

# KAMPALA UNIVERSITY

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## **FOREWORD BY THE VICE CHANCELLOR**

On behalf of Management of Kampala University, I wish to introduce to you our Scientific Research Journal (KUSRJ 2024). This publication is in pursuit of our university's mandate to conduct research and promote innovation.

Scientific research is critical to help us navigate our ever-changing world. Without it, we would have to rely on people's opinions, our intuitions and luck. Systematic scientific research offers us an objective understanding because scientific knowledge is grounded in objective and tangible science.

Further, publishing is the backbone of academic studies. It is the traditional means of disseminating research results, communicating new ideas and techniques. So we should not forget it in the academic arena. Journals provide a source of useful information and knowledge that can easily be located and read.

Therefore, I extend a vote of thanks to our students and staff who have highly contributed to this publication. On the same note, I highly commend our editorial team for their great efforts in reviewing the articles for publication.

I encourage all scholars to develop a culture of reading research papers in order to add to their existing knowledge and improve their overall understanding; to gain insight into the latest scientific techniques being used and the new development opportunities available; to create a rich repository of relevant reference; to develop critical thinking; and to build professional relationships and stronger networks among others.

Amb. Al Haj. Prof. Badru Dungu Kateregga.

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# **Physical Activity and Workplace Productivity: A Systematic Review**

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## **Abstract**

*This study aimed to explore the relationship between physical activity and workplace productivity. The scope encompassed workplace initiatives, non-communicable diseases (NCDs), and socio-economic implications. It reviewed literature on the impact of physical activity on workplace productivity and NCD prevention, focusing on initiatives to reduce sedentary lifestyles in the workforce. Methodologically, a funnel approach was employed to review scholarly literature, including randomized and non-randomized studies on global trends sub-Saharan Africa, East Africa, and Uganda. The literature search strategy led to the screening of over 100,000 abstracts and titles, resulting in six studies being included for review after a quality check. These studies revealed correlations between sports participation and work performance, the impact of tailored physical exercise training on presenteeism and absenteeism, wellness management programs' effectiveness, and interventions to stimulate physical activity and relaxation among office workers. The research gap highlighted the scarcity of empirical evidence on physical activity and workplace productivity in sub-Saharan Africa, East Africa, and Uganda, with most existing studies focused on NCDs and workplace interventions to increase physical activity. The study highlights several effective workplace initiatives to support physical activity, including flexible schedules, exercise classes, walking meetings, gym facilities, charity walks/runs, and buddy exercise programs. Additionally, the study emphasizes the positive correlation between sports participation and work performance, as well as the effectiveness of individually tailored intelligent physical exercise training (IPET) and wellness management programs (WMP) in reducing absenteeism and increasing productivity. It also suggests that reducing work hours with or without mandatory physical exercise can positively affect productivity. Furthermore, the study recommends that managers should stimulate regular physical activity among staff and establish practical plans to provide physical activities, especially among female staff.*

**Key words: Exercise, Physical Activity, Workplace Productivity, Non-Communicable Diseases, Systematic Review**

## **1.0 Introduction**

Adults typically work full-time, spending at least 8 hours a day, 5 days a week at their jobs. Many have reported not having leisure time for physical activity due to longer work hours and other responsibilities at home. However, implementing physical activity in the workplace can be feasible and effective without compromising work quality or quantity. This study aims to examine available literature and propose ways to improve health and productivity through workplace activity. The literature and case presented here can be used to inform policy and practices in the workplace. Finally, the study discusses a conceptual framework that's modeled on active and sedentary life styles as well as their resultant socio-economics effects. These are then utilized to provide guidelines for implementing workplace physical activity programs. (Bhutani et al., 2021) (Callow et al., 2020) (DiPietro et al., 2020) (Zhao et al., 2020).

## **1.1 Study Scope**

The study broadly focused on workplace initiatives, prevention of Non-Communicable Diseases (NCDs) and the socio-economic (Ding, et al., 2016). Specifically, literature search was conducted on key parameters and assumptions that would unwrap the crux of physical activity and workplace productivity:

1. Active lifestyle prevents NCDs and also affects workplace productivity (Leischik, et al, 2015).
2. Relationship between physical activity and its possible effects on workplace productivity (Muluvhu, et al, 2020) (Igweni-Chidobe, et al, 2018).
3. Relevant workplace initiative to reduce sedentary lifestyle in the workforce.
4. Level of workforce output.

## **1.2 Research Questions**

The systematic review of literature was designed to explore the following research questions:

1. What is the effect of physical activity on non-communicable diseases?
2. What workplace initiatives are effective in supporting physical activity?
3. What is the link between physical activity and workplace productivity?

### **1.3 Physical Activity and Non-Communicable Diseases**

#### **Benefits of Physical Activity**

Recent research has examined the relationship between physical activity and mental health in the workplace, with several studies showing a strong positive correlation between increased levels of physical activity and lower levels of depression and anxiety. It is suggested that reduced absenteeism, from work, due to mental health issues could be an important pathway by which increased physical activity may improve workplace productivity. A recent review has also highlighted the importance of considering the type and context of physical activity on mental health in the workplace, indicating that aerobic exercise and activities conducted during leisure time have more beneficial effects. The prominence of physically related health problems such as cardiovascular disease, obesity, and diabetes in the working population has led to an increased focus on the role of physical activity in the workplace for overall health promotion. It is also well known that regular participation in physical activity has a positive effect on the biological risk factors for these chronic diseases, such as improved glucose and insulin metabolism, regulation of blood pressure, and favorable changes in plasma lipids. Physical activity has been widely studied in terms of effectiveness in the prevention of chronic diseases. However, it is only in recent years that interest has emerged concerning the potential health benefits in the workplace. (Bhutani et al., 2021) (Callow et al., 2020) (DiPietro et al., 2020) (Greenwood-Hickman et al., 2021) (Woessner et al., 2021) (Zhao et al., 2020).

## **Physical Activity and Physical Health**

Physical health is a precious resource which allows an individual to undertake activities of daily living and meet essential needs. Fitness, general health, and physical activity are all interrelated. Health is not only a result of certain fitness traits, but the relationship between the two is complex. There are several conceptual models of the relationship between physical activity and health. One model, the biomedical model, is the oldest. It proposes that there is a linear dose-response relation between cause (physical activity) and effect (health). This model is now considered oversimplified and quite outdated. The double positive model states that physical activity influences health by directly affecting body composition and function. It also has a positive effect on self-esteem through the effects of body image and general well-being. The model suggests that a more physically active lifestyle can be more resilient to age and stress-related disorders. From this model, it is understood that the effects of physical activity on health are multifaceted. Finally, the resource allocation theory proposes that the body has a fixed pool of energy it allocates between activity and biological systems. The theory predicts that increased activity will have a positive long-term effect of more energy and improved biological systems due to overspill from activity. (Kaur et al., 2020) (Hagedorn et al., 2022) (Agarwal et al., 2020)

## **Reduced Risk of Chronic Diseases**

The term chronic disease encompasses a range of conditions that come on gradually and persist for long periods of time. Some of the most common and costly conditions in terms of morbidity and mortality are cardiovascular disease (CVD), cancer, chronic obstructive pulmonary disease (COPD), and diabetes. The literature is replete with evidence that regular physical activity can reduce the risk of these and other chronic conditions, but the focus here will be on these major conditions. The evidence for the positive effect of physical activity on CVD is strong. Inactivity is a comparable risk factor for CVD to smoking, and there is evidence that regular



physical activity can prevent the development of diabetes, a major risk factor and independent cause of CVD. The mechanism for the protective effects of activity on CVD is largely through its beneficial effects on reducing raised blood pressure, correcting dyslipidemia, reducing obesity, particularly abdominal obesity, and it also has a favorable effect on platelet and vascular function. High fitness levels can also reduce the risk of CVD, and the fitter a person is, the lower their risk. An ambitious statement from the AHA in 2003 was to eliminate death from CVD in people under 60 by 2020. It is only through widespread behavior change, primarily increases in physical activity, that this can be achieved. (Elshahat et al., 2021) (K. F. Morse et al. 2021) (Kaur et al., 2020)

### **Improved Energy Levels and Stamina**

Poor physical fitness and the lack of physical activity can lead to an increased perception of effort for tasks that may seem routine as well as an increased feeling of fatigue. The increased perception of effort and the loss of stamina can be detrimental to an individual's productivity and performance as it will affect the speed and accuracy in which a task is performed. By addressing the link between fitness and increased stamina, it may be possible to offset fatigue and its effects in the workplace. This would be beneficial to an employer as an individual with higher energy levels and stamina would be more productive and make fewer errors. This would more than justify the time allocated for exercise in terms of the potential increase in output from employees. This was tested and proven in an experimental study to test the effects of jogging in a group of unfit sedentary adults. A 10-week program of exercise showed significant differences in the experimental group compared to a control group in aspects of fatigue. This can be taken as a useful indication to employers that if employees engage in fitness programs, they will be more productive during the time spent at their job. This could serve as a point to try to implement workplace fitness programs, which studies have shown to be very productive due to their convenience. (Rodríguez-Rey et al.2020).

## **1.4 Workplace Initiative and Physical Activity**

### **Implementing Physical Activity Programs in the Workplace**

There are 5 steps to implement a workplace physical activity program. Steps include surveying employees, tailoring activities to their preferences, obtaining commitment from leaders and members, planning and executing activities, and evaluating the program. (Barkley et al., 2020) (Daly-Smith et al., 2020) (Fukushima et al., 2021) (Jacob et al., 2020) (Mon-López et al., 2020) (Parker et al., 2021) (Strain et al., 2020) (Van et al., 2021).

### **Creating a Culture of Movement**

To promote movement at work, organizations should integrate physical activity into the workplace culture by creating supportive policies and environments. Engaging workers in the development of activity programs is crucial for success. Programs should be based on workers' interests and needs to make them more appealing. Creating a team-based approach or committee can increase participation and inclusivity. Incentives such as time off, prizes, and public recognition can further boost employee participation. Joining available Worksite Health Promotion provides useful resources for effective program implementation. (Aubert et al., 2022) (Benedetti et al., 2020) (Centeio et al., 2021) (Chanana &, 2021) (Holland et al., 2021) (Salvo et al., 2021) (Sundstrup et al., 2020) (Vilchez et al., 2021) (Yarberry and Sims, 2021).

### **Analyzing Access Opportunities for Fitness Venues**

Access to exercise facilities is important for participation in physical activity. On-site facilities demonstrate commitment to health and influence employee behavior. A targeted recruitment approach led to a tenfold increase in program participation. Offering exercise facilities at work positively influences exercise habits. Evaluations of workplace interventions show increased physical activity and fitness levels. Perception of access to the facility is correlated with exercise levels. (Altman et al., 2023) (Béraud-Peigné et al., 2024)

(Ehrlich et al., 2023) (Gilles et al., 2021) (Jia et al., 2023) (Ransbotham et al., 2020) (Shao et al., 2022).

### **Encouraging Active Breaks and Movement throughout the Day**

A healthy mix of sitting and standing, combined with both physical and mental tasks, supports good cognitive performance, whereas a more physically inactive workstation work pattern has a detrimental effect on cognitive performance. A recent cross-sectional survey of over 2000 office workers in 7 different countries found that the cognitive performance of those workers who had the most inactive workstations was significantly lower than those with the most active workstations. Cognitive performance was measured with a careful series of computerized tests from the Cognitive Drug Research computerized assessment battery. The association remained strong and significant for both the overall cognitive performance z-score (global measure of cognitive function) and for 4 out of 6 specific cognitive domains, i.e., the inactive workstation group performed significantly worse across the tests of attention-switching, attention span, and speed of recall. There is a significant association between work patterns and spatial working memory. Age, gender, education, job type, and lifestyle did not remove the association between cognitive performance and work pattern. The more sedentary the work pattern, the worse the cognitive performance. Part-time workers and workers with a work-based injury or ailment did not have significantly different cognitive performance levels. Gender and age did not have a significant interaction effect. These results were consistent across all countries. ANCOVA with propensity score as a covariate was used to confirm the findings. (Altman et al., 2023) (Béraud-Peigné et al., 2024) (Dai et al., 2021) (Dobbin & Kalev, 2022) (Ehrlich et al., 2023) (Gilles et al., 2021) (Jia et al., 2023) (McCandless et al., 2022) (NASTACĂ et al., 2024) (Swanagon & Simpson, 2023) (Wu, 2024).

## **Promoting Work-Life Balance and Flexibility**

A key goal within today's high-performance and highly demanding work environments should be to promote a work-life balance. An appropriate balance between work and life is very important and can be influenced by workplace culture and the demands of the job. The reasoning behind this goal is a worker who puts in long hours on the job with minimum time left for their personal lives is unlikely to engage in regular physical activity. However, long working hours do not necessarily mean higher productivity. There is a point where working any more hours in the week will produce a decrease in productivity which will be counterproductive to the initial goal of getting more work done. It has been found that increasing working time from 40 to 50 hours in the week increases the amount of work done by 25%. However, increasing from 60 to 70 hours only adds an extra 5% of work done. This is equivalent to working 7 days a week at 10 hours a day being no more effective than working 6 days at 10 hours a day. Regular excessive hours can also lead to stress and fatigue, which are known to reduce mental capacity and concentration. By achieving an ideal work-life balance and limiting the work hours per week, maintaining a high level of productivity would be more feasible. This would be a much healthier lifestyle choice, and regular physical activity can play a big role in that. (Kang et al., 2024) (Lluch & Salvaj, 2022) (McCandless et al., 2022).

