescents of the based their study in a developed country, the USA, It also majorly focussed on the adolescents especially in the well developed country. The study therefore was to be curried out so as to establish the effect of PA on AA in the rural and primary schools of Namutumba district.

Nguri, (2024) also carried out his study on Physical Activity Academic Achievement in Indonesian universities. This study was appealing to learners at the university level and more so in a middle-income developing country. Therefore, a study was carried out to find out the trends on Physical Activity and Academic Achievement in the learners of Primary schools in a rural setting of an undeveloped country, Uganda.

In the studies of both Mpalampa L., et al (2023) and Nakabazzi B, et al (2020), investigations were carried about the effects of PA on AA in selected Primary schools of Kampala city Uganda. The study on the effect of PA on AA also had to be carried out in the rural primary schools of Nawaikona subcounty, Namutumba district – Uganda.

CHAPTER THREE

METHODOLOGY

3.0: Introduction

This chapter covered the research design, study population, the sample size, sampling procedure, the research instruments, procedure for research and data analysis.

3.1 Research design.

Sileyew K. J., (2019) considers a research design as an appropriate framework for a study. It is a very significant decision choice about the research approach to follow since it determines how relevant information for a study will be obtained. A research design as an arrangement of conditions for collection, and analysis of data in a manner that aims at combining relevance to the research purpose with economy in procedure (Ngechu, 2001).

A descriptive cross sectional survey research design was used in this study. The descriptive cross sectional survey design was used with qualitative research which was based on words, particularly when getting data from key informants at group or individual level and whereas quantitative research was used while getting data using questionnaire.

Numbers were considered important here. The research purpose was to depict accurately, and in detail the characteristics of the population guided by the objectives of the study. This was used to describe the characteristics of the study at a given time, to the extent of providing a systematic description that was factual, and as accurate as possible Descriptive research aimed at complete enumeration of what was being studied, since a questionnaire and interview guide were used to collect data/information.

3.2. Information sources.

The sources of data were categorized into two parts namely;

3.2.1 Primary sources of information

According to Ajayi, Victor. (2023), Primary sources are the original materials on which other research studies were based on. The examples are key informants, for this matter the head teachers and the board members.

3.2.2 Secondary source of information

These describe or analyse primary sources such as dictionaries, text books, encyclopaedias, and books that interpret, and review original research. These sources therefore were important to the researcher during the data collection, for whatever was got helped during the compilation of this report.

3.3. Study population and population sampling technique.

3.3.1. Study population.

According to Nsubuga (2013) study population is considered to be the total sum of all units of interest, or the universe. For this matter, the term refers to human beings who qualify to participate in the study. For the matter of this study, the population was sampled from the total of school Management Committee, head teachers and class room teachers of the 6 schools. It was among these that the sample size per category was drawn from separately. The total population that was included in this research was 110 people, by sex, 55 females and 55 males.

3.3.2. Population sampling technique.

Bhardwaj, Pooja. (2019) defines sampling as the procedure of selecting a small group of people from many individuals (population) for a certain kind of study. Here, a population is the total number of individuals who qualify to participate in the study. To determine the population of the study, purposive sampling technique was used while getting SMC members, head teachers, pupils and parents. This technique was considered because it enabled the researcher to save time. It as well enabled the researcher to directly get the members who were more knowledgeable about the topic of the study. To get the class room teachers as sample population category, simple random sampling technique was used. The bench mark was the total teachers in each School. This technique was used because it avoided biasness since all of the teachers were considered to be knowledgeable about the topic of the study.

3.4. Sample size and sampling technique.

3.4.1 Sample size

According to Nsubuga & Katumba, (2013), a sample is a sub set, or portion of the total population, for example, 1% sample would consist of 1 out of every 100 entities in the population. The researcher considered a sample size as important in the study because the population of study was too big to be handled. The sample size was therefore considered more convenient

3.4.2. Sampling technique

To determine the sample size therefore, each category of the population was subjected differently to Krejecie, & Morgan, 1970 table of sample determination at a confidence level of 90% and a margin error of 5%.

Table 3.1. Population, and sample size of the study.

Category of the population	Population of study	Sample size	Respondents by gender.
Head Teachers	006	006	4males and 2 females
SMC members	072	012	6males and 6 females
Parents	120	060	30 males and 30 females
Teachers	132	108	73 males and 35 females
Pupils	455	217	145 males and 72 females
Total	785	403	258 males and 145 females

Source: Primary data, 2024.

As detailed in table 3.1 above, the population total was 785 from which a sample of 403 respondents was selected, categorized as 6 head teachers, (one per school) 12 SMC members, (2 per school), 60 parents, (10 per school), 108 class room teachers, (depending on staff size) and 217 candidates (depending on the P.7 enrolment) were extracted from the 6 Public primary Schools of Nawaikona Sub County, Namutumba district.

3.5. Data collection instruments.

The main instruments that were used while collecting data are as detailed below:

3.5.1 Questionnaire.

Andrew G. D. Holmes (2023), defines a questionnaire as a formalized set of questions for obtaining information from respondents. It is considered to be a set of questions to which respondents answer in writing, meaning that it is always structured.

The questionnaire used in this study asked for data that respondents were able to give without any assistance. The respondents were provided with a guide on how to respond to the statements. The scoring system of the questionnaire was given by a Likert scale structured as, (5) strongly agree (4) agree, (3). Not sure (2) disagree (1) Strongly disagree. The option of the respondent was indicated in the space provided using a tick.

This tool enabled the researcher to minimize the wastage of time while collecting data, as all the tools were given out to the respondents at the same time, and returned within 3 days, as the instruction requested.

3.5.2 Interview guide

An interview is a technique that is primarily used to gain an understanding of the underlying means and motivations for people's attitude towards performance, or behaviour (Nsubuga (2013). It can be undertaken on a personal one-to- one basis, or a group. For this matter this was conducted at an individual level, mostly the SMC members and head teachers were interviewed using this tool, at an agreed venue by the member, and the researcher himself. This instrument provided the researcher with accurate information that was used to confirm what was got while using the questionnaire.

3.6. Procedure for data collection.

The researcher got an introductory letter was got from the University before the administration of the questionnaire. This was used as a basis by the researcher to request for permission from the administration of Namutumba District local Government, particularly the Education department to be allowed to carry out data/information collection since the study targeted Schools. After approval of the application by the Education department, the researcher reported to the identified schools, each at a time and the head teachers were met and briefed about the study.

The researcher, having been allowed to collect data by the head teachers of various schools proceeded to identify teachers who finally participated in the study. During the administration of the tool, each respondent was briefed about what the study was all about. They were as well requested to answer all the questions and on collection, the entire questionnaire was again checked to confirm that all questions were answered.

3.7 Response rate

After collecting back all the questionnaires, some respondents had not completed and some had completely not answered anything therein. These were discarded and the rest considered to compute the questionnaire response rate. Of the sampled SMC members, 10 of the 12 SMC members (83.3%), 55 of the 60 parents (91.7%), 99 of the 108 teachers as well as199 of the 217 candidates (91.7%) were able to complete the questionnaire. This gave a combined response rate

of 91.7% which was sufficient for meaningful data analysis to take place. The analysis also considered the qualitative responses of all the six head teachers of the sampled primary schools.

3.8. Quality control.

Here, validity and reliability of the instruments were considered important for this study. How these were managed is detailed below;

3.7.1. Validity of Instrument

Costa A., Rodrigues F., Pitarma R., & Ferreira M. E., (2024), consider validity as the extent to which an instrument is truly measuring what is intended to measure thus relevant to the study as returned. Adequate measures were taken to ensure that the questionnaire fulfilled the content validity as returned.

According to Amin (2005), Content Validity Index (CVI) must be greater or equal to 0.7 before it is considered to be valid. This was calculated using the formula below CVI = n / N where n = the appropriate questions and N = all the questions in the instrument. Since the CVI was 0.96 thus greater than 0.5, the instrument was considered valid. It is therefore concluded that the instrument truly measured what it was supposed to measure as returned by the respondents and later analysed and reported on in chapter four.

3.7.2 Reliability of Instruments

Mugenda. (2008) states that reliability refers to the degree to which an instrument consistently gives what it is supposed to give. Therefore, before the instrument was used, it was tested to a tenth of the sample size and this was done through Cronbach's Alpha with the support of SPSS (version 20), and results were presented in a tabular format. According to Amin (2005), an instrument to be accepted as reliable, its Cronbach Alpha must be greater or equal to 0.7. Table 3.2 shows reliability Statistics. Cronbach's Alpha No of Items returned 0.99 95 Since the CVI is 0.98, which was greater than 0.7, the instrument was considered reliable.

3.8. Data analysis.

Dibekulu Dawit (2020), defined data analysis as a process of collecting, transforming, cleaning, and modelling data with the goal of discovering the required information. It is a process of bringing order, structure and meaning to the mass of collected data. Here therefore the collected

data was edited, coded and scored Gall (2013). The scores for all the respondents were totalled to obtain their final raw score.

Data analysis was done in order to justify the representativeness of the bio data of the respondents. The outcome was presented in chapter four using tables, in them, frequency and percentage was used.

3.9. Ethical Consideration.

Nsubuga, P. (2013) defines this as moral standard and how they affect conduct of the respondents. To maintain the practice of ethics, names of the respondents were not written on any tool of data collection. By so doing getting to know who answered the question in away was not possible. This led to the confidentiality maintenance. Voluntary participation and informed consent of the respondent was obtained. This was done after explaining while putting across the merits of this research and while presenting the information in chapter four, generalization of the findings was done. This aimed at avoiding individualization of the findings, hence maintaining confidentiality.

3.10. Limitation of the study.

The researcher encountered dishonesty and biasness of the respondents during data/information giving. To overcome this, respondents were made to understand the merits of this study to the extent of they, willingly accepting to participate in the study. They were therefore requested to give quality data for decision making. For the sake of fears, the reason of this study was clearly explained to the respondents in order to clear the fears. As well, respondents were given more time if they needed to work on the questionnaire, but not more than five days. By so doing, the fears were managed by the researcher.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

In this chapter the results of the study are presented and discussed. The purpose of the study was to find out the effects of physical activity on the academic achievement of pupils in selected schools in Nawaikona sub - county, Namutumba district, Uganda.

The data were analysed around key objectives of the study, thus to; investigate the levels of academic achievement of, find out the forms of physical activity engaged in by pupils and establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda

4.1 Demographic Characteristics

4.1.1 Gender of respondents

Table 1: Gender of respondents

Table 1 below was drawn to show the gender of all the respondents that were sampled save for the head teachers who were just interviewed.

Category	Frequency	Percentage (%)
Male	232	63.91
Female	131	36.09
Total	363	100.00

Source: Primary data, 2024

From Table 1 above, it is clearly shown that majority of the respondents in the study were male232 (63.91%) while their female counterparts were 131 (36.09%). Data presented in the table still indicates that only 363 of the sampled 403 respondents were analysed, showing that some of the questionnaires (34) were not received back from the respondents and some of the respondents were just interviewed and not issued with questionnaires.

It should be noted the Primary seven pupils formed the bulk of the respondents because they were presumed to provide better information about PA activities in Primary schools. The other respondents were the head teachers, SMC members, selected parents and teachers who were

chosen to provide insight into the effect of PA on the AA of pupils in Nawaikona Subcounty of Namutumba District.

4.1.2 Age of respondents

Table 2: Age of respondents

Age in years	Frequency	Percentage (%)
10 -15	183	50.41
16 – 20	63	17.36
21 – 25	27	7.44
26 – 30	23	6.34
31 – 35	15	4.13
36 – 40	20	5.51
41 – 45	12	3.31
46 – 50	9	2.47
51 – 55	6	1.65
56 – 60	5	1.38
TOTAL	**363**	**100.00**

Source: Primary data, 2024

The findings in Table 2 indicate that majority of the respondents were in the age group of 10- 15 who were 183(50.41%), followed by 16-20 who were 63(17.36%), 21 – 25 that were 27 (7.44%), 26 – 30 (6.34%), 36 -40(5.51%), 31 – 35 (4.13%) 41 - 45 (3.32%) 51 -55(4,2.14%),46 -50 (2.47%), 51 – 55 (1.65%) and 56 – 60 (1.38%).

The bulk of the respondents were in the age range of 10-15 indicating that P.7 candidates were the majority of the respondents and they fall in that age range. This age bracket was followed by those aged 16 – 20 who were some P.7 candidates that for some reasons delayed to complete the Primary school cycle.

Teachers and parents aged 31- 35 were ranked next amongst the respondents. These were basically the certificate holding teachers of the Upper primary section and specifically the P.7 class. Notably, the age brackets of 56 -60 and 51 – 55 were the least prevalent of all the respondents. Commonly, these are supposed to be teachers who are about to retire as well as those who have just joined the teaching profession who are rarely allocated to teach Primary seven.

4.1.3 Marital status of respondents

Table 3 shows the Marital status of the respondents

Category	Frequency	Percentage (%)
Widowed	21	5.79
Married	111	30.58
Single	231	63.63
Total	363	100.00

Source: Primary data (2024)

From above it is seen that majority of the respondents in the study were single 63.63% followed by the married ones with 30.58% and a least representation was of the widowed with 5.79%.

The singles were the majority because it also represents the percentage of the P.7 pupils who are single and the given married percentage is for the heads, teachers and some parents.

4.1.4 Education level of the respondents

Table 4 shows the level of education of the respondents

Category	Frequency	Percentage (%)
Primary	223	61.43
Secondary	54	14.88
Tertiary	79	21.76
Others	07	1.93
Total	363	100.00

Source: Primary data (2024)

In table 4, it is seen that majority of the respondents had a primary level of education (61.43%), followed by the tertiary level (21.76%) as well as those with secondary level (1.93%) and 1.93% with other forms of education level.

4.1.5 Qualification of respondents

Table 5 shows the qualifications of the respondents.