## **1.5 Physical Activity and Workplace Productivity**

### **Importance of Workplace Productivity**

Productivity has many benefits down the line, such as increased international competitiveness. It can prevent the loss of market share to imports and increased sales of exports. Products of other countries today are almost entirely judged by their price and quality. High productivity makes it possible to meet these goals. Finally, higher productivity can enable increased tax revenue for the government. If productivity increases throughout the economy, there is generally an

increase in profits. This results in a rise in tax collection due to increased income and business activity. This tax revenue can then be spent on many social goods while still maintaining a low tax burden. This has a favorable effect on the standard of living of its citizens. The importance of workplace productivity in society has been increasing due to global competition. There is now a higher focus on innovation and efficiency. Increased productivity in the workplace has many benefits. It is a major determinant of long-term growth and the level of real wages, and it is a foundation for the successful functioning of a country and its economy. The bottom line is that a country which is more productive is able to improve its standard of living. Greater productivity enables increased profits for businesses. This allows businesses to provide higher wages, increasing the standard of living. It also allows businesses to afford and expand, providing more jobs. These new jobs can be higher wage jobs in more prosperous communities. High productivity is a pathway to high growth – it makes it possible to increase economic growth as output can be achieved with fewer resources and time. This can lead to lower production costs and higher quality of goods. (Agarwal et al., 2020) (E. Centeio et al., 2021) (Callow et al., 2020) (Woessner et al., 2021) (Zhao et al., 2020).

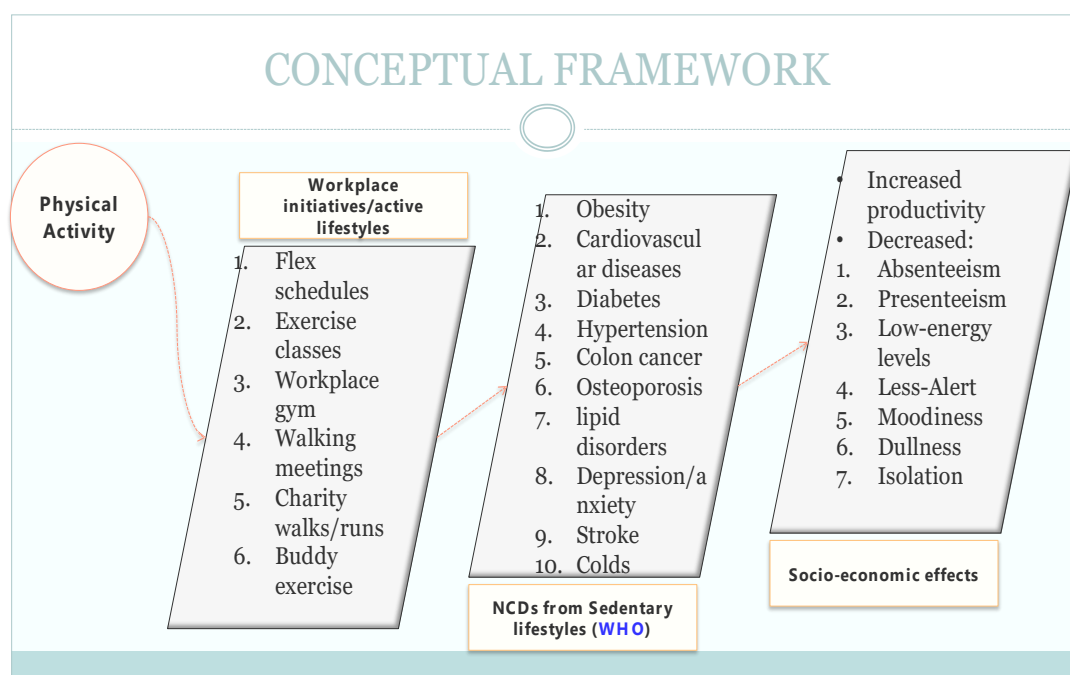
### **Decreased Absenteeism and Presenteeism**

Studies show that improving physical health decreases absenteeism in the workplace. Physical activity is linked to fewer sick days in studies of civil servants and U.S. workers. Lack of physical activity and obesity are major contributors to sick days. Increasing exercise levels just once a week can reduce sick leave risk by 8%. Presenteeism, when employees work while not functioning at full capacity due to illness, causes greater productivity loss than absenteeism. Encouraging physical activity can benefit both employees with current health issues and prevent health problems in healthy individuals. (Baillot et al., 2021) (Dishman et al., 2021) (Leung, 2020) (Park et al., 2020) (Vizzotto et al., 2020) (Whiting et al., 2021).

## 1.6 CONCEPTUAL FRAMEWORK

*The conceptual framework highlights the potential impact of physical activity (in form of workplace initiatives and active lifestyles) on preventing non-communicable diseases and how this has socio-economic effects. The physical activities may include exercise classes, workplace gym, and charity walk and/or runs. Non communicable diseases that are impacted by physical activities include obesity, cardiovascular diseases and hypertension. The socio-economic benefits include increased productivity and decreased absenteeism.*

**Table 1: Conceptual Framework**



## 2.0 METHODOLOGY

This study employed the funnel approach to collect, assess, analyse and synthesis data from randomized and non-randomised studies on global trends, sub-Saharan Africa, East Africa and Uganda. A systematic review process was then applied with clearly stated inclusion and exclusion criteria, literature search strategy, search findings, reviews of evidence, evaluating and summarizing the studies. This methodology is well depicted on Table 2 below.

**Table 2: Funnel Approach**

METHODOLOGY: FUNNEL APPROACH	
Scholarly literature:	Review process:
<ol style="list-style-type: none"><li>1. Randomized and non-randomized studies on global trends, sub-Saharan Africa, East African, and Uganda.</li><li>2. Workplace initiatives on physical activity</li><li>3. Workforce involvement in physical activities</li><li>4. Schedules of physical activity for group/individual members of the workforce</li><li>5. Resultant outputs associated with such initiatives.</li></ol>	<ol style="list-style-type: none"><li>1. Inclusion/Exclusion criteria</li><li>2. Search strategy</li><li>3. Search findings/Reviews of Evidence/Evaluating and summarizing the studies</li></ol>

**Inclusion and Exclusion Criteria**

Table 3 depicts the inclusion and exclusion criteria that were used to select the relevant literature for the systematic review.

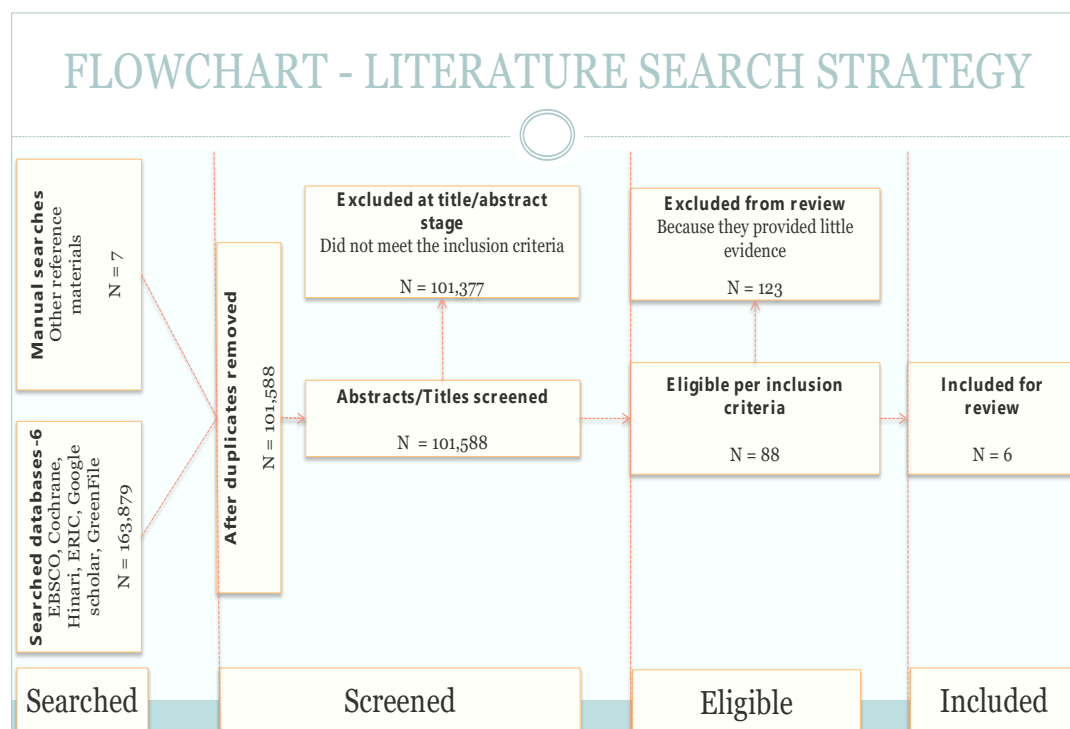
**Table 3: Inclusion and Exclusion Criteria**

INCLUSION/EXCLUSION CRITERIA	
Studies were eligible for inclusion if they:	Studies were not eligible for inclusion if they:
<ol style="list-style-type: none"><li>1. Were published in English between 2009 – 2024</li><li>2. Were published in peer reviewed academic journal</li><li>3. Evaluated outcomes that were selected for review</li><li>4. Were conducted in Africa</li><li>5. Used economic analytical methods to assess productivity</li></ol>	<ol style="list-style-type: none"><li>1. Were evaluating the use of physical activity for therapeutic purposes</li><li>2. Were focusing on non-workplace initiatives</li><li>3. Were focusing on policies</li></ol>

## Literature Search Strategy

This study utilised a 4-level literature search strategy. Over 160,000 literature were searched from reliable databases, these were then cleaned and screened for eligibility at title and abstract stages, titles and abstracts that were deemed eligible for review were then subjected to the inclusion and exclusion criteria. Table 4 is a flow chart that illustrates the 4-level strategy process undertaken to identify relevant information for the systematic review.

**Table 4: Literature Search Flowchart**



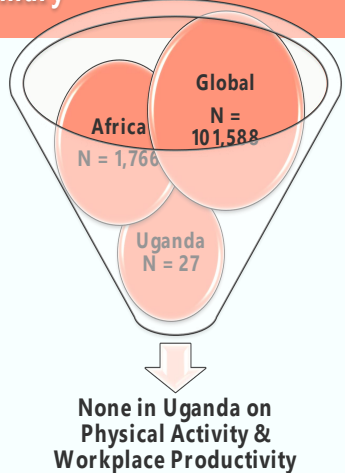
## 3.0 Search Findings

The literature search was subjected to an abstraction quality check of “Perfect - 100%”, “Very Good - 90%”, “Good – 89%”, “Satisfactory - 79%”, and “Unsatisfactory - <60%”. Literature that were categorized as “Unsatisfactory” were not considered for review. 101,588 titles and/or abstracts were screened after removing duplicates and repetitions. 211 studies were deemed eligible for review, out of which, 123 were excluded after indepth review, because they provided little evidence for this study. Only six studies qualified and were included for review, out of the 88 studies that were deemed eligible for review, because they met the inclusion



criteria. Search findings further indicated that 1,766 studies were conducted in sub-Saharan African but only 27 studies were either about Uganda, in relation to the inclusion crite, or were conducted in Uganda. It's important to note that none of the 27 studies focused on Physical activity and workplace productivity in Uganda. This narrative is summarized in Table 5 below.

**Table 5: Review of Evidence**

SEARCH FINDINGS/REVIEW OF EVIDENCE	
Quality Check	Summary
<ul style="list-style-type: none"> <li>The eligible studies were subjected to an abstraction quality check and assigned grades as follows:</li> </ul> <ol style="list-style-type: none"> <li>Perfect (100) N = 0</li> <li>Very good (90-100) N = 2***</li> <li>good (80-89) N = 1**</li> <li>satisfactory (60-79) N = 3*</li> <li>unsatisfactory (less than 60).</li> </ol> <ul style="list-style-type: none"> <li>Unsatisfactory evidence was not considered for reporting.</li> <li>6 studies qualified to be included for review</li> </ul>	 <p>None in Uganda on Physical Activity &amp; Workplace Productivity</p>

*The six studies, that qualified for inclusion, were then used as a proxy to the selected study criteria and considered adaptable to parameters that could be suitable for settings in sub-Saharan Africa, East Africa, and Uganda. Table 6, summarises the six studies that were analysed to explore the relationship between physical activity and workplace productivity. It captures names of the authors, study focus, study setting and/or country, methodology and design, study findings, conclusion and recommendations. All the six studies indicated a positive relationship between physical activity and workplace performance and productivity.*

**Table 6: Findings from Qualified Literature**

S/No	Author(s)	Study focus	Setting/country	Methodology/design	Finding	Conclusions/recommendations
1.	Hashim, R., et al. (2011)*	Correlation between sports participation and work performance	40 staff of University Teknologi MARA (UiTM), Malaysia	Cross-sectional survey design, stratified random sampling, bivariate analyses	Higher sports participation is associated with higher performance evaluation	UiTM should revise its policy that its 4,000 employees are more physically active
2.	Justesen, J.B., et al. (2017)***	Effect of individually tailored intelligent physical exercise training (IPET) on presenteeism and absenteeism among employees.	387 office workers, Denmark	1-year randomized controlled trial, training group-TG Vs control group-CG	TG exhibited a significant 4% increase in workability, 9% increase in general health, 6% increase in productivity, and a 29% reduction in absenteeism.	IPET combined with leisure-time physical activity significantly improved presenteeism and decreased absenteeism
3.	Kanier, M., et al. 2014)*	Effectiveness of wellness management programmes (WMP) on absenteeism	Department of agriculture in Capricorn district, Limpopo province, SA	Qualitative research design	WMP has benefits for employers and employees, it can contribute to high production	WMPs are necessary in a work place to combat absenteeism
4.	Koopmans, L., et al. (2014)*	Intervention to stimulate physical activity, relaxation of office workers and work performance	412 employees from 19 departments of a financial service provider, the Netherlands	RCT of individual work performance questionnaire (IWPO) at baseline and 12 months follow-up	IWPO showed statistically significant changes in IWP at baseline and follow-up	IWPO scales and changes on other constructs were in the expected direction
5.	Schwarz u, V.T., et al. (2011)**	How worksite health interventions, 2.5hr reduction of weekly working hours (RWH) with/without mandatory physical exercise (PE), affect productivity	177 employees in six dental health care workplaces, Sweden	Longitudinal examination of randomized study of workers' self-rated productivity and workplace production levels	RWH showed the largest increase in productivity, PE showed significant increase in quantity of work, work-ability & decreased sickness absence.	A reduction in work hours may be used for health promotion activities with sustained or improved production levels
6.	Vatan, M.H., et al. (2017)**	Effect of 12-week physical activity on resilience, productivity and reducing staff absence	94 female staff of Islamic Azad university, Iran	Pretest-posttest quasi-experimental study designs, control and experimental groups	12-week physical activity had significant effect on resilience and staff productivity and reducing staff absence	Managers should stimulate regular PA to all staff in organizations and establish practical plans to provide physical activities especially among female staff

## **Research Gap**

1. There is very limited body of empirical evidence on physical activity and its possible effects on workplace productivity in sub-Saharan Africa, East Africa and Uganda.
2. None of the studies included were from Uganda.
3. Most of the research was from the developed countries.
4. Most studies focused on the effect of physical activity and NCDs.
5. Most studies highlighted workplace interventions to increase physical activity.