Category	Frequency	Percentage (%)
Master's degree	01	0.28
Bachelor's degree	21	5.78
Diploma	40	11.02
Certificate	102	28.10
None	199	54.82
Total	**363**	**100.00**

Source: Primary data (2024)

Majority of the respondents shown in table 5 above were not qualified at all (54.82%). These were followed by the certificate holders (28.10%), followed by diploma holders at 11.02%, bachelor's degree holders were 5.78% and least of all were the master's degree holders at 0.28%.

Findings show that the majority of the respondents were not employed at all and these were the P.7 candidates who were still attending the Primary school. These were followed by the grade three teachers' certificate and diploma holders respectively.

4.2.6 Type of employment of respondents

Table 6 shows the type of employment of the respondents

Category	Frequency	Percentage (%)
Permanent	139	38.29
Temporary	17	4.69
None	207	57.02
Total	363	100.00

Source: Primary data (2024)

Findings in Table 6 show that slightly above half of the respondents were not employed at all (57.02%), followed by 38.29% in permanent and 4.69% in temporary employment. These

findings show that majority of the respondents were the Primary seven candidates who were not yet employed followed by the teachers on the government payroll as well as those teachers who are not yet on government payroll.

4.2 Objective one: Levels of academic achievement of pupils in grant – aided primary **schools**.

The first objective of the study was to investigate the levels of academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda and to achieve this, a questionnaire with five items was issued. Following a Likert scale; where 5= strongly agree (SA), 4= agree (A), 3= undecided (U), 2= disagree (D) and 1= strongly disagree (SD), the responses were as tabulated below: -

Table 7: Table 7 shows the levels of academic achievement of pupils

	To investigate the levels of academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.	**5**	**4**	**3**	**2**	**1**	**TOTAL**
a	Taking part in our day-to-day lessons across all subjects.	97 (26.72%)	161 (44.35%)	64 (17.63%)	28 (7.72%)	13 (3.58%)	363 (100.00%)
b	Doing all the work given during the lessons to completion in all subjects.	36 (9.92%)	33 (9.08%)	25 (6.89%)	109 (30.03%)	160 (44.08%)	363 (100.00%)
c	Doing corrections for all the work done wrongly during lessons across all the subjects.	15 (4.13%)	28 (7.71%)	43 (11.85%)	98 (27.00%)	179 (49.31%)	363 (100.00%)
d	Attending school and completing classes for the whole year and get promoted to higher ones.	41 (11.29%)	39 (10.74%)	163 (44.90%)	55 (15.15%)	65 (17.92%)	363 (100.00%)
e	Most pupils in schools studying and completing the primary school cycle.	19 (5.23%)	34 (9.37%)	43 (11.85%)	99 (27.27%)	168 (46.28%)	363 (100.00%)
f	Pupils in school performing very well in their Primary Leaving Examinations.	22 (6.06%)	25 (6.89%)	39 (10.74%)	114 (31.40%)	163 (44.90%)	363 (100.00%)

Source: Primary data, 2024

As seen from table seven above, the researcher needed to investigate the levels of academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda and the respondents gave varying opinions per investigated aspect.

In aspect one, the researcher sought to establish the rate at which pupils take part in their day-to-day lessons across all subjects where; a total of 258(71.07%) of the respondents agreed, 64 (17.63%) were not sure while a total of 41(11.30%) of them, disagreed with taking part in their day-to-day lessons across all subjects. Some were found to be effective in some subjects at the expense of others and those are the ones who were either not sure or disagreeing with this aspect.

For the second aspect, the researcher wanted to find out whether pupils were doing all the work given during the lessons to completion in all subjects. Here, a total of 69(19.00%) of the respondents agreed, 25 (6.89%) were not sure and yet a total of 269 (74.10%) of the respondents disagreed with doing the given work to completion.

The third aspect was used to establish the pupils' efforts in doing corrections for all the work done wrongly during lessons across all the subjects, it was realized that a total of 43 (11.84%) respondents agreed, 43 (11.85%) of them were not sure and 277 (76.31%) of the respondents disagreed with doing corrections for their wrongly done work.

In the fourth aspect of; attending school and completing classes for the whole year and getting promoted to higher ones; 80 (22.03%) agreed, 163 (44.90%) were undecided and a total of 120 (33.07%) of the respondents disagreed with the aspect. As it was observed, most pupils in schools of Nawaikona subcounty were not consistently attending school and completing classes for the whole year and before getting promoted to higher ones.

The findings of the fourth aspect were in tandem with the qualitative observation of on e of the head teacher;

''Very many of our pupils who start school commonly drop out before completing the primary school cycle. You find many of them leaving school for; rice growing, petty trade activities along the Tirinyi – Mbale highway and the developing trading centres in the area.''

(SMC member – school D)

Both the qualitative e findings as well as the qualitative observation above do confirm that not all pupils enrolled at the Primary one level are able to finish Primary Seven' hence; the prevalence of high primary school dropout rates.

With regard to the fifth aspect of; most pupils in schools studying and completing the primary school cycle, a total of 53 (14.60%) respondents agreed, 43 (11.85%) were not sure while a total of 267 (73.55%) of the respondents disagreed with this aspect. In their observations, the respondents were confirming

that not all pupils were attending school and completing the classes. This, in itself, suggested that some pupils who start school do not complete the cycle hence the unfortunate existence of primary school dropouts.

About pupils in school performing very well in their Primary Leaving Examinations. In this regard, a total of 47 (12.95%) of the respondents agreed, 39 (10.74%) were not sure and a total of 277 (76.31%) of the respondents disagreed with this aspect. In most schools of Nawaikona sub county, candidates hardly score a division one, very few pass in the second division, many are in the third division while a substantial number is either in division IV, U or X and as such cannot qualify for transition to the secondary school level.

One of the head teachers who was interviewed together with the available PLE performance records agreed that the performance of pupils in Nawaikona subcounty was not good;

''At PLE level, the state of affairs in our schools is appalling. Many of our candidates register and either do not sit or sit but fail the exams and are classified as ungraded by UNEB. Even the passes registered by our candidates are weak with majority in divisions four and three and very few in divisions two and one overtime.''

(Head teacher – School A)

So, the above qualitative response from one of the head teachers coupled with the findings of aspect six above confirm that the performance of candidates in Nawaikona subcounty during PLE is very low compared to other places in and outside of Namutumba district.

Objective two: To find out the forms of physical activity engaged in by pupils of selected grant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda.

The second objective of the study was to find out the forms of physical activity engaged in by pupils of selected grant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda. To meaningfully investigate this, seven aspects were included in the questionnaires to which different categories of the population responded using the Likert scale explained earlier.