## **Study Implications**

1. This study points to the dire need for research on this phenomenon in Uganda.
2. Such systematic inquiry would inform policy on the importance of physical activity in preventing NCDs and increasing workplace productivity.
3. It would also help stakeholders in developing evidence-based interventions to support workplace initiatives in the prevention of NCDs.

## **4.0 CONCLUSION**

This study systematically examined the literature on physical activity and workplace productivity. The literature indicated that there is a relationship between physical activity and improved employee health, especially on the prevention of non-communicable diseases, and this has a positive effect on workplace productivity and resultant socio-economic benefits. The study also indicated a lack of literature in Uganda on this phenomenon and the need for such studies.

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## **Physical Activity and Workplace Productivity in Uganda**

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### **Abstract**

*This paper, a sequel to “Physical Activity and Workplace Productivity: A Systematic Review” (Rajab-Gyagenda, 2024), examined the relationship between workplace productivity and physical activity in Uganda. Despite the increasing demand for jobs and returns, workplace physical activity has not received much attention. It is argued that workplace physical activities have not been considered a significant factor in productivity, even though it is known that a healthy lifestyle leads to fewer doctor visits, less downtime, and improved productivity. This highlights the importance of physical health for all working groups in Uganda, regardless of their cultural and socio-economic status. The intensity of physical activities may vary among Ugandans, ranging from intense to mild, but the fact remains that it is not a routine activity in the workplace. The high costs associated with malnutrition and diseases in Uganda hinder the focus on physical activities. As a result, the nation's health capital is still low, raising questions about what exactly productivity entails in Uganda. Likewise, the emphasis on personal health for improved performance is lacking within workplaces. The researcher argues that productivity should be defined beyond the nation's GDP and take into account factors like teamwork, working conditions, work habits, and absenteeism, as is common in the Western Countries. This study reviewed literature on the relationship between physical activity and workplace productivity in Uganda, a developing country with its unique cultural and socio-economic landscape. The study acknowledges that physical activity can differ in nature and may not solely occur during leisure time or exercise, aligning with recent advancements in defining and measuring physical activity. While this study aims to improve work environment for Ugandans, its findings may also hold true for developing countries in general. The significance of the study is that it points to the need for employers to enhance physical activity opportunities for their workers for the long-term benefit of their businesses and the health of their employees. There is need for more studies in Uganda that objectively examine the relationship between physical activity and employee productivity.*

**Key words:** *Non-communicable diseases, Physical activity, Socio-economic, Workplace productivity, Uganda*

## **1.0 INTRODUCTION**

The macroeconomic impact of physical activity (PA) on a developing country is profound. Low-income countries tend to have a high prevalence of physically demanding jobs and a low life expectancy. The major concern for these countries is communicable disease, which has a vast impact on morbidity and mortality, inevitably diverting human and economic resources from productive activities. The double burden of disease is truly taking its toll on the least developed countries. Economic modelling has suggested a potential increase in the gross domestic product (GDP) of at least 15 billion dollars in 2010 to 30 billion in 2015 if the burden of illness was significantly reduced in low and middle-income countries. Simulation models in this data suggested that by achieving a 1% reduction in the relative risk of cardiovascular disease through a 10% reduction in physical inactivity, there would be 120,000 prevented deaths, which would add increased economic growth by an extra 180 billion dollars. There has been an increasing prevalence of non-communicable disease (NCD) in Uganda. It has been stated that by using the demographic projection model (DPM), the life expectancy at birth and at 60 years will increase by 13.2 years and 12.6 years, respectively from 2005 to 2050. The WHO global report in 2010 stated that the projected relative risk of premature death from the four main NCDs in Uganda was to increase by 50% between 2006 and 2015. This has the potential to substantially increase economic loss. Data on NCDs and the effect of Physical Activity on individual productivity is scarce in a low-income country context. Focusing on this data and providing relevant material from setting physical activity/health programs in low-income countries may increase policymakers' awareness of the importance of physical activity in the workplace and the potential to prevent the loss of economic resources from NCDs.(Kazibwe et al., 2021) (Kostova et al.2020) (Schneider et al.2021) (Liu et al., 2022).

### ***Importance of Workplace Productivity***

The examination of workplace productivity holds significant importance as it directly influences the success or failure of an organization. As stated by Steers (1991), organizations must prioritize individual productivity as it has a direct impact on both group and organizational productivity. *Individual productivity* refers to the level of efficiency required to attain a specific objective. Typically, this efficiency level is measured by comparing the resources utilized to achieve a goal. If an individual can minimize the resources used to reach a goal, they can be deemed productive, and vice versa. There are numerous reasons why productivity is crucial for an organization: heightened employee productivity significantly affects revenue and costs. Increased productivity lowers production costs and raises revenue. To enhance profitability, organizations must strive to increase productivity as it allows for lower unit costs and higher unit sales. Consequently, this enables organizations to create more employment opportunities or pay higher wages. Additionally, high productivity positively impacts workforce morale. Enhanced productivity often results in reduced working hours, allowing employees to have a more relaxed schedule and reduced job demands. Furthermore, high productivity facilitates the expansion of businesses and enhances an organization's reputation. (Ganju et al.2020)

### ***Role of Physical Activity in Workplace Productivity***

This study does not seek to examine the direct impacts of physical activity on productivity, as it is widely known that physical activity is beneficial to health and that healthier workers are likely to be more productive. Instead, this study aims to examine the opportunities for physical activity during a working day in Uganda and the impact of participation in occupational and non-occupational physical activity on worker productivity.

*Leisure time physical activity*, which refers to physical activity outside of work, is commonly associated with exercise and encompasses activities such as sports and recreation. Decreased job-

related physical activity has been linked to decreased productivity, suggesting a negative relationship between the two. Optimal performance appears to occur in activities that require moderate levels of effort. A study conducted in Costa Rica supports this notion, revealing that workers engaged in low-energy jobs had higher productivity than those in high-energy jobs. However, absenteeism rates were the same, and there was a greater loss of work time. This finding underscores the importance of examining various forms of physical activity and their impact on productivity, highlighting that the effect on productivity may not solely be attributed to its impact on an individual's health.(Denis &Ndanyi, 2022) (Tulengerayo, 2022).

Despite the potentially detrimental outcomes associated with decreased physical activity during work, there has been an increasing concern regarding presenteeism in developed nations. *Presenteeism*, which can be defined as a decline in performance as a result of health issues or injuries, is an issue that is drawing more and more attention. It is quite astonishing to note that despite feeling unwell, many employees persist in working due to the fear of job loss or reduced income. This trend has been observed to be particularly prevalent in countries with a high occurrence of work-related injuries, raising questions about the impact of physically demanding jobs on presenteeism. Additionally, it also prompts us to ponder whether individuals with poor health have limited employment alternatives. This intertwining of factors suggests that certain types of physically demanding work can have a significantly adverse effect on both the well-being and productivity of workers, further emphasizing the importance of addressing presenteeism in the workplace. (Henderson & Smith, 2022)(Karanika-Murray & Biron, 2020)(Dobson et al.2020)(Coledam& da Silva, 2020)(Ruhle et al.2020)(Van, 2023)(Wang et al., 2023)(Pie et al.2020).

## **FACTORS AFFECTING PHYSICAL ACTIVITY IN UGANDA**

The economic advancement of Uganda has brought about notable changes in the lifestyle of its community, giving rise to lifestyle

diseases. Efforts to encourage physical activity as a means of preventing these diseases have proven to be unsuccessful within the country. According to the background information, physical activity has been defined in various manners. However, the most comprehensive definition, utilized to emphasize the significance of promoting *physical activity*, stems from Caspersen and Powell (1985). They define it as "any movement performed by the body's skeletal muscles that results in energy expenditure." In other words, any action employing the skeletal muscles that expends energy can be considered physical activity, whether it be as simple as thinking or as strenuous as engaging in intense physical exercise. *Exercise*, on the other hand, is a subset of physical activity that is deliberately planned, structured, and repetitive, with the primary or intermediate aim of enhancing or sustaining physical fitness. Raising the level of physical activity may prove to be a viable approach for enhancing the overall health of the population; however, promoting this change is proving to be a challenging undertaking due to the multitude of factors that influence the behavior of the Ugandan community.(Ahaibwe et al., 2021) (Alkhatib et al., 2021)(Ndejjo et al., 2020)(Mackay, 2022)(Musoke et al., 2021)(Ndejjo et al., 2023).

An important aspect to consider in the promotion of physical activity in Uganda is the cultural outlook. The Western perspective of health promotion through physical activity does not hold relevance in a country that is still grappling with meeting its population's basic needs. The slogan "80% by the year 2000" was embraced by Western nations in an attempt to enhance the health of their communities. This goal is aimed at getting 80% of the population to partake in an activity that would burn 300 Kcal of energy per week. However, this slogan is not feasible for Ugandans. Ugandans view physical activity as work, not for health or fitness enhancement. Recreation is limited due to challenging living conditions. Given the distinct perception of physical activity, health promotion campaigns need to be tailor-made to effectively convey their objectives. A wide array of strategies must be employed to

transform behavior and attitudes across the entire population, although measuring the success of each strategy can be a daunting task. (Yaya et al., 2020)(Seymour et al., 2020).

### ***Socio-economic Factors***

The shift to sedentary jobs in Low and Middle-Income Countries (LMICs), including Uganda, due to the process of industrialization and energetic transitions, is leading to a noticeable decrease in physical activity and a significant decline in the overall health of the workforce. Moreover, the productivity of workers is also being severely affected as energy-saving technologies are gradually replacing manual labor. It is important to note that higher socio-economic status is now increasingly associated with engaging in more sedentary work, which poses considerable challenges for individuals in LMICs who were previously engaged in labor-intensive occupations. Additionally, the impact of HIV/AIDS further exacerbates the issue of workplace productivity, particularly in sectors such as industry and agriculture. The increasing production costs and declining profits in these sectors are directly linked to the escalating rates of sickness and mortality, which significantly hinder overall productivity. It is crucial to emphasize the importance of physical activity in relation to productivity, especially when compared to worker health. By prioritizing physical activity, it is possible to enhance both the productivity and well-being of the workforce, thereby addressing the challenges faced by LMICs in a comprehensive manner. (Kwizera et al., 2023)

### ***Cultural Factors***

One crucial element to consider in this study is the influence of culture. Culture shapes individuals' behavior and choices in society, impacting their physical activity levels. Traditional beliefs and religious influences have marginalized women in Ugandan society, leading to a lack of physical activity. Embracing Western culture increases women's likelihood of being active, but they still face time constraints and traditional roles. Research has shown that 18.5% of Ugandans are inactive, with women making up the majority of this



group. This connection between physical activity, gender, and social class hinders women's participation. Essentially, cultural norms in Uganda make it challenging for many women to participate in physical activity. Addressing this cultural issue is vital for promoting women's physical activity and improving overall health outcomes for future generations, considering that today's young girls will become tomorrow's women. Resolving this cultural issue may be the key to promoting increased physical activity among women and ultimately improving overall health outcomes through lifestyle modifications.

### ***Accessibility to Factors***

In urban areas, the majority (58.9%) lacked physical activity facilities at workplaces compared to rural areas (21.1%). Urban workers primarily engaged in walking (20.6%) and standing (21.6%). Only a small percentage (8.9% walking, 1.7% cycling) commuted by walking or cycling. Rural workers had higher percentages, with 12.5% walking and 3.1% cycling. On average, 5.4% of urban and 6.6% of rural workers participated in vigorous-intensity work-related activities. A majority (88.1%) of urban workers and a slightly higher proportion of rural workers (92.6%) considered physical activity important. This discrepancy may be correlated to the individual's perception of the importance of physical activity, and it could also be influenced by the higher percentage of traditional workers in rural areas. Some workers prioritized income over physical activity. Population growth and urbanization have increased the importance of physical activity, with governments implementing initiatives. While access to exercise facilities is not a major factor affecting physical activity in Uganda, it is worth considering in rural villages. More exercise facilities could increase physical activity, and traditional work health benefits should not be neglected.(Abdul et al.2021) (Amuzie et al., 2022)(Zhang et al., 2022).

## **BENEFITS OF PHYSICAL ACTIVITY ON WORKPLACE PRODUCTIVITY**

There are multiple approaches by which engaging in physical activity can enhance work performance. These approaches encompass heightened concentration, prioritization of tasks, and the ability to think critically. The reason behind this lies in the fact that individuals who are physically active exhibit superior cognitive function compared to their sedentary counterparts. It is suggested that engaging in moderate to intense physical activity accelerates the brain's information processing speed, which serves as the foundation for cognitive function. Consequently, this enables individuals to make better instantaneous decisions and ultimately leads to an improvement in work performance. Furthermore, it has been proposed that the positive impact of exercise on mood is correlated with enhanced cognitive function. Alongside these cognitive benefits, physical activity also directly affects work performance by reducing absenteeism, diminishing staff turnover, and enhancing on-the-job decision making. This is of utmost importance as it signifies that physical activity intervention programs in Uganda can be implemented more easily, due to the various ways in which physical activity can enhance productivity. (Heinze et al., 2021)(Vancampfort et al., 2020) (Relacion, 2023) (Ikosiot, 2023).

### ***Improved Physical Health***

Physical activity has been a strong interest in improved health from earlier times. The American College of Sports Medicine and the Center for Disease Control have identified the major strength and health gains from regular physical activity. Regular physical activity has numerous health benefits including reducing the risk of premature death, improving coordination, lowering the risk of diabetes and high blood pressure, maintaining a healthy weight, and managing weight. It also strengthens muscles, bones, and joints, reduces depression and anxiety, improves psychological well-being, enhances performance in work and sports, and may increase lifespan. Overall, being physically active can improve work performance and productivity, especially for manual labor workers, and even individuals with illnesses or diseases can benefit from increased

engagement in productivity. When a person is absent at work, productivity is lost. This leads to excess free time where unhealthy behaviors can occur. The worker may also lack motivation to return, resulting in a loss of skills and impaired performance. This can impact income and job stability. Evidence shows that physical activity plays a crucial role in improving health and productivity for skilled workers. Engaging in regular physical activity can reduce absenteeism by enhancing bodily efficiency. For example, those who are more active have fewer infection symptoms and less time off work. A more efficient system results in less fatigue and higher morale. Overall, physical activity greatly improves health and work performance regardless of the job type.(Fukushima et al., 2021)(Lusa et al., 2020)(Patel et al., 2022)(Priya et al., 2023)(Sfandyari et al., 2020).

### ***Enhanced Mental Well-being***

Constraints to work teams in Uganda include low morale, illness, and alcohol abuse. Mental well-being, particularly cognitive and emotional aspects of the psychological well-being (PWB), has been studied in relation to exercise. One study (Oaten and Cheng, 2006 on 29 sedentary young adults) found that aerobic exercise reduced negative mood and stress levels in sedentary young adults. While Higgins (2016) conducted a randomized trial involving 156 adults with Major Depressive Disorder (MDD) and found that 12 weeks of moderate-intensity aerobic exercise led to a noteworthy decrease in depressive symptoms. A UK-based study also found a link between exercise and improved work performance through enhanced mental health. (Bond et al.2020) (Gaia et al., 2022) (Hassan et al.,2023) (Herbert, 2022) (Herbert et al., 2020) (Johnston et al. 2021) (Uddin et al., 2020) (Yoon et al., 2023).

### ***Increased Focus and Concentration***

Regular physical activity has been proven to improve focus and concentration at work, as well as enhance mental performance. Studies have shown that both long-term exercise programs and short-term aerobic exercise can have positive effects on cognitive performance. A comprehensive analysis of 18 studies between 1996

and 2001 found that fitness training significantly improved cognitive abilities of individuals aged 55-80, with those who participated in training outperforming control groups by 0.4 Standard Deviations (SD). Higher fitness levels were also associated with higher performance levels. Implementing a physical activity program in Uganda, a country with low reported physical activity, could potentially enhance cognitive capacity and improve labor productivity. Another study found that engaging in physical activity improved mental clarity and concentration, leading to improved job performance. The benefits of increased cognitive performance were not limited to exercise sessions, but extended to work tasks performed outside of the program. This suggests that continued physical activity can boost cognitive function and overall work productivity. Clear thinking, focused effort, and task performance are closely connected, making cognitive performance crucial for productivity. (Heinze et al. 2021)(Johnson, 2022)(McCurdy et al., 2020) (Quialheiro et al. 2022)(Thomas & Charles, 2022) (Vancampfort et al. 2021).

### ***Reduced Absenteeism and Presenteeism***

Absenteeism and presenteeism are two important terms to define. *Absenteeism* refers to being absent from work, which negatively affects productivity. *Presenteeism* occurs when employees come to work despite being unwell, causing decreased output and distractions. Both can impact workplace productivity, especially in low-income countries. Studies show that physical activity can reduce absenteeism and presenteeism. One study demonstrated that exercise had a significant impact on reducing sickness presenteeism (-1.1 times/week,  $p=0.008$ ) and, after one year, also had a significant effect on reducing the number of sick days. The study focused on sedentary call-center workers and found that exercise significantly reduced sickness presenteeism and sick days. Another study by van den Heuvel (2004) on randomized controlled trial aimed to assess the effectiveness of a back pain prevention program in a work setting, found that high fitness levels reduced sick leave due to back pain. These findings support the idea that exercise can enhance capabilities and modify behaviors and beliefs. (Aronsson et al., 2021)(Hervieux et al., 2023)(Hunter et al., 2021)(Jeong et

al.,2020)(Lusa et al.,2020) (O'Malley, 2021)(Petrovčič et al., 2022)(Ribas et al.,2020)(Santos and Miragaia, 2023)(Tarro et al.2020).

### ***Amplified Financial Gains***

Companies invest in assets to maximize profits and expand operations. To achieve a higher return on investment in employee physical activity, an analytical approach is necessary. Investing in factors that encourage increased physical activity among employees should lead to an overall increase in the labor supply. Moreover, investing in raising public awareness about the benefits of physical activity and the drawbacks of a sedentary lifestyle requires time to influence behavior, especially among at-risk groups. These educational interventions will increase the opportunity cost of leisure and the costs associated with inactivity. These effects will primarily affect the labor force through the income effect and, if successful, result in an increase in labor supply. Consequently, the entire labor supply curve will shift outward. Since the investment has not caused actual changes in wages, the increase in activity will simply lead to a movement along the supply curve. The wage elasticity of supply is crucial in this scenario. If it is high, even a slight increase in wages will prompt workers to increase their activity levels, which is desirable for employers. In such a situation, profitability is likely to rise due to the higher labor supply, even with an unchanged wage rate. (Cindiyaari et al., 2022) (Farooq et al., 2021)(Ge and Xu, 2021).

## **STRATEGIES TO PROMOTE PHYSICAL ACTIVITY IN THE WORKPLACE**

The workplace is an important setting for physical activity, as many adults spend a significant amount of their waking hours there. However, there has been limited exploration of promoting physical activity in the workplace. This study investigates attitudes and practices of workplace physical activity. The results show that individuals with white-collar occupations engage in less non-exercise activities compared to those in manual labor occupations.

Barriers to physical activity in the workplace include time pressures, fatigue, and a lack of resources and facilities. For instance, a recent review of qualitative research in the UK revealed that office workers often feel restricted due to a lack of feasible opportunities for physical activity during their working hours. Specifically, these workers expressed that they would be open to taking short active breaks if provided with viable options. An office worker in a Swedish study aptly described this situation by stating, "it needs to be easy to make the right choice," referring to the choice of breaking up sedentary time with physical activity. This sentiment aligns with social ecological models of behavior, which emphasize the importance of enhancing self-efficacy and offering environmental opportunities to promote behavior change. (Bukhsh et al., 2020) (Herrod et al., 2021) (Metcalf et al., 2020) (Reid et al.2022).

### ***Creating a Supportive Environment***

Creating a supportive workplace environment is crucial for promoting behavioral changes in health. Both the physical and cultural aspects of the workplace play a role in influencing employee health. Companies that prioritize employee retention and long-term health tend to have better health outcomes and reduced sick days. A supportive environment can be nurtured through employee participation in decision-making processes, teamwork, and a strong social support network. Tailoring interventions to the specific workplace and implementing changes such as creating resource centers, increasing access to stairs, and using point of decision prompts can effectively encourage healthier behaviors. Monitoring and follow-up assessments are important to ensure the effectiveness of these changes.(Sorn et al., 2023) (Szabó and Kajos, 2024).

### ***Offering Incentives and Rewards***

Offering incentives provides individuals with motivation to start a task and finish it. Incentives persuade people to dedicate more time to their workout program. The rewards can be non-monetary, such as a company-branded item or free nutritious meals. A study,

conducted in the United States, showed that 64% of employees would take better care of themselves if their employer offered a cash incentive. Another survey conducted in Australia revealed that 63% of individuals considered rewards to be very important or significant in their involvement in employment-based health promotion programs. Random rewards generate more enthusiasm than predetermined ones. They create uncertainty and encourage individuals to continue working diligently. A monthly raffle where exercise session attendees receive a ticket is a practical example of a random reward strategy. The names of 4-6 individuals can be drawn, and those who did not win can preserve their tickets for the next raffle. This strategy maintains individuals' interest with a slight probability of receiving a reward each month. (Colvin et al., 2021) (MacLeod & Urquiola, 2021) (Ravenelle et al., 2021) (Vonasch et al., 2024). (Vuong & Nguyen, 2022).

### ***Providing Accessible Exercise Opportunities***

In order to encourage consistent participation, it is important to customize physical activity to suit each person's individual requirements, preferences, and daily routines. Nonetheless, efforts to promote exercise in the workplace typically focus on group interventions, which may not be appealing to everyone. Employers should be prompted to adopt more innovative methods by employing a blend of individual and organizational strategies to enhance accessibility to exercise for a larger number of their staff members.

At the individual level, it is important to implement strategies that assist employees in incorporating exercise into their daily lives, whether it be during work hours or outside of them. This is particularly crucial as the perception of limited time is a significant factor contributing to the lack of physical activity among working adults. Organizations can consider offering seminars on time management or work-life balance, integrating exercise breaks into employee schedules, or motivating individuals to utilize their lunch or coffee breaks for engaging in physical activities.

Given that poverty often acts as an obstacle to physical activity, especially in developing nations, it is crucial to devise cost-effective strategies that can promote exercise among employees with low-paying jobs. One approach is to offer incentives for physical activity, such as monetary rewards or reduced health insurance premiums, to those employees who achieve specific exercise goals. Another effective method is to sponsor company teams for events like races and walks, or alternatively, provide subsidized exercise classes. Furthermore, providing educational resources and materials that explain where and how to engage in physical activity, as well as the optimal types and amounts of activity for various health outcomes, can greatly benefit employees who lack a strong understanding of these concepts.

## **CONCLUSION**

This study explored the relationship between physical activity and workplace productivity in Uganda. The literature points to significant advantages for promoting physical activity and its impact on employee productivity. Quantitative studies on Uganda are sparse and the country's cultural norms and economic status indicate that cut and paste physical activities from the West may not be possible in Uganda. However, there is need for Ugandan employers to provide opportunities for their workers to be physically active. There is also great need in Uganda for more objective studies examining this relationship and exploring different physical activities and their relative impact on productivity.



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**Influence of Structured Classroom Debates on Proficiency of  
English Language among Pupils in Selected Public Primary  
Schools in Mayuge District, Uganda**

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**Abstract**

*The study sought to establish the influence of structured classroom debates on the proficiency of the English language among pupils in selected public primary schools in Mayuge District. A cross-sectional design was used to conduct a study about debate and proficiency in English. The researcher prepared a set of structured questions for teachers in public primary schools. The interview guided interactions between the researcher and each head teacher. Four interview sessions, each not exceeding one hour per primary school, were held with each head teacher. Head teachers were asked to provide documented information about pupil performance. A focus discussion guide was prepared in line with the specific objectives of the study and used to obtain findings from learners. A strong positive statistically significant relationship ( $r = .478^{**}$ ;  $P = .000$ ) exists between structured class debating and proficiency in English for primary school pupils in Mayuge District. This finding suggests that engaging primary school pupils in structured class debating activities can significantly improve their proficiency in English. The correlation coefficient of 0.478 indicates a moderate strength of the relationship, while the p-value of 0.000 indicates a high level of statistical significance. Therefore, it can be concluded that incorporating debate exercises into the curriculum can be an effective strategy for enhancing English language skills among primary school pupils in Mayuge District. To enhance the influence of structured classroom debating on English proficiency among pupils: Teachers can provide a diverse range of debate topics that cater to different interests and levels of language proficiency.*

**Keywords:** Classroom, Debate, English Language, Proficiency

## **1. Introduction**

Structured classroom debate is a formal discussion where students argue for or against a specific topic in a systematic and organized manner. This type of debate typically follows a set format, with students presenting opening statements, rebuttals, and closing arguments (Winter & Antoine, 2019). On the other hand, Proficiency of the English language refers to a person's ability to communicate effectively in English, both verbally and in writing. It involves not only understanding and using grammar and vocabulary correctly, but also being able to convey ideas clearly and accurately (Seattle, 2015)

The origins of debate can be found in the intellectual scuffles between the renowned philosophers of Ancient Greece or the scholars of Ancient India (Winter and Antoine 2019). The Greek philosopher Socrates (c. 470-399 BC) sought to understand the world by teasing out the assumptions and principles that, often unwittingly, lay beneath the reasoning of his interlocutors, thus exposing self-interest, deception, and false reasoning for the smokescreens they were (Will 2020). In 63 BC, the orator and philosopher Cicero was famed for his ability to detect weaknesses in contemporary Roman government, most famously in his blistering, unrestrained attack on the aristocrat Catiline (Eelco 2020).

Debate has been considered as a potentially useful instructional strategy for speaking since it may be used to scaffold and feed the learning process in ways that can lead to language growth (e.g., Lustigova, 2011; Stewart, 2003). Speaking usually gets most of the

attention when there is a disagreement. Debaters frequently speak impromptu in addition to planned remarks to address the points of their opponents, especially during the "clash" stage.

The speaking skills of pupils are improved through debate participation, according to studies. In El Majidi, de Graaff, and Janssen's (2018) study, the debaters reported that debate improved their speaking abilities by a mean of 4.26 on a 5-point Likert scale. Every participant in O'Mahoney's (2015) study discovered that debates enhanced their public speaking skills. Participants in the tests conducted by Zare and Othman (2015) as well as Al-Mahrooqi and Tabakow (2015) also stated that debate had enhanced their verbal communication skills. However, in addition to instructor observations, all of the study that connected debate participation to the improvement of oral ability also relied on pupil surveys, questionnaires, and interviews. There is obviously a dearth of experimental evidence to back up the existing anecdotal evidence.

Debating is done because speaking English fluently is difficult without engaging in practices such as debates to improve speech and communication skills, communicate ideas, and this has been a success in many parts of the world (Awal, 2023). However, due to the aforementioned factors in Uganda's language strategy, children are not introduced to English at a period where they are anticipated to have keen recall and grasp concepts. The transitional level is difficult for pupils as they try to establish a balance between the local language and Language 2. The resulting effort is what most people refer to as "Broken English," in which the pupil attempts to

find the best words to utilize and speak effectively, resulting in a lack of "proficiency." This study assumes that by introducing debate in schools and advocating for it after the lower primary, one would be able to become proficient in English, especially given that proficiency is all about interacting with different people and learning how to use concepts during arguments. Debating among pupils in primary schools can take various forms, depending on the school's curriculum and resources. These include structured classroom debates, inter-class debates and inter-school debating competitions hence This study aims at establishing the influence of structured classroom debates on proficiency of English language among pupils in selected public primary schools in Mayuge District.