Table 8 shows the forms of physical activity engaged in by pupils

	To find out the forms of physical activity engaged in by pupils of selected grant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda.	5	4	3	2	1	TOTAL
a	Pupils walk to school daily	283 (77.96%)	50 (13.77)	21 (5.79%)	9 (2.48%)	0 (0.00%)	363 (100.00%)
b	Pupils play football at school daily	249 (68.60%)	63 (17.34%)	12 (3.31%)	23 (6.34%)	16 (4.41%)	363 (100.00%)
c	Pupils play netball at school daily	208 (57.30%)	111 (30.58%)	25 (6.89%)	11 (3.03%)	8 (2.20%)	363 (100.00%)
d	Pupils participate in athletics at school	199 (54.82%)	132 (36.36%)	13 (3.58%)	14 (3.86%)	5 (1.38%)	363 (100.00%)
e	Pupils engage in some simple games of low organization at school daily	222 (61.16%)	55 (15.15%)	48 (13.22 %)	23 (6.34%)	15 (4.13%)	363 (100.00)
f	Pupils engage in physical work like slashing, sweeping and picking while at school daily	251 (69.15%)	67 (18.46%)	29 (7.99%)	11 (3.03%)	5 (1.38%)	363 (100.00%)
g	Physical education lessons are conducted at school daily	132 (36.36%)	89 (24.52%)	13 (3.58%)	95 (26.17%)	34 (9.37%)	363 (100.00%)

Source: Primary data, 2024.

From table eight above, it is seen that the researcher needed to investigate the forms of physical activity engaged in by pupils of selected grant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda and the respondents gave varying opinions per investigated aspect.

To establish the forms of physical activity engaged in by pupils of selected grant – aided primary schools seven aspects were investigated. In the first aspect of pupils walking to school daily, a total of 333 (91.73%) of the respondents agreed, 21 (5.79%) of them were not sure and 9 (2.48%) of the respondents disagreed with this aspect. Most of the respondents agreed that majority of the

pupils in Nawaikona sub county come to school on foot and it was therefore the most prevalent form of physical activity.

This finding corroborates well with the qualitative result from the interview with one of the head teachers as stated below;

''Most of our pupils walk to and from school daily. These include those from nearby as well as those from distant villages in the subcounty.''

(Head teacher – School E)

The qualitative findings from table 8 and the comments of the head teacher above confirm that most of the pupils walk to and from school regardless of the distances.

With regard to aspect two, the researcher wanted to establish whether pupils play football at school daily. Here, 63 (17.34%) of the respondents strongly agreed, 12 (3.31%) agreed, 23 (6.34%) of them were not sure, 16 (4.41%) disagreed while the remaining 249 (68.60%) respondents strongly disagreed to playing football daily at school.

A head teacher in one of the sampled schools confirmed this finding when he asserted that;

''It is pretty hard to ensure a presence of balls for pupils to play every day at school. The quality and standard of storage for the procured balls are so much of a challenge that they get spoilt in a short time and pupils at times leave school without playing football.''

(Head teacher – School C)

The comment of the head teacher and the findings of aspect two in table 8 above confirm that most pupils walk to and from school and is therefore a common form of physical activity.

For the third aspect of pupils playing netball at school daily, 208 (57.30%) of the respondents strongly agreed, 111 (30.58%) of them agreed, 25 (6.89%) were not sure, 11 (3.03%) disagreed and 8 (2.20%) strongly disagreed to the playing of netball at school daily. It is evident in this aspect that as many as 87.88% of the respondents confirmed that girls play netball at school on a daily basis as another common form of physical activity in the primary schools of Nawaikona subcounty, Namutumba district.

In the fourth aspect of; pupils participate in athletics at school, a total of 331 (91.18%) and 19 (5.23%) of the respondents agreed and disagreed to participating in athletics respectively. Those

who disagreed where alluding to the fact that athletics is only emphasized in most schools only during the first term of each year and as such, to them, athletics is not a common form of Physical activity.

As it was observed in the fifth aspect of; pupils engaging in some simple games of low organization at school daily that, a total of 277 (76.31%) of the respondents agreed, 48(13.22%) were not sure and 38 (10.47%) of them disagreed with this aspect. It is a common practice in these schools that games of low organisation are commonly engaged in by pupils of the lower than those of the upper primary classes.

For the sixth aspect of; pupils engage in physical work like slashing, sweeping and picking while at school daily, 251 (69.15%) strongly agreed, 67 (18.46%) agreed, were not sure, 11 (3.03%) disagreed and 5(1.38%) strongly disagreed with this aspect. In this, a total of 318 (87.60%) agreed while 16 (4.41%) of the respondents disagreed with the aspect of pupils engaging in physical work.

In a verbal utterance, one of the SMC members in one of the schools agreed with the observation of pupils engaging in physical work when she said that,

''In our schools, most of the physical work is done by our children in schools. They are the ones who, clean, sweep, mop, slash and dust furniture instead of hiring support staff in schools. As they do the physical work, pupils unintendedly benefit from it as a physical activity.''

(SMC Member – School B)

This observation rhymed well with the findings as given by the respondents in the table 8 above in confirming that physical work done by pupils in school is another common form of physical activity that they take part in regularly.

Regarding the seventh aspect of; Physical education lessons being conducted at school daily, a total of 221 (60.88%) of the respondents agreed, 13 (3.58%) were not sure while 129 (35.54%) of them disagreed with the daily conducting of Physical education lessons. Many of the respondents indicated that Physical education lessons were regular in Lower than Upper Primary Classes. In the candidate class for instance, most P.E lessons are not given the attention they deserve by either swapping it with other subjects or leaving it go without any teaching.

Objective three: To establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.

The third objective of the study was to establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda. To meaningfully investigate this, six aspects were included in the questionnaires to which different categories of the population responded using the Likert scale explained earlier.

Table 9 shows the effects of physical activity on the academic achievement of pupils

To establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.	**5**	**4**	**3**	**2**	**1**	**TOTAL**
a) Involving in physical activity increases pupils' interest in school.	259 (71.34%)	58 (15.98%)	32 (8.82%)	9 (2.48%)	5 (1.38%)	363 (100.00%)
b) Involving in physical activity helps to keep pupils' alert in class.	244 (67.22%)	81 (22.31%)	28 (7.71%)	8 (2.20%)	2 (0.55%)	363 (100.00%)
c) Involving in physical activity enables pupils to complete given work at school.	238 (65.56%)	97 (26.73%)	19 (5.23%)	6 (1.65%)	3 (0.83%)	363 (100.00%)
d) Involving in physical activity helps pupils to perform well in tests and exams.	211 (58.13%)	83 (22.86%)	43 (11.85%)	18 (4.96%)	8 (2.20%)	363 (100.00%)
e) Involving in physical activity improves pupil'	277 (76.31%)	52 (14.33%)	28 (7.71%)	6 (1.65%)	0 (0.00%)	363 (100.00%)

	health so as to learn better.						
f)	Involving in physical activity enables pupils to remain in school until they complete the primary school cycle.	254 (69.97%)	77 (21.21%)	21 (5.79%)	7 (1.93%)	4 (1.10%)	363 (100.00%)

Source: Primary Data, 2024

Table 9 reveal a multitude of information about the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.