## **2. Methodology**

### **2.1 Research Design**

A cross-sectional design was used to conduct a study about debate and proficiency in English. This was because the researcher wanted to examine the relationship between debating skills and English proficiency in a specific time frame. By collecting data from participants of different proficiency levels at a single point in time, the researcher was able to compare debating abilities and English language proficiency levels accurately.

### **2.2 Study Population, sample size and sampling procedure**

The study population included Deputy Head teachers, teachers, head teachers, school management Committees and pupils. In this research, a random subset of each category was used as indicated in

the table below using Krejcie and Morgan (1970) table guide. The respective numbers of categories are as in the table below.

**Table 1: Population, sample size and procedure**

S/n	Category	Total Number (N)	Sample size	Procedure
1	Deputy Head teachers	4	4	Simple random
2	Head teachers	4	4	Simple random
3	Teachers	120	92	Simple random
4	School Management Committee (SMC)	48	40	Purposive
5	Pupils for primary seven	10 per school	40	Simple random
	Total	207	180	

***Source : Primary Data 2023***

Stratified sampling was used to identify the male and female teachers. After stratifying the population of teachers, selection of male and female representatives was done right away.

## **2.3 Instrument of Data Collection**

**Self-Administered Questionnaire (SAQ).** The researcher prepared a set of structured questions for teachers of public primary schools. The questionnaire was structured into sections: Section A sought for respondents' social demographic characteristics, including age, gender, working experience, subject taught and the period they have worked in the current primary school. Section B for the dependent variable (proficiency of English), section C contained items on the

independent variable (Debating) and then section D comprised questions on challenges. The composition of the questionnaire was in such a way that each of the questions about the main study variables were rated on a Linkert scale running from 1-Strongly Disagree, 2-Disagree, 3-Not sure, 4-Agree and 5-Strongly Agree.

**Interview Guide.** The interview guided interactions between the researcher and each head teacher at ago. Four interview sessions, each not exceeding one hour per primary school, were held with each head teacher. Head teachers were asked to provide documented information about pupil performance.

**Focus Discussion Guide for learners.** A focus discussion guide was prepared in line with specific objectives of the study and used to obtain findings from learners. The use of the Focus Discussion guide is to cater for two issues: 1). some learners may not be in position to fill in questionnaires and 2) it is easier to obtain responses from learners in a group than individual learners. It also makes sharing of views easy.

## **2.4 Data Presentation and Analysis**

Data from questionnaires were selected according to the major subthemes. Findings from demographic characteristics were entered into the computer using the statistical package for social sciences spreadsheet version 22 and automatically generate frequencies and line percentages. Results were presented in summary tables to show the frequency and score rates. Findings from demographic characteristics were entered into the computer using the statistical

package for social sciences spreadsheet Version 22 and was automatically generated frequencies and line percentages. Results were presented in summary tables to show the mean and standard deviation with the scale to explain the results as follows: 1.00-1.80 is graded as strongly disagree, 1.81-2.60 is graded as Disagree, 2.61-3.40 is graded as Neutral or uncertain, 3.41- 4.20 stands for Agree, and 4.21-5.00 for Strongly Agree.

### **3. Results and Discussion**

The results for first objective were obtain by establishing scores for individual items of structured debating and performing a Pearson coefficient correlation analysis to determine the influence rate. Table 9 show results obtained for structured class debates with the scale of interpreting scores as follows; Mean score from 1.00-1.80 is graded as strongly disagree, Mean score from 1.81-2.60 is graded as Disagree, Mean score from 2.61-3.40 is graded as Neutral or uncertain, Mean score from 3.41- 4.20 stands for Agree, and Mean score from 4.21-5.00 for Strongly Agree.



**Table 2: Results for Structured class Debating**

	<b>Structured class debating</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>M</b>	<b>SD</b>
1	Promotion of oral communication in English	136	1.00	5.00	3.69	1.18
2	Opportunity for individual participation in debate	136	1.00	5.00	3.85	0.98
3	Testing of reading skills	136	1.00	5.00	3.63	1.05
4	Testing of comprehension	136	1.00	5.00	3.60	1.06
5	Open mind discussions	136	1.00	5.00	3.55	1.13
6	Welcoming atmosphere with empathy	136	1.00	5.00	3.80	1.03
7	Logical arguments for efficiency in speaking	136	1.00	5.00	3.44	1.26
8	Assessment and evaluation	136	1.00	5.00	3.58	1.11
9	Making conclusions based on assessments	136	1.00	5.00	3.70	1.09
10	Heated arguments and defence of ideas	136	1.00	5.00	3.16	1.24

***Source : Primary Data 2023***

The results concerning the statement that structured class debating leads to promotion of oral communication in English receive a rating of mean = 3.69 and SD = 1.18, and were evaluated as agreeable. The mean rating of 3.69 suggests that many participants agreed that structured class debating promotes oral communication in English. Additionally, the relatively low standard deviation of 1.18 indicates that there was a consensus among the respondents. These results indicate that structured class debating is well-received and effective in improving oral communication skills in English. These results are in line with research by Majidi et al. (2021) and Williams-Brown (2015), which suggests that introducing structured

discussions into the classroom gives pupils a forum to actively participate in oral communication and articulate their ideas in English.

The results regarding the statement that structured class debating provides an opportunity for individual participation in debate received a rating of mean = 3.85 and SD = 0.98, and were also evaluated as agreeable. This suggests that participants recognize the value of structured class debating in allowing everyone to actively participate in the debate. The high mean rating indicates a positive reception towards this aspect of structured class debating, while the relatively low standard deviation suggests a general agreement among the respondents. The results are consistent with Beqiri's (2018) study, which shows that in order for pupils to take part in organize debates, they must perform research and learn about a range of topics. This improves pupils' reading and comprehension abilities.

The results regarding the statement that structured class debating provides an opportunity for testing of reading skills received a rating of mean = 3.63 and SD = 1.05, and were also evaluated as agreeable. These results indicate that structured class debating is perceived as a valuable tool for assessing and improving reading skills. The relatively high mean rating suggests that most respondents recognize the benefits of this aspect of debating. Additionally, the low standard deviation indicates a consensus among the participants, further supporting the notion that structured class debating effectively promotes the testing of reading skills. Like Beqiri (2018),

pupils who participate in organized debates may enhance their listening comprehension as they are obligated to listen intently to the arguments and counterarguments put forth by their peers. In addition, the findings pertaining to the claim that organized class debating fosters unbiased conversations were deemed acceptable.

In addition, the results regarding the statement that structured class debating provides an opportunity for testing comprehension received a rating of mean = 3.60 and SD = 1.06 and were also evaluated as agreeable. These findings suggest that structured class debating is effective in testing pupils' comprehension. The mean rating of 3.60 indicates that many participants agreed that this method provides an opportunity for testing comprehension. The low standard deviation of 1.06 suggests that there was a consensus among the respondents regarding the agreeability of this statement. These results highlight the positive impact of structured class debating on pupils' comprehension assessments. The high mean rating and low standard deviation also imply that structured class debating is consistently effective in testing pupils' comprehension across a diverse range of participants. Cuncic (2022) finds that when pupils participate in debates that call for careful listening and careful responding, they develop a greater awareness of other people's opinions and a more open mind, which may also help to explain the outcomes. Research by Schloss (2011) further supports these results, showing that doing so fosters in pupils a sense of empathy and understanding that enhances the positive and inviting environment in the classroom.

Further, the results regarding the statement that structured class debating provides an opportunity for open-minded discussions received a rating of mean = 3.55 and SD = 1.13 and were evaluated as agreeable. This suggests that pupils perceive structured class debating to foster open mindedness and encourage respectful dialogue among peers. The relatively low standard deviation indicates that most pupils agreed with this statement, further highlighting the positive reception of this teaching approach. The findings demonstrate that structured class debating is not only effective in assessing comprehension but also contributes to an engaging and valuable learning experience that promotes open-minded discussions. The results regarding the statement that structured class debating provides a welcoming atmosphere with empathy received a rating of mean = 3.80 and SD = 1.03 and were evaluated as agreeable. This suggests that pupils feel comfortable expressing their opinions and that there is a sense of understanding and respect among classmates during these debates. According to Schloss (2011), for pupils to effectively express their opinions, they must learn how to organize their ideas, support them with facts, and create arguments that make sense. Their capacity to think critically and analytically about what they write is enhanced, as are their writing abilities.

Furthermore, the results regarding the statement that structured class debating provides opportunity for logical arguments for efficiency in speaking received a rating of mean = 3.44 and SD = 1.26 and were evaluated as agreeable. These results suggest that participants

generally agreed that structured class debating allows for logical arguments and improves speaking efficiency. However, the relatively high standard deviation indicates that there may be some variability in participants' opinions. In other words, while many participants agreed that structured class debating is beneficial for logical arguments and speaking efficiency, there may be a subset of participants who hold differing opinions. This variability could be attributed to individual preferences, prior experiences, or personal biases. Future research could delve deeper into understanding the factors that contribute to this variability and explore ways to mitigate it for more consistent results.

Additionally, the results regarding the statement that structured class debating provides opportunity for assessment and evaluation in speaking English received a rating of mean = 3.58 and SD = 1.11 and were evaluated as agreeable. These findings suggest that most participants agree that structured class debating is an effective method for assessing and evaluating English speaking skills. However, the slightly higher standard deviation indicates that there is a subset of participants who may not fully agree with this statement. The results regarding the statement that “structured class debating provides opportunity for drawing conclusions based on assessments” received a rating of mean = 3.70 and SD = 1.09 and were evaluated as agreeable. The evaluation of this statement as agreeable suggests that structured class debating is seen as a valuable tool for reaching conclusions through assessments. This relates to Huang et al. (2020), who note that engaging in discussions

gives pupils the chance to learn about a range of viewpoints, evaluate the validity of sources, and examine the logical coherence of arguments.

The results regarding the statement that “structured class debating provides opportunity for heated arguments and defense of ideas” received a rating of mean = 3.16 and SD = 1.24 and were evaluated as neutral results. The relatively lower mean rating for this statement indicates a more neutral perception among respondents. The higher standard deviation suggests a greater level of variability in the responses, indicating that opinions on this statement were more divided. It can be inferred that while some participants may see structured class debating as an opportunity for heated arguments and defense of ideas, others may not perceive it in the same way. According to Wale and Bishaw (2020), pupils may develop their communication skills by engaging in debates, which force them to present their points of view in an eloquent and persuasive manner. Pupils gain from this not just in academic settings but also in real-world scenarios where effective communication is necessary.

**Table 3: Relationship between Structured class Debating and Proficiency in English**

		Proficiency in English	
Proficiency in English	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	136	
Structured Class debating	Pearson Correlation	.478**	1
	Sig. (2-tailed)	.000	
	N	136	136
<b>**.</b> <i>Correlation is significant at the 0.01 level (2-tailed).</i>			

Table 3 shows that a strong positive statistically significant relationship ( $r = .478^{**}$ ;  $P = .000$ ) exists between structured class debating and proficiency in English for primary school pupils in Mayuge District. This finding suggests that engaging primary school pupils in structured class debating activities can significantly improve their proficiency in English. The correlation coefficient of 0.478 indicates a moderate strength of the relationship, while the p-value of 0.000 indicates a high level of statistical significance. Therefore, it can be concluded that incorporating debating exercises in the curriculum can be an effective strategy for enhancing English language skills among primary school pupils in Mayuge District. Furthermore, the study also found that pupils who regularly participated in class debates showed a greater improvement in their overall language skills compared to those who did not engage in such activities. This suggests that debate-based learning can not only enhance English proficiency but also foster critical thinking and communication skills. As a result, it is recommended that schools in Mayuge District consider implementing debating exercises as a regular part of their English curriculum to further support the development of pupils' language abilities.

On the qualitative side, head teachers and pupils were asked; of what benefit are the structured class debates?

**FGD-**Structured debating is important for primary school learners as it helps develop critical thinking skills and the ability to articulate thoughts and ideas effectively. It also encourages active listening and respectful communication, as pupils must consider opposing

viewpoints and respond thoughtfully. Additionally, structured debating fosters confidence and self-expression, as learners gain the opportunity to express their opinions and defend their arguments in a structured and supported environment.

**Interview-**Structured debating in primary schools offers several advantages for both pupils and teachers. Firstly, it enhances critical thinking skills as pupils learn to analyze arguments, evidence, and counterarguments. Secondly, it fosters effective communication skills as pupils learn to articulate their thoughts clearly and persuasively. Additionally, structured debating promotes teamwork and collaboration, as pupils work together to prepare arguments and counterarguments. Lastly, it helps develop research skills as pupils gather and analyze information to support their arguments.

#### **4. Conclusion**

A strong positive and statistically significant correlation ( $r = .478^{**}$ ;  $P = .000$ ) was established between structured class debating and English competency among primary school pupils in Mayuge District. This discovery implies that involving elementary school pupils in well-organised classroom debates might greatly enhance their English language skills. The correlation coefficient of 0.461 signifies a moderate level of strength in the association, while the p-value of 0.000 shows a high degree of statistical significance. Thus, it can be inferred that integrating debating exercises into the curriculum can serve as a potent approach to bolstering English language proficiency among primary school children in Mayuge District.



## 5. Recommendation

It is recommended that to enhance the influence of structured classroom debating on English proficiency among pupils:

Teachers can provide a diverse range of debate topics that cater to different interests and levels of language proficiency. This will encourage active participation and allow pupils to practice using English in various contexts.

Additionally, incorporating feedback sessions after debates can help pupils identify areas of improvement and work on specific language skills.

Organizing interclass or interschool debate competitions can create a competitive spirit, motivating pupils to excel in their English language abilities.