In the first aspect of; involving in physical activity increases pupils' interest in school, 259 (71.34%) of the respondents strongly agreed, 58 (15.98%) agreed, 32 (8.82%) were not sure, 9 (2.48%) disagreed and 5 (1.38%) strongly disagreed. This meant that a total of 317 (87.33%) of the respondents agreed while a sum of 14 (3.87%) of the respondents disagreed with the belief that involving in PA increases the learners' interest in school.

One of the interviewed head teachers also made similar qualitative comments in regard to this aspect of investigation as quoted below;

''Physical activity keeps the learners active, involved and interested in what they learn. When this continues across all subject, learners will be more interested in their learning and school in general.''

(Head teacher – School C)

These similar respondents from different segments of the sample involving in physical activity increases pupils' interest in school.

In the second aspect of involving in physical activity helps to keep pupils' alert in class; 244 (67.22%) of the respondents strongly agreed, 81 (22.31%) agreed, 28 (7.71%) were not sure yet 8 (2.20%) disagreed and 2 (0.55%) of them strongly disagreed. When aggregated, it means that a total of 325 (89.53%) agreed, 28 (7.71%) were not sure and 10 (2.75%) of them disagreed with the notion that involving in physical activity helps to keep pupils' alert in class.

For the third aspect of believing that involving in physical activity enables pupils to complete given work at school, a total of 238 (65.56%) of all the respondents strongly agreed, 97 (26.73%)

agreed, 6 (1.65%) disagreed, 3 (0.83%) strongly disagreed while only 19 (5.23%) were not sure. Most of the respondents; 335 (92.29%) agreed to while 9(2.48%) disagreed with the belief that involving in physical activity enables pupils to complete given work at school.

To the aspect of, involving in physical activity to help pupils to perform well in tests and exams; 211 (58.13%) of them strongly agreed, 83 (22.86%) agreed, 43 (11.85%) were not sure, 18 (4.96%) disagreed and 8 (2.20%) strongly disagreed. It meant that a total of 294 (80.99%) of the respondents agreed and only 26 (7.16%) of them agreed that involving in physical activity helps pupils to perform well in tests and exams.

With regard to the aspect of, involving in physical activity to improve pupils' health so as to learn better; 277 (76.31%) of the respondents strongly agreed, 52 (14.33%) agreed, 28 (7.71%) were not sure, 6 (1.65%) strongly disagreed and none was undecided. This implied that, a total of 329 (90.64%) of the respondents agreed to and only 6 (1.65%) of them disagreed with involving in physical activity to improve pupils' health so as to learn better.

In the sixth aspect of, involving in physical activity to enable pupils remain in school until they complete the primary school cycle; 254 (69.97%) strongly agreed, 77 (21.21%) agreed, 21 (5.79%) were not sure, 7 (1.93%) disagreed while 4 (1.10%) strongly dis agreed. This implied that of all the respondents; a total of 331 (91.18%) agreed with, 11 (3.03%) disagreed while 21 (5.79%) were not sure. Respondents in most schools confirmed that involving in physical activity enables pupils to remain in school until they complete the primary school cycle.

Most respondents who agreed that involving in physical activity to enable pupils remain in school until they complete the primary school cycle were in tandem with evidence by one head teacher during the interview when he said that;

''Enrolment in our schools is highest during term one per year. This is so, because the levels of PA are highest during term one. It is therefore presumed that if the PA levels are maintained at a high level. Then the rates of primary school completion would also improve substantially.''

So, it became clear that involving in physical activity enables pupils remain in school until they complete the primary school cycle.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter presents the discussion, conclusions and recommendations based on the study findings presented. The purpose of the study was to establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.

5.1.1 Research objective one

The first objective of the study was to investigate the levels of academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda. To effectively investigate this, six items were embedded in the questionnaire to help the researcher get an insight into the levels of academic achievement of pupils in selected grant – aided primary schools especially by the Primary Seven candidates. The responses were given based on a five - point Likert scale of; strongly agree (5), agree (4), not sure (3), disagree (2) and strongly disagree (1).

After analysing the findings in the six aspects investigated under this objective, a combination of positive, neutral and negative responses was discovered that. The respondents majorly agreed that; pupils take part in their day-to-day lessons across all subjects at a rate of 258 (71.07%) of all the respondents.

On the other hand; pupils' efforts in doing corrections for all the work done wrongly during lessons across all the subjects, most pupils in schools studying and completing the primary school cycle and pupils in school performing very well in their Primary Leaving Examinations were found to be negative at 277 (76.31%), 267 (73.55%) and 277 (76.31%) of all the respondents respectively.

Relatedly, much as the respondents in the questionnaires appeared to be neutral in the fourth investigated aspect of, attending school and completing classes for the whole year and getting promoted to higher ones, 163 (44.90%) of the respondents were undecided. Their indecision was due to the fact that many of the respondents were not privy to the school records on admission, placement and promotion to the next and higher classes. Their indecision was however cleared

when the SMC Member of school C clarified that very many of our pupils who start school commonly drop out before promotion to the next classes or completing the primary school cycle.

These findings also have a semblance with the findings of Suleiman A. H., (2023). According to Suleiman A. H., (2023), Cultures have a great effect on schooling as it determines how we see the world, how we try to understand it, and how we behave throughout our academic studies. As a result, culture has a large influence on both learning and teaching styles. Most African cultures are stiff, and students are expected to be extremely humble while learning. Such socio-cultural behaviour may affect a student's academic success.

In a nutshell, just like; Suleiman A. H., (2023)'s work, the level of academic achievement of the pupils in primary schools of Nawaikona Subcounty is very low and calls for immediate mediation, one form of which would be their involvement in PA.

5.1.2 Research objective two

The second objective of the study was to find out the forms of physical activity engaged in by pupils of selected gr ant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda. In the questionnaire, eight items were used to investigate the responses of the different strata of the sample. To investigate this, the questionnaire captured seven items to which different responses were given as seen in table 7.

Out of the seven investigated forms of PA, six of them were found prevalent in Nawaikona subcounty although at different degrees. Walking to school daily was the most prevalent at 91.73% followed by; participating in athletics (91.18%), playing football (85.94%), playing netball (87.88%), engaging in physical work like slashing, sweeping and picking while at school daily (87.61%) and engaging in some simple games of low organization at school daily (76.31%) were found common in the Primary schools of Nawaikona subcounty, Namutumba district.

However, the teaching of Physical Education is not being handled appropriately even when it is another form of PA. The effective teaching of PE keeps reducing as you progress from the lower to the Upper Primary classes with the worst realised in the candidate class where most P.E lessons are not given the attention they deserve by either swapping it with other subjects or leaving it go without any teaching. This in turn affects the attainment of the pupils' weekly target PA hours and its related benefits.

The findings about the forms of PA are in agreement with the Self-Determination Theory (SDT) as developed by Deci and Ryan (2020). In the context of Physical Activity and Academic Achievement in adolescents, SDT suggests that engagement in PA activities may promote intrinsic motivation and feelings of autonomy, which in turn can positively impact academic outcomes). According to this theory, Adolescents who participate in PA may experience a sense of competence and mastery, leading to increased confidence and resilience in academic settings (Ryan & Deci, 2020).

From the findings in table 8, a total of 221 (60.88%) of the respondents agreed that Physical education lessons are conducted at school daily. This observation is in line with that of Mpalampa L., et al (2023), who in their study noted that even when 97.2% of the Sampled schools allocated some time to the teaching of Physical Education only 44% schools scheduled PE after lunch and 13.9% of them time tabling PE all through the day depending on the day of the week. It was noted in this study that even when timetabled, PE lessons were not followed as timetabled. It was sometimes cancelled (mainly due to exams and rain) in all schools. In one school, there was more time for PE during exam time, because afternoons were free.

In the findings about PA as in Table 8, it is clear that the primary school children were not getting enough PA activities and time of engagement. Time for engagement in PA was also studied by; Carlson, M., Winsler, A., & Smith, K. (2020) in the USA. In their multilevel analysis of cross-sectional data about a study titled; ‘‘Physical activity, sports participation, and academic outcomes in U.S. adolescents,’’ it was noted that young people were not getting enough time of PA while in school.

The time allocated to the pupil’s involvement in PA in this study as well as that of Mpalampa L., et al (2023), CDC (2013) and Carlson, M., Winsler, A., & Smith, K. (2020) was found to be below the one recommended by the World Health Organization in their guidelines on physical activity and sedentary behaviour (WHO; 2018 & 2020). Under these guidelines These guidelines were issued as a follow – up on their Global action plan on physical activity for 2018 - 2030 in which they aim at having more active people for a healthier world.

5.1.3 Research objective three

The third objective was to establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda. Six items, as shown in table 9, were investigated in which it was discovered that

involvement in PA, increases pupils' interest in school, helps to keep pupils' alert in class, enables pupils to complete given work at school, helps pupils to perform well in tests and exams, improves pupil' health for better learning and enables pupils to remain in school until they complete the primary school cycle.

The findings in table 9 are in tandem with the Achievement Goal Theory (AGT). In the context of PA and academic achievement, AGT suggests that adolescents may adopt different goal orientations (e.g., mastery goals, performance goals) in both domains, which can influence their engagement and achievement outcomes (Dweck, 2019). For example, adolescents with a mastery orientation in sports may transfer this approach to academics, seeking to learn and improve rather than simply striving for grades or external rewards.

In separate studies, Nguri M, (2024), Fisher C.A & Eileen A., (2023), as well as Elizabeth Doll & Samuel Y. Song (2023), came up with similar findings to the effect that the group of learners who active in PA improved in mathematics and upper body strength following a physically active academic intervention. These studies contributed to the notion that physically active academic interventions can be beneficial in the school environment to improve the AA of young learners.

Nguri, M (2024**),** in his study on Effects of Sports Participation on Academic Performance in Adolescents**,** empirical studies provided valuable insights into the potential benefits of sports engagement on various academic outcomes, including higher GPAs, improved standardized test scores, and enhanced cognitive abilities. Moreover, research has highlighted the transferable nature of skills and character strengths cultivated through sports participation, which can positively influence academic achievement. From the findings of table 9, implication of the Achievement Goal Theory (AGT) as well as recommendations of many other related studies confirmed that there is a strong positive relationship between PA and Academic Achievement.

5.2 Conclusion

The study findings above were used to draw a number of conclusions at the end as specified below;

In investigating the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda, the findings revealed a particular trends per objective.

Through the various items investigated, the level of academic achievement of the pupils in primary schools of Nawaikona Subcounty was very low and called for immediate mediation, one form of which would be their involvement in PA. It was also found that pupils are involved in sufficient PA activities such as; walking to school daily, participating in athletics, playing football playing netball, engaging in physical work like; slashing, sweeping and picking while at school daily as well as engaging in some simple games of low organization at school daily though the time allocated to the teaching of Physical Education and Physical Activity in general was found to be insufficient across the schools of Nawaikona subcounty, Namutumba district.

It was also established that an increase in the levels of PA will lead to a better AA among the Primary school pupils. It was established with evidence that, involvement in PA, increases pupils' interest in school, helps to keep pupils' alert in class, enables pupils to complete given work at school, helps pupils to perform well in tests and exams, improves pupil' health for better learning and enables pupils to remain in school until they complete the primary school cycle.

5.3 Recommendations

Through the study findings, discussions and conclusions above, the researcher made the following recommendations for the action of all stake holders in Nawaikona subcounty and other places in relation to the Physical Activity and Academic Achievement: -

i)All Primary Schools should reinforce the involvement of learners in a variety of Physical Activity for a better and improved academic performance. Learners should enjoy participating in such PA activities as; walking, running, ball games, athletics, games of low organisation as well as water games like bottle filling, wading and swimming.

Learning at the Primary school should be programmed through play way. Play is the most effective way(method) of teaching because through play; a natural PA activity, all senses of the body are involved in the learning process, hence' realistic and more meaningful concept development.

The teaching of Physical education and other PA activities in Primary Schools should be allocated time as guided by the World Health Organisation, thus, at least 60 minutes of Moderate to Vigorous Activity (MVA) per week. Schools, especially at the primary level, should ensure that pupils are involved in the timetabled Physical Education lessons without deviations or omissions regardless of the class levels.

5.4 Areas for Further Research

Having concluded this study, the researcher finds it prudent to recommend that in future, studies be conducted to establish;

i) The causes of school dropouts in the Primary schools of Nawaikona subcounty, Namutumba district and Uganda at large.

ii) The factors affecting the teaching of Physical Education in the Primary Schools of Nawaikona subcounty, Namutumba district.

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APPENDIX ONE

QUESTIONNAIRE FOR P.7 PUPILS

Dear respondent, I am **Kiiza Anna**, a Student of Busitema University. I am carrying out a study to find out the; **''Effects of Physical activity on the academic achievement of pupils in selected schools in Nawaikona sub - county, Namutumba district, Uganda.''** You are requested to help and provide the information below to assist in the study. The information you provide will be kept confidential. Do not write your name anywhere in this questionnaire.

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENT

(Please tick (√) what best applies to you)

1. School----------

2. Gender Male ☐ Female ☐

3. Age (Tick your age bracket)

Age in years	10 -15	16-20	21-25	31-35	36-40	41-45	46-50	51 & above

3. Marital status

Married ☐ Single ☐ Widowed ☐

4. Level of education

Primary ☐ Secondary ☐ Tertiary ☐ Others ☐

5. Qualification

Certificate ☐ Diploma ☐ Degree ☐ Masters ☐ Others ☐

6. Type of employment

Temporary ☐ Permanent ☐ Others ☐ None ☐

SECTION B:

Tick in each of the boxes numbered from 1 to 5 from the rating scale that best reflects your views. This questionnaire is not a test, and all information collected will be anonymous, so respond honestly. Use the following rating.