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# **Role of job delegation on participatory decision making in**

**National Drug Authority, Kampala Uganda**

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## **Abstract**

*This research assessed influence of participatory decision making on organizational performance at National Drug Authority Kampala Uganda to establish the role of job delegation on organizational performance. The study employed a descriptive survey research design where 286 respondents were selected and consented to participate in the study. The mean scores less than three (<3) reveals disagree in responses and the scores above three (>3) reveal agree in responses. Standard deviation scores less than one (<1) reveal employees in responses and the scores above one (>1) reveal divergences (varying responses). There was a significance of 0.041 at 5% level between communication channel variable; . The results presented in Table 1 indicated that 4.9% of the supervisors are not willing to stand up for the subordinates. 12.9% of the supervisors agreed that they will stand up for them to a small extent. 33.1% indicated that they will moderately stand for the subordinates. 30.7% of the supervisors agreed that they will highly stand for the subordinates. 18.7% of them are in support of highly standing up for the subordinates. From the findings, it is evident that job delegation, interpersonal relationship and effective communication had a positive impact on effective Organisational performance. It was concluded that delegation has great impact towards employee performance especially in economic development and competitive business environment. Therefore, the researchers recommend that: Communication and conflict management training must be given to all employees to address common problems. Timely delivery of information from management must be practiced which reduces pressure on employees. A study can be carried out in future to determine if management styles and employees attitudes affect effective communication in organizations. Feedback must be encouraged to ensure that there is understanding from both*

*management and employees regarding tasks, goals, objectives.*

***Keywords: Community, National Drug Authority, Participation***

## **1. Introduction**

Organizational performance (OP) is an indicator which measures how well an enterprise achieves their objectives (Hamon, 2003). Organizational performance is concerned with product or service quality, product or service innovation, employee attraction, employee retention, customer satisfaction, management/employee relation and employee relation (Delaney and Huselid, 1996). Human resources have been identified to be both valuable and a source of competitive advantage (Legge, 1995). According to Bontis (1999), the human elements of the organization are those that are capable of learning, changing, innovating and providing the creative thrust which if properly motivated can ensure the long-term survival of the organization. Delery (1998) observed that the methods used by an organization to manage its human resources can have a substantial impact on many organizationally relevant outcomes.

An organization's success depends heavily on its ability to adapt to its environment and its ability to tie people into their roles in the organization, conduct its transformative process, and manage its operations (Armstrong, 2006). Studies have showed empirical evidence that demonstrated a linkage between a firm's human 'resource management (HRM) practices and performance. In America, Wright, et al., (2005) explored the effect of HRM practices on firms' performance in 45 business units in America and Canada and established a causal association between HRM practices and

business performance. In Israel, Harel and Tzafrir (1999) found that HRM practices had positive relationship with firms' performance in public and private sectors. Harel and Tzafrir (1996) argued that HRM practices improve employee's knowledge, skills and abilities through enhanced motivation. In Kenya, several studies have been carried out on human resource development and organizational performance. Maritim (2007) studied training and development programmes and their impact to effective organizational performance and concluded that training increases organizational performance. Koskey (1997) studied the impact of organizational development management strategies on working conditions and performance in an institution of higher learning. The study found out that adoption of organizational development strategies had the potential to influence management practices, working conditions and performance in institutions of higher learning. With the success of NDA, research to link the organization's management practices to organizational performance is of great concern to stakeholders.

The National Drug Authority (NDA) was established in 1993 by the National Drug Policy and Authority Statute which in 2000 became the National Drug Policy and Authority (NDP/A) Act, Cap. 206 of the Laws of Uganda (2000 Edition)

The Act established a National Drug Policy and National Drug Authority to ensure the availability, at all times, of essential, efficacious and cost-effective drugs to the entire population of Uganda as a means of providing satisfactory healthcare and safeguarding the appropriate use of drugs. Its vision is "A world

class drug regulatory Agency and its mission is ‘To protect and promote human and animal health through the effective regulation of drugs and healthcare products’.

## **2. Materials and Methods**

**Study design:** This study used descriptive survey research design. Descriptive survey research design was appropriate for this study because the study aimed at gathering facts, knowledge, opinions and attitudes about people, events or procedures. Descriptive research studies are designed to describe people’s responses to information concerning the status of phenomenon with the aim of understanding their perception and whenever possible to draw conclusion from the facts discovered.

**Setting:** This study was conducted in National Drug Authority, Kampala District. Kampala is the capital and largest city of Uganda. The city proper has a population of 1,680,000 and is divided into the five political divisions of Kampala Central Division, Kawempe Division, Makindye Division, Nakawa Division, and Rubaga Division.

Kampala's metropolitan area consists of the city proper and the neighboring Wakiso District, Mukono District, Mpigi District, Buikwe District and Luweero District. It has a rapidly growing population that is estimated at 6,709,900 people in 2019 by the Uganda Bureau of Statistics in an area of 8,451.9 km<sup>2</sup> (3,263.3 square miles).

In 2015, this metropolitan area generated an estimated nominal GDP of \$13.80221 billion (constant US dollars of 2011), which was more than half of Uganda's GDP for that year, indicating the importance of Kampala to Uganda's economy.

Kampala is reported to be among the fastest-growing cities in Africa, with an annual population growth rate of 4.03 percent, by City Mayors. Mercer (a New York–based consulting firm) has regularly ranked Kampala as East Africa's best city to live in, ahead of Nairobi and Kigali.

**Participants:** For one to participate in this research, the researchers ensured that they should be impacted, in either way by the participatory decision making in NDA, however, those already acquainted with management practices were excluded, including those who refused to consent.

**Study size:** A sample is a small proportion from the target population selected for observation and analysis. It is a fraction or portion of a population selected such that the selected portion represents the population adequately. Sample size was calculated using Krejcie & Morgan (1970) calculated sample size summarized below

**Table 1: Study sample size**

SNo.	Target group	Number
1	Administrators	20
2	Staff	30
3	Support staff	75
	Total	165

**Statistical methods:** Depending on the available circumstances, a triangulation of data collection methods was used to collect data. Purposive sampling of the participants was used to select participants. In addition, the lottery method was used where by ten cards were marked. Seven of them were marked “Yes” for those to participate in the study and three of them were marked “No” for those who did not participate in the study. The cards were then put in a jar and shaken. Respondents were asked to dip their hands into the jar and pick a card. Those who picked “yes” were interviewed and marked to avoid repetitions.

### **Data Analysis**

The data collected from different questionnaires was organized to ensure order. Editing and crosschecking were done to detect errors and corrections made. This helped to find out completeness in the questionnaires. After editing the data, it was coded. This involved assigning of symbols to answers so that data can be categorized for example by age, level of education and gender. Quantitative data was entered into Statistical Package for Social Sciences (SPSS) version 21, summarized and presented in frequency tables. Pearson correlation analysis was conducted to establish whether there is a significant relationship between: participatory decision making and performance in NDA.



### 3. Results and Discussion

#### 3.1. Role played by job delegation on participatory decision making

Objective one of the study was to assess the role played by job delegation in participatory decision making on Organisational performance in NDA. Organisational performance was measured using a number of questions with following responses obtained in return (Table 4.4).

**Table 4.4: Role played by job delegation**

Questionnaire item	N	Mean	Std. Deviation
I am given chance to give my opinion.	165	3.69	1.35
I participate in decision making.	165	3.51	1.42
NDA leaders discuss Management plans with workers.	165	2.84	1.26
Leaders carry out regular surveys on the needs of their employees.	165	2.77	.77
There is deliberate plan to delegate by the supervisors	165	2.80	.81
Delegation plans are discussed in all departments	165	2.91	.76
NDA consultants other experts	165	2.61	.60
Valid N (list wise)	165		

**Source: Primary Data, 2023**

The mean scores less than three (<3) reveals disagree in responses and the scores above three (>3) reveal agree in responses. Standard deviation scores less than one (<1) reveal employees in responses and the scores above one (>1) reveal divergences (varying responses). Lastly, both agreed and strongly agreed were combined

to represent agreed scores and both disagreed and strongly disagreed were combined to reflected respondents that disagreed.

On whether employees are given chance to give their opinion on Organisational performance, a mean score 3.69 means that majority of study participants were in agreement with the statement. These findings are attributed to the fact that NDA encourages employees' participation where many of the stakeholders were encouraged to head some sections and participate equally through sharing and exchanging of ideas in the development of the organisation hence intended to better the effective management of NDA. On planning, it can be said that, a bottom up approach seemed too have been adopted where NDA plans strategically hence views and ideas are brought up for inclusion in goal and objective setting.

However, on the issue of whether the employees discussed issues to do with delegation with their respondents, a mean score of 2.86 indicate that majority of respondents were in disagreement. The result meant that fewer NDA staff are consulted in the delegation roles. In addition, it can also be observed that most of the leaders after assuming offices they would not take delegation serious. These numeric findings can be supported by qualitative information obtained where one respondent stressed that;

*“To a less extent during planned budget conferences where employees are given opportunities to share their proposals on what they want to be done. However, if their proposals rank highest they are taken”.*

One respondent said,

*“We normally seek for views from all employees during our planning meetings in the months of November, December and January”*

These qualitative results meant that the employees still believed that they were not well informed of what was expected of them while planning hence information flow seemed inadequate amongst. They were supposed to be briefed on what they should have done present in the planning meetings in relation to participatory decision making.

On whether the Supervisors carried out regular surveys on the needs of their employees, a mean value of 2.77 implies that majority of the respondents were in disagreement with the claim. Findings revealed that the employee is not aware. This attributed to the fact that most communication channels were insufficient to allow massive dissemination messages as most of them were informal in nature as compared to the formal means.

While one employee said, *“Message transmission is not enough there is need to give regular information.”*

On whether consultation with potential partners and stakeholders is done, a mean score of 2.8 implies that majority of respondents disagreed. Findings indicate that when plans are drawn they are not presented to the employees to enable it follow the activities to be done meaning that there is a communication problem. That is why some employees do not follow what has been planned hence the reason of having delayed service deliveries.

On whether delegation plans were adhered to and enforced; most respondents revealed that they expected more to be done. In terms of comparability and using the mean scores obtained, out of the 7 questions whether an employee is involved in planning, only 2 questions, obtained scores above 3 which means most questions were answered in a negative way.

Delegation is always on the fore front when it comes to the performance of the employees and that of the organization in general. It is up to the management to ensure that delegation is taking place in the company to enhance its performance so as to yield the expected results and goals of the organization. In regard to the objective of finding out why managers don't delegate it was revealed that; Managers do not empower staff to enable them to take up delegation successfully and it was shown by 60% of the respondents. This was also deduced from the staff that held one position for a very long period of time.

#### **4. Conclusion**

From the findings, it is evident that job delegation, interpersonal relationship and effective communication had a positive impact on effective Organisational performance. It was been observed that delegation has great impact or effect towards employee performance especially in economic development and competitive business environment where by organizations need to have skilled employees who are flexible to carry out the tasks of the organization effectively enhancing its potentials to meet its goals. From the study it could be deduced that delegation influences the performance of the employee

by improving their ability to perform different tasks allocated to them as it stimulates innovation and creativity in their working |leaving them to perform more efficiently and effectively leading to the achievement of the organization goals.

## **5. Recommendations**

On the basis of the results obtained from the study the researcher cited areas that need improvement in making sure that delegation is well implemented to improve the performance of the employee and that of the organization at large.

### **a) Measures for effective delegation**

The company should ensure that the potential delegate feel secure in his job. There should also be creation of awareness for the need of delegation through proper education, training and refresher courses. Conducive organizational climate should be established that is free from fear and frustration, satisfactory compensation and continuous management development.

### **b) Leadership commitment**

The top management should be committed to ensure that there are clear policies governing the delegation and have a follow up on how it is implemented. There should be set goal to be achieved through delegation to ensure it has more meaning to the employees. This involves allocating funds to be used as remuneration to the delegate after successfully accomplishing the task.

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**Solid Waste Management and Environmental Conservation in  
Makindye Ssebagabo Municipality, Uganda  
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**Abstract**

*Increased generation and disposal of solid waste has greatly affected the environment and its resources. The study examined the effects of solid waste management on environmental conservation in Makindye Ssebagabo Municipality, Wakiso Uganda. The study employed both Qualitative and quantitative techniques to data collection. Data was through self-administered questionnaires, interview guides and observation, and analyzed using SPSS to generate descriptive statistics and relational statistics. The findings revealed the existing solid waste management practices as open burning, composting, land filling, incineration and indiscriminate dumping. The major findings most preferred method and the percentage that is; open burning (37.5%), composting (25.0%), land filling (16.7%) incineration (13.9%) and indiscriminate dumping (6.9%). The researcher observed that respondents attached great importance to open burning of solid wastes since it was cheap and convenient for them. The study concludes that there is a weak but significant relationship between solid waste management practices and their effects on the environment. It therefore, recommends that Makindye Sabagabo municipal council should emphasis on composting of biodegradable wastes while the in organic wastes be recycled or reused, further the study recommends disposal of wastes to be undertaken in a scientific manner and encourage environmental impact assessments be done for the various waste management methods.*

**Keywords:** *Environmental conservation, Open burning, Solid waste*

## **1. Introduction**

In most developing countries, typically one to two thirds of the solid waste is not collected (Zerbock, 2018) as a result, the un collected waste, which is often also mixed with urban and animal excreta is dumped indiscriminately in the streets and in drains, contributing to flooding, breeding of insect and rodent vectors and the spread of diseases such as cholera. Solid waste management encompasses generation, collection, transportation and disposal of urban waste. Urban authorities have the responsibility to ensure safe, reliable and cost effective removal and disposal of solid waste, which takes up a large population of available resources which are not adequate to cope with the magnitude of the problem (NEMA 2016).

Today waste management is a critical issue in Uganda's urban areas. Almost on daily basis there are press reports highlighting the appalling waste management situation in the urban centres. Among the issues regarding waste management is the inability and inefficient ways to cope with the intensifying amount of waste generation and the increasing urban population. As a consequence, this has raised environmental and health concerns. Dealing with health and environmental issues in a rapidly urbanizing context leads to ever increasing volume of generated waste, posing a major challenge. This is particularly the case in the area of solid waste management. While Makindye Sabagabo Municipality is generating an ever-increasing quantity of solid waste, the effectiveness of its waste collection and disposal systems are not yet to standard.