Opinion	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Numeric value	5	4	3	2	1

To investigate the levels of academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.		**5**	**4**	**3**	**2**	**1**
a	We fully take part in our day-to-day lessons across all subjects.					
b	We do all the work given to us during the lessons to completion in all subjects.					
c	We do corrections for all the work we do wrongly during lessons across all the subjects.					
d	We attend school and complete our classes for the whole year and get promoted to higher ones.					
e	Most pupils in our school study and complete the primary school cycle.					
f	Pupils in our school perform very well in their Primary Leaving Examinations.					
To find out the forms of physical activity engaged in by pupils of selected grant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda.		**5**	**4**	**3**	**2**	**1**
a	Many of us walk to school daily					
b	We play football at school daily					
c	We play netball at school daily					
d	We participate in athletics at school					
e	We engage in some simple games of low organization at school daily					
f	We engage in physical work like slashing, sweeping and picking while at school daily					
To establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.		**5**	**4**	**3**	**2**	**1**
a)	Involving in physical activity increases our interest in school					

b)	Involving in physical activity helps to keep us alert in class					
c)	Involving in physical activity enables us to complete given work at school					
d)	Involving in physical activity helps us to perform well in tests and exams					
e)	Involving in physical activity improves our health so as to learn better					
f)	Involving in physical activity enables us to remain in school until we complete the primary school cycle.					

Thank you for the time and participation

APPENDIX TWO

QUESTIONNAIRE FOR TEACHERS

Dear respondent, I am **Kiiza Anna**, a Student of Busitema University. I am carrying out a study to find out the; **''Effects of Physical activity on the academic achievement of pupils in selected schools in Nawaikona sub - county, Namutumba district, Uganda.''** You are requested to help and provide the information below to assist in the study. The information you provide will be kept confidential. Do not write your name anywhere in this questionnaire.

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENT

(Please tick (√) what best applies to you)

1. School----------

2. Gender

Male ☐ Female ☐

3. Age (Tick your age bracket)

Age in years	10 -15	16-20	21-25	31-35	36-40	41-45	46-50	51 & above

3. Marital status

Married ☐ Single ☐ Widowed ☐

4. Level of education

Primary ☐ Secondary ☐ Tertiary ☐ Others ☐

5. Qualification

Certificate ☐ Diploma ☐ Degree ☐ Masters ☐ Others ☐

6. Type of employment

Temporary ☐ Permanent ☐ Others ☐ None ☐

SECTION B:

Tick in each of the boxes numbered from 1 to 5 from the rating scale that best reflects your views. This questionnaire is not a test, and all information collected will be anonymous, so respond honestly. Use the following rating.

Opinion	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Numeric value	5	4	3	2	1

Objective one: **To investigate the levels of academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.**		**5**	**4**	**3**	**2**	**1**
a	Pupils in our school fully take part in all the day to day lessons across all subjects.					
b	Pupils in our school do all the work given to them during the lessons to completion in all subjects.					
c	Pupils in our school do corrections for all the work done wrongly during lessons across all the subjects.					
d	Pupils in our school attend school and complete their classes for the whole year and get promoted to higher ones.					
e	Most pupils in our school study and complete the primary school cycle.					
f	Pupils in our school perform very well in their Primary Leaving Examinations.					
Objective two: **To find out the forms of physical activity engaged in by pupils of selected grant – aided primary schools of Nawaikona Sub – county, Namutumba district, Uganda.**		**5**	**4**	**3**	**2**	**1**
a	Many pupils in our school walk to school daily					
b	Pupils in our school play football at school daily					
c	Pupils in our school play netball at school daily					
d	Pupils in our school participate in athletics at school					
e	Pupils in our school engage in some simple games of low organization at school daily					
f	Pupils in our school engage in physical work like slashing, sweeping and picking while at school daily					
Objective three: **To establish the effects of physical activity on the academic achievement of pupils in selected grant – aided primary schools of Nawaikona sub – county, Namutumba district, Uganda.**		**5**	**4**	**3**	**2**	**1**
a)	When pupils nvolve in physical activity, it increases their interest in school					
b)	Physical activity helps pupils in our school to remain alert in class					

c)	Involving in physical activity enables pupils in our school to complete given work at school					
d)	When pupils in our school involve in physical activity, they are helped to perform well in tests and exams					
e)	When pupils involve in physical activity, it improves upon their health so as to learn better					
f)	When pupils I our school involve in physical activity, they remain in school until they complete the primary school cycle.					

Thank you for the time and participation

APPENDIX THREE:

TIME SCHEDULE FOR THE RESEARCH PROJECT

ACTIVITY	**PERIOD**
Proposal writing	January – March, 2024
Approval of research proposal	April, 2024
Data collection	May – June, 2024
Data analysis	June, 2024
Report writing	July – August,2024
Submitting the report	September, 2024

APPENDIX FOUR

RESEARCH BUDGET ESTIMATES

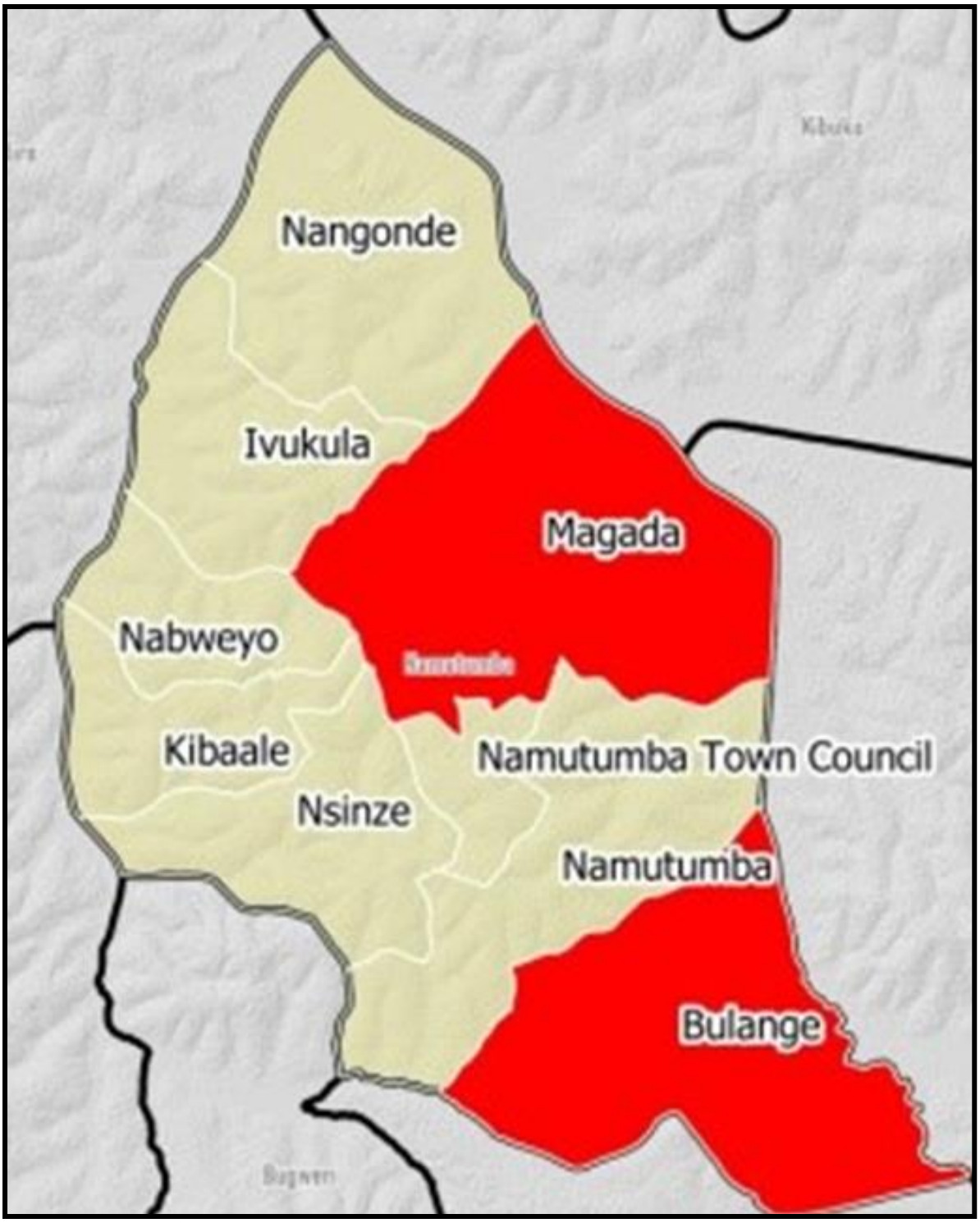
STAGE	ITEM	DETAIL	UNIT COST	TOTAL
RESEARCH PROPSAL WRITING	Transport	5 trips	Shs. 50,000/=	Shs. 250,000/=
	Stationary	2 reams	Shs. 20,000/=	Shs. 40,000/=
	Refreshments	15 meals	Shs. 6,000/=	Shs. 90,000/=
	Accommodation	10 days	Shs. 20,000/=	Shs. 200,000/=
	Airtime		Shs. 50,000/=	Shs. 60,000/=
	Secretarial Services		Shs.140,000/=	Shs. 140,000/=
	SUB TOTAL			**Shs. 780,000/=**
RESEARCH REPORT WRITING	Transport	5 trips	Shs. 50,000/=	Shs. 250,000/=
	Stationary /=	2 reams	Shs. 20,000/=	Shs. 40,000/=
	Refreshments	15 meals	Shs. 7,000/=	Shs. 105,000/=
	Accommodation	10 days	Shs. 20,000/=	Shs. 200,000/=
	Airtime		Shs. 50,000/=	Shs. 50,000/=
	Secretarial Services		Shs. 200,000/=	Shs. 200,000/=
	SUB TOTAL			**Shs. 845,000/=**
GRAND TOTAL				**Shs. 1.625,000/=**

APPENDIX FIVE

A MAP OF BUSOGA SHOWING THE LOCATION OF NAMUTUMBA DISTRICT

APPENDIX SIX

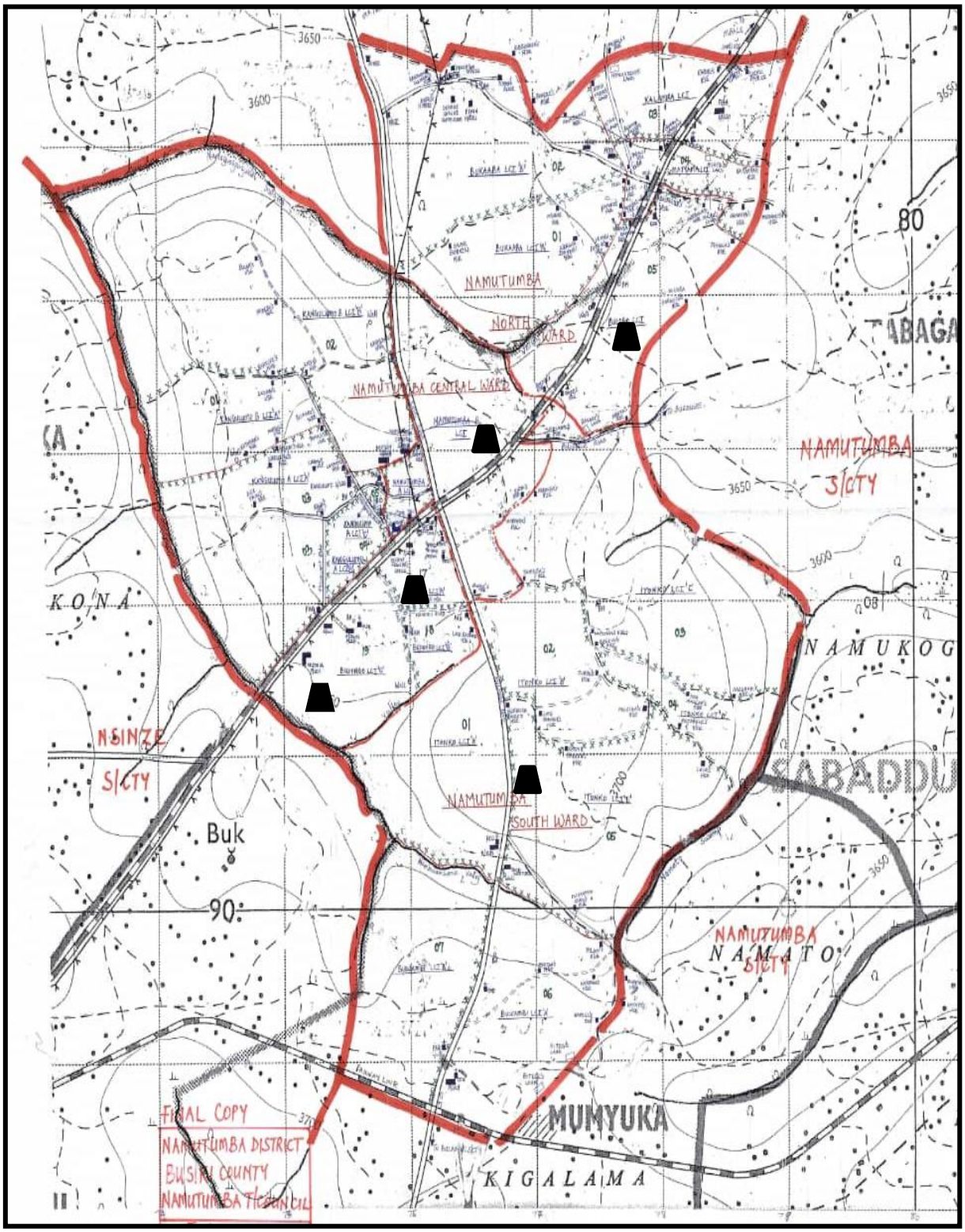
A MAP OF NAMUTUMBA DISTRICT SHOWING THE LOCATION OF NAMUTUMBA TOWN COUNCIL



KEY ▲ Namutumba Town Council

APPENDIX SEVEN

A MAP OF NAMUTUMBA SUBCOUNTY SHOWING THE LOCATION OF THE SAMPLED SCHOOLS



KEY

LOCATION OF SAMPLED SCHOOL