Waste handling implies managing the solid waste throughout various processes prior to disposal. It starts with the generation of the waste continuing through storage, collection them and transporting them to the ultimate disposal. Currently all matters concerning waste management is the mandate of Makindye Ssebagabo Municipality. The best approach perhaps is to forestall waste ahead of its generation. A waste should not be considered a waste until it is confirmed to be useless. Most waste can be recycled and can be disposed separately within the household. The study sets investigated solid waste management methods in Makindye Ssebagabo Municipality and their effects on health and environment.

## **2. Methods**

A cross sectional design using quantitative and qualitative approach were used. A cross sectional was used because the information on solid waste practices and their effects on the environment conservation was collected at that point in time from a simple population (Amin, 2005). The study population was 479 and consisted of all the households of Makindye Ssebagabo Municipal Council which included; the Mayor, Councilors, Heads of departments (Technical staff) in Makindye Ssebagabo Municipal Council (Government Officials), division chairpersons, garbage collection Headman) business operators, heads of households, nongovernmental organizations among others. Sample size was determined using a table provided by Krejcie and Morgan as cited in Amin (2005). In this case, each respondent had an equal chance of being selected and therefore the findings were acceptable as being

representative of the population of study for Makindye Ssebagabo Municipal council. Data was collected using interview and questionnaires where the questionnaire had both open and closed ended questions that respondents fill or complete in writing to suit the research objectives and questions. The study further used interview

### **3. Results and Discussions**

#### **3.1. Solid waste management practices**

**Table 1: Solid Waste Management practices in Makindye Ssebagabo Municipality**

<b>SWMP</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Recycle	52	30.6
Reuse	72	42.4
Dumping	160	94.2
Composing	112	65.9
Burning	134	78.8
Energy recovery	36	21.2

***Source: Primary Data, 2023***

From the above table, 94.2% respondents agreed that dumping is the most common solid waste management practice in Makindye Ssebagabo Municipality. This was followed by 78.8% of the respondents who identified burning. 65.9% identified composing, 42.4% identified reuse, and 30.6% identified recycle whereas the least 21.2% identified energy recovery as a solid management practice.

### **3.2. Effects of solid waste management practices on the environment conservation**

Data pertaining to this was generated through survey questionnaire and interviews. The results are presented and discussed below.

#### **Positive effects of solid waste management**

Several items in the questionnaire were presented to the respondents and the findings are show below.

**Table 2: Positive effects of solid waste management**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Reduce on pollution	112	80.0
Conserve resources	138	98.5
Reduce damage on ecosystem	98	70.0
Promotes a healthy economy	86	61.4

***Source: Primary Data, 2023***

From table above, majority of the respondents (98.5% agreed that solid waste management helps on reducing pollution. This was followed by 80% who suggested that solid waste management helps on reducing damage on ecosystem. The rest of the respondents (61.4%) asserted that solid waste management promotes a healthy economy.

**Table 3: Negative effects of solid waste management**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Soil contamination	133	95.0
Water contamination	140	100
Human damage	76	54.2
Air contamination	104	74.3
Weather changes	43	30.7

***Source: Primary Data, 2023***

From table above, it can be observed from respondents that improper solid waste management leads to water contamination. This was supported by all (100%) of the respondents to the study. 95.0% of the respondents agreed that improper solid waste management lead to soil contamination. 74.3% suggested that improper solid waste management leads to air contamination, 54.2% of the respondents asserted that improper solid waste management leads to human damage whereas the rest (30.7%) suggested that improper solid waste management leads to weather changes.

Open burning method is one of the oldest ways used to manage solid waste. It is easy to use but also the least expensive way to burn municipal waste, if properly used. The method, however, has its dangers and hazards.

Open burning releases many pollutants into the atmosphere (State of Alaska, 2016), these include, dioxins, polycyclic aromatic compounds, volatile organic compounds, carbon monoxide, hexachlorobenzene, and ash. All of these chemicals pose serious health and environmental hazards. The dioxins are capable of producing a multitude of health problems; they can have adverse effects on reproduction, development, disrupt the hormonal system or even cause cancer. The polycyclic aromatic compounds and the hexachlorobenzene are considered to be carcinogenic. The particulate matter can be harmful to person with respiratory problems such as asthma or bronchitis and carbon monoxide can cause neurological symptoms.

The harmful effects of open burning are also felt by the environment (state of Alaska, 2016), this process releases acids such as the halo-hydrides; it may also release the oxides of nitrogen and carbon. Nitrogen oxides contribute to acid rain, ozone depletion smog and global warming. In addition to being a greenhouse gas, carbon mono oxide reacts with sunlight to produce ozone which can be harmful. The particulate matter crates smoke and haze which contribute to air pollution.

Open burning in Makindye Ssebagabo Municipal Council, as in all urban areas of Uganda and much of the developing world is not done in a managed way. This then opens communities to the hazards pointed out above. How much open burning has contributed to some of the health problems in Makindye Ssebagabo Municipal Council has not been established, but it is a matter of conjecture.

#### **4. Conclusion**

The most preferred solid waste management methods in order of preference in Makindye Ssebagabo Municipality are open burning, composting, land filling, incineration and indiscriminate dumping. The researcher found out that since the solid waste generated in Makindye Ssebagabo Municipality were not too much open burning was being practiced however composting was highly used by those practicing urban farming.

## 5. Recommendations

The researcher recommends that to reduce the effects of the solid wastes, proper management methods should use appropriate methods like promotion of reduction, reuse and recycle. This should include having compulsory deposit – refund system in the municipality.

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# **Domestic Violence and Child Development in Uganda: A Case Study of Buikwe District, Njeru Municipality**

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## **Abstract**

*According to the United Nations report on domestic violence (2020), domestic violence is typically a pattern of abusive behavior towards an intimate partner in a dating or family relationship, where the abuser exerts power and control over the victim. This study focused on domestic violence and child development, a case study of Njeru Municipality, Buikwe District. Specifically, it established the prevalence of domestic violence and assessed the effect of domestic violence on child development in Njeru Municipality Buikwe District. The study instruments used were questionnaires and interview guides and 80 respondents were sampled. The questionnaires contained closed ended questions while the interview guides contained open ended questions. The study employed simple random sampling technique which involves probability selection of respondents. The study revealed that domestic violence is prevalent in Njeru Municipality, Buikwe District and it has significant adverse effects on child development. It was found out that domestic violence adversely affects child's mental, physical, moral and emotional development. The study recommended community mobilization and sensitization; Government poverty alleviation programs and law enforcement by government should be promoted to control domestic violence.*

***Keywords: Child development, divorce, domestic violence***

## **1. Introduction**

According to the United Nations report on Domestic Violence, (2020), anyone can be a victim of domestic violence, regardless of age, race, gender, sexual orientation, faith or class. Victims of

domestic abuse may also include a child or other relative, or any other household member and domestic violence can be mental, physical, economic or sexual in nature. On the other hand, Child development is the physical, cognitive, and social growth that begins at birth and continues into adulthood (Allen, 2015).

Domestic Violence becomes traumatic when the victim does not have the ability to consent or dissent, which, in turn, is linked with the universal experience of helplessness and hopelessness engendered by victimization” (Marie Abraham-Robinson, (2018). Preschool children exposed to IPV show more behavior problems and significantly lower self-esteem than do older, school-aged children exposed to IPV (Marie Abraham-Robinson, (2018). Children have continued to experience neglect like; denied basic needs like education, medical care, shelter resulting in severe consequences on the child’s mental health and development. (Badoe, 2017). Domestic Violence is a social problem that covers the whole globe however it only differs in its magnitude and forms. According to the World Health Organisation, (2019), the two regions with the highest-known prevalence of IPV are Sub-Saharan Africa, where 33% of women aged 15–49 years have suffered IPV in their lifetime.

In East Africa, a survey by the World Health Organization indicates that in 2017, over 71% and 66% of boys and girls experience the worst forms of domestic violence. The survey depicts a slight difference in the case of Tanzania which registered 55% and 53% of sexual and physical violence suffered by both boys and girls as a

result of neglect from their parents and other care givers (WHO, 2019).

According to the National Survey on Violence against Women in Uganda, (2021) as presented by the Minister of Gender, Labour and Social Development, Betty Amongi to parliament, it was found that 95% of the respondents experienced either physical or sexual violence by partners or non-partners since the age of 15 years. It is against this background that examined effect of domestic violence on child development in Njeru municipality, Buikwe district.

## **2. Methods**

This study is a survey and it employed a cross sectional design using quantitative and qualitative methods. A total of 80 participants were determined from a target population of 100 using Slovic's formula and data was collected through Polls, questionnaire and interview from the selected respondents. Random sampling and purposive sampling. It was then analyzed SPSS to generate descriptive statistics.

## **3. Results and Discussion**

### **3.1. Prevalence of domestic violence in Njeru Municipality**

Results of the study showed that domestic violence is prevalent in Njeru Municipality Buikwe District. For example; 12% of the respondents showed that their parents do not at all teach them to keep safe and clean, 39% of the respondents revealed that their parents sometimes teach them to keep themselves clean and safe, 28% of the respondents most times teach them to keep themselves

clean and safe. 40% of the respondents commented that most times their parents teach them to keep safe from physical injuries, 43% revealed that their parents sometimes teach them to protect themselves from physical injuries

**Table 1: Summary of prevalence of physical violence**

Statement	Not at all (%)	Sometimes (%)	Mostimes (%)	All times (%)
Do your parents/ care givers teach you to keep safe from physical injuries?	12	43	40	6
How often do your parents/ caregivers provide you with basic needs?	12	39	35	15
Do your parents/ care givers teach you to keep yourself clean and smart?	12	39	28	20

***Source: Primary Data, 2023***

The study findings above implies that a significant number of children suffer physical violence because their parents do not at all teach them to keep safe and clean. According to Train Education (2024), physical violence against children is manifested in a number of ways such as inadequate protection given to children by parents or caretakers, this result into unexplained physical injuries, multiple bruises in various stages of healing, bruises located on child's face, ears, necks and other parts of the body.

### 3.2 Prevalence of child emotional and metal violence

**Table 2: Summary of prevalence of emotional violence and mental distress.**

Statement	Not all (%)	Sometimes (%)	Most times (%)	All times (%)
Do your parents console you when you are angry?	17	29	33	21
Do your parents motivate you whenever you do something best?	10	44	29	17
Do your parents praise you and thank you for being nice to them?	12	42	34	12
Do you feel comfortable whenever you are with your parents?	13	35	27	26
<b>prevalence of mental distress.</b>				
<b>Mental distress</b>	<b>Frequency</b>		<b>Percentage (%)</b>	
No mental distress	21		46.7	
Moderate distress	14		31.1	
Serious distress	10		22.2	
<b>Total</b>	<b>45</b>		<b>100</b>	

*Source: Primary Data, 2023*

For emotional and mental violence, the research findings also revealed that 17% of the respondents showed that their parents do not at all console them when they are angry, 29% sometimes console them when they are angry. Failure to console, appreciate and praise children indicates emotional violence since such children tend to develop negative emotions and behavior towards their parents or caretakers. Physical and mental violence often cause poor mental, emotional and physical health outcomes, (Handrick K, et al., 2018). According to Train Education (2024), such children tend to

fear going home in an attempt to avoid their parents and tend to develop abusive behavior.

### 3.2. Effect of domestic violence on child development in Njeru Municipality

**Table 3: Impact on the child's physical, social and moral development**

	Not at all (%)	Sometimes (%)	Most times (%)	All times (%)
Have you felt sick because of family stress or abuse?	25	26	35	14
Have you sustained any physical injury or disability because of family abuse?	20	28	40	12
<b>Social and moral development</b>				
	Not at all (%)	Sometimes (%)	Most times (%)	All times (%)
Have you felt like not being with friends because of your status and family background?	17	35	23	25
Have you felt like rebelling against your parents because of any form of abuse?	15	36	25	24

**Source: Primary Data, 2023**

The research findings revealed that domestic violence has an adverse impact on child development. The research findings revealed that 12% of the respondents showed that they sustained physical injury all times due to family abuse, 40% of the respondents showed that they sustained physical injury most times due to family abuse. Generally, the results indicate that domestic violence has negative effects on child's physical development, this is because a significant number of respondents showed that most

times and all times they sustained physical injuries and felt sick due to child abuse

According to Walakira (2016), extreme cases of domestic violence can result into child's death, disability or severe physical injury which is related to the findings of this research whereby a number of respondents revealed that they sustained physical injuries and even felt sick due to domestic violence. Orapan K (2021) further adds that domestic violence is detrimental to children and it results in them being in a stressful environment where they are usually overcome by anxiety, anger and fear which all affect physical growth of children.

For the impact on child's mental health, the research findings showed that 54% of the respondents revealed that they sometimes felt tired in the last 60 days without any good reasons, According to Egyptian Journal of Forensic Sciences, (2023), children exposed to domestic violence suffer various mental and psychological complications such as depression (stress), post-traumatic stress disorders, aggressive behaviors and even low levels of IQ. According to Behice Han, (2020), domestic violence causes disturbance in mental health and life quality of women and their children, also exposure to domestic violence increases use of medical services among women and impairs long term mental development of their children.

The research findings also revealed that majority of the parents (72.2%) said that domestic violence results into malnutrition, poor health and trauma among children, 61.1 % of the respondents revealed that domestic violence results into divorce, 50% of the



respondents revealed that domestic violence results into school dropout and high mortality rate. Generally the findings from the interview guides that were administered to parents/ guardians, health officials and Local Government Officials showed that domestic violence result into adverse effects on child's development either directly or indirectly

#### **4. Conclusions**

Domestic violence is prevalent evidenced by mental violence and distress and these adversely affect child development in Njeru Municipality.

#### **5. Recommendations**

Government should create awareness amongst communities about the dangers of domestic violence on child development, enforce laws and policies against domestic violence, and promote good practices of caring and loving the children.

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# **Forest Product Exploitation and Its Effect on the Environment in Kasese District, Uganda**

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## **Abstract**

*Forest product exploitation remains a challenge impacting on the global environment. The study established forest product exploitation and its effect on the environment in Kasese district, Uganda. It specifically assessed factors influencing forest product exploitation, examined effect of forest product exploitation on the environment, and analyzed approaches to mitigate forest product exploitation in Ibanda parish. The study employed a cross-sectional survey designed using both qualitative and quantitative data collection approaches. It targeted a population of 1000 people from whom 286 were determined using Slovene's formula. Data was collected through Interview, questionnaire, and later data was analyzed using SPSS version 26 to generate descriptive statistics for analysis. The findings revealed that climate change 35%, and soil resources loss and flooding, water 17.5%, decrease in biodiversity, habitat loss and conflicts 23.1%, economic losses 14%, and social consequences 10.5% as the environmental effects of forest product exploitation. Lastly, results indicated that collaboration (44%), followed by awareness (27.9%) and sensitization (20.9%) law and policy (6.9%) were the approaches to challenges from forest product exploitation. Conclusively, forest product exploitation causes environmental effects which are detrimental to community. The study recommended that government should strengthen laws on environmental protection and conservation the environment, sensitize masses about the importance of forest, use community resource management approach in conserving the forest ecosystem and implement environmental conservation laws and policies and ensure that forests are protected from encroachers especially man and his activities.*

**Keywords: Biodiversity, exploitation, forest product**

## **1. Introduction**

The exploitation of forest resources continues to be a problem for the world community, having an impact on the ecosystem. Climate change, pollution, poverty, food insecurity, and restricted access to forest resources are some of the repercussions, as they were in earlier eras. Studies reveal that of the world's 8 billion inhabitants, 1.6 billion depend on forests for their livelihoods, subsistence needs, jobs, and income (WWF, 2023).

About 20% of the world's population, particularly women, children, landless farmers, and other vulnerable groups, rely on forests to meet their food and income needs. For centuries, forests have offered socioeconomic safety nets for individuals and communities during difficult times. Of the extreme poor in rural areas, 40% live in forest and savannah areas (FAO, 2021). Reversing the global loss of forest cover through sustainable forest management is the mandate of Global Forest Goal 1. 31% of the surface on Earth is currently covered by forests. The area of forests worldwide decreased by 1.2% between 2010 and 2020, with decreases primarily occurring in South America and Africa.

Nonetheless, since 1990, there have been net gains in the area covered by forests in Asia, Europe, and Oceania; between 2010 and 2020, the combined area of these regions' forests grew by 1.1%. Furthermore, according to FAO (2018), the rate of net forest loss significantly decreased between 1990 and 2020 as a result of both natural forest expansion and forestation in certain countries, as well as a decrease in deforestation in others Food and Agriculture Organization (FAO, 2021).

## 2. Methods

The study employed a cross-sectional survey designed using both qualitative and quantitative data collection approaches. The sample size was 286 from the targeted population of 1000 people and the sample size was determined using Slovene's formula. Data was collected through Interview, questionnaire where purposive and simple random sampling techniques were used , and later data was analyzed using SPSS version 26 to generate descriptive statistics for analysis

## 3. Results and Discussion

### 3.1 Factors Influencing Forest Product Exploitation in Ibanda Parish

**Table 1: Factors influencing forest product exploitation in Ibanda Parish**

Factors	S A		A		UD		D		SD		M	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
Fires	160	55.9	100	35	3	1	15	5.2	8	2.8	1.6399	0.95128
Expansion of farming land	200	69.9	80	28	6	2.1	0	0	0	0	1.3217	0.51095
Urbanization/ industrialization and infrastructure	200	69.9	70	24.5	5	1.7	11	3.8	0	0	1.3951	0.71169
Overpopulation and poverty	206	72.0	80	28.0	0	0	0	0	0	0	1.2797	0.44965
Corruption and lack of political	230	80.4	56	19.6	0	0	0	0	0	0	1.1958	0.39751
Unregulated market for forest products	233	81.5	53	18.5	0	0	0	0	0	0	1.1853	0.38923

**Source: Primary Data, 2023**

From the table above respondents were asked to respond to the causes of forest product exploitation according to their extremities using a 5 point likert scale and the following responses were reported. Respondents were asked whether fires were the cause of forest product exploitation and 160(55.9%) strongly agreed 100(35%) agreed, 3(1.0%) were undecided 15(5.2%) disagreed and 8(2.8%) strongly disagreed and with the mean score value of 1.639 and SD of 0.95128 it implies that fires are the cause of forest product exploitation.

Also respondents were asked whether expansion of farming land is the cause of forest product exploitation and most of them 200(69.9%) strongly agreed, 80(28%) agreed, 6(2.1%) were undecided and with the mean score value of 1.3217 and SD of 0.51095, it implies that expansion for farming land is the cause of forest product exploitation in Ibanda parish Kasese district.

Also respondents were asked whether urbanization /industrialization and infrastructure is the cause of forest product exploitation and majority of them 200(69.9%) strongly agreed, 70(24.5) agreed, 5(1.7%) were undecided while 11(3.8%) disagree, and with the mean score value of 1.3951 and SD of 0.71169, it implies that urbanization/industrialization and infrastructure are the major causes of forest product exploitation in Ibanda parish, Kasese district.

Also respondents were asked whether overpopulation and poverty cause forest product exploitation and 206(72%) strongly agreed and 80(28%) agreed, with the mean score value of 1.2797 and SD of

0.44965, it implies that overpopulation and poverty cause forest product exploitation in Ibanda parish, Kasese district

Again respondents were asked whether corruption and lack of political will cause forest product exploitation and most of them 230(80.4%) strongly agreed and 56(19.6%) agreed. With the mean score value of 1.195 and SD of 0.39751 it implies that corruption and lack of political will is the cause of forest product exploitation in Ibanda parish, Kasese district

Lastly on whether unregulated market for the forest product cause forest product exploitation, majority of the respondents 233(81.5%) strongly agreed, and 53(18.5%) agreed that unregulated market for the forest product cause forest product exploitation. And with mean score value of 1.1853 and SD 0.38923 implies that unregulated market for the forest product cause forest product exploitation in Ibanda parish, Kasese district

The findings from the study objective one revealed that expanding for farmland is common cause of forest product exploitation 146(51%) followed by logging 100 (35%), urbanization/industrialization and infrastructure 30 (10.5%) and fires 10 (3.5%) as the major common cause forest product exploitation. These finding are similar to the findings of Fearnside & Lawrence (2017) that the construction of roads, railways, bridges, and airports opens up the land to development and brings increasing numbers of peoples to the forest frontier. If wood is used as fuel in mining operations and it is sources from plantations established for the

purpose, it can cause serious deforestation in the region. On the other hand, mining can be labour intensive and take labour away from clearing forest.

Mining and agricultural exploitation also accused according to Fomou (n.d.), Construction of power plants and roads are also important factors leading to deforestation of these cross- country fauna and flora reserves. Agricultural practice by itself contributes to deforestation of Millions hectares each year and were the main causes of deforestation in the 1990s, are now surpassed by large commercial timber harvest. Expanding cities and towns require land to establish the infrastructures necessary to support growing population which is done by clearing the forests (IPBES, 2019). Tropical forests are a major target of infra-structure developments for oil exploitation, logging concessions or hydropower dam construction which inevitably conveys the expansion of the road network and the construction of roads in pristine areas (Pimental, 2017). The construction of roads, railways, bridges, and airports opens up the land to development and brings increasing numbers of people to the forest frontier. Whether supported or not by the governmental programmes, these settlers have usually colonized the forest by using logging trails or new roads to access. Logging does not necessarily cause deforestation. However, logging can seriously degrade forests (Porter-Bolland *et al.*, 2021). Logging in Southeast Asia is more intensive and can be quite destructive. However, logging provides access roads to follow-on settlers and log scales can help finance the cost of clearing remaining trees and preparing



land for planting of crops or pasture. Logging thus catalyzes deforestation (Contreras-Hermosilla, 2020).

Fuel wood gathering is often concentrated in tropical dry forests and degraded forest areas (Su, 2019; Anon 2016). Fuel wood is not usually the major cause of deforestation in the humid tropics although it can be in some populated regions with reduced forest area such as in the Philippines, Thailand and parts of Central America. Fuel wood gathering was considered to be the main cause of deforestation and forest degradation in El Salvador (Roberts, 2019).). In the drier areas of tropics, Fuel wood gathering can be a major cause of deforestation and degradation.

Poverty and overpopulation are inextricably linked. Poverty, while undeniably responsible for much of the damage to rainforests, has to a large extent been brought about by the greed of the rich industrialized nations and the Third World elites who seek to emulate them. Development is often regarded as the solution to world poverty, seldom helps those whose need is greatest. Thus, it is often the cause rather than the cure for poverty. The claim that overpopulation is the cause of deforestation is used by many governments and aid agencies as an excuse for inaction. In tropical countries, pressure from human settlement comes about more from inequitable land distribution than from population pressure. Generally, most of the land is owned by small but powerful elite which displaces poor farmers into rainforest areas. So long as these elites maintain their grip on power, lasting land reform will be Difficult to achieve (Ekins & Max- Neef, 2021) and deforestation

continues unabated. Therefore, poverty is well considered to be an important underlying cause of forest conversion by small-scale farmers and naturally forest- dense areas are frequently associated with high levels of poverty (Contreras-Hermosilla, 2020).

#### **4.2. Effects of forest product exploitation on environment Ibanda parish**

Further, respondents were asked the common effect of environment and the following responses were reported as indicated in the table below

**Table 8: Effect of forest product exploitation on environment in Ibanda**

<b>Effect</b>	<b>Frequency</b>	<b>Percent</b>
Climate change	100	35.0
Water and soil resources loss and flooding	50	17.5
Decreased biodiversity, habitat loss and conflicts	66	23.1
Economic losses	40	14.0
Social consequences	30	10.5
Total	286	100.0

***Source: Primary Data, 2023***

From the table above most of the respondents 35% reported climate change, 17.5% reported water and soil resources loss and flooding, 23.1% reported decrease in biodiversity, habitant loss and conflicts, 14% reported economic losses and only 10.5% reported social consequences.

These Findings concur with the findings of (WWF, 2021) that deforestation can change the global change of energy not only through the micrometeorological processes but also by increasing the concentration of carbon dioxide in the atmosphere because carbon dioxide absorbs thermal infrared radiation in the atmosphere. Moreover, deforestation can lead to increase in the albedo of the land surface and hence affects the radiation budget of the region, affects wind flows, water vapor flows and absorption of solar energy thus clearly influencing local and global climate.

Global warming or global change includes anthropogenic produced climatic and ecological problems such as recent apparent climatic temperature shifts and precipitation regimes in some areas, sea level rise, stratospheric ozone depletion, atmospheric pollution and forest decline. Tropical forests are shrinking at a rate of about five per cent per decade as forests are logged and cleared to supply local, regional, national and global markets for wood products, cattle, agricultural produce and biofuels (Anon., 2016). One of the most important ramifications of deforestation is its effect on the global atmosphere. Deforestation contributes to global warming which occurs from increased atmospheric concentrations of greenhouse gases (GHG) leading to net increase in the global mean Temperature as the forests are primary terrestrial sink of carbon, disrupts the global water cycle (FAO, 2018).

With removal of part of the forest, the area cannot hold as much water creating a drier climate. Water resources affected by deforestation include drinking water, fisheries and aquatic habitats,

flood/drought control, waterways and dams affected by siltation, less appealing water related recreation, and damage to crops and irrigation systems from erosion and turbidity (Anon, 2016; Contreras-Hermosilla, 2020). Urban water protection is potentially one of the most important services that forest provides (Contreras-Hermosilla, 2020). Filtering and treating water is expensive. Forests can reduce the costs of doing so either actively by filtering runoff or passively by substituting for housing or farms that generate runoff (Boedhihartono & Sayer, 2022).

Deforestation can also result into watersheds that are no longer able to sustain and regulate water flows from rivers and streams. Once they are gone, too much water can result into downstream flooding, many of which have caused disasters in many parts of the world. This downstream flow causes soil erosion thus also silting of water courses, lakes and dams. Deforestation increases flooding mainly for two reasons. First, with a smaller ‘tree fountain’ effect, soils are more likely to be fully saturated with water. The ‘sponge’ fills up earlier in wet season, causing additional precipitation to run off and increasing flood risk. Second, deforestation often results in soil compaction unable to absorb rain. Locally, this causes a faster response of stream flows to rainfall and thus potential flash flooding (Boedhihartono & Sayer, 2022). Another negative effect of deforestation is increasing incidents of human-animal conflicts hitting hard the success of conservation in a way alienating the people’s participation in conservation. The tropical forests destroyed each year amounts to a loss in forest capital valued at US \$ 45

billion (Fearnside & Lawrence, 2017). By destroying the forests, all potential future revenues and future employment that could be derived from their sustainable management for timber and non-timber products disappear.

#### **4. Conclusion**

The findings from the study objective one concluded that expanding for farmland, logging urbanization/industrialization and infrastructure and fires are the major common cause forest product exploitation.

The study concluded that forest product exploitation results into include environment effects such as climate change, soil resources loss, flooding, water, and decrease in biodiversity, habitat loss, conflicts, economic losses and social consequences.

The study from the findings of objective three concluded that the study from the findings of objective three revealed that collaboration is major approach to forest exploitation, followed by awareness and sensitization, law and policy and restoration.

#### **5. Recommendations**

1. Government should strengthen laws on environmental protection and conservation to deter those destroying environment.
2. Government should sensitize masses about the importance of forest in Ibanda parish in Kasese district

3. Government should use community resource management approach in conserving the forest ecosystem
4. Government should implement environmental conservation laws and policies and ensure that forests are protected from encroachers especially man and his activities.

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**Methods for medical wastes management in Benadir hospital in  
Mogadishu, Somalia**

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**Abstract**

*Medical waste management is a global concern, affecting healthcare systems worldwide. The improper handling of medical waste can lead to the transmission of infections, endangering public health. The study assessed the common medical waste management methods at Benadir Hospital in Mogadishu, Somalia. A cross-sectional design using both qualitative and quantitative was employed, and targeted 100 health workers from whom 70 was selected and participated in the study. Data was collected through questionnaire, interviews and observation, and analyzed using SPSS version 25 to generate descriptive and inferential statistics from which interpretations and analysis were made. Results indicated autoclaving (47%), recycling (40%), landfill (27%), chemical disinfection (33%) and incineration (20%) as the common methods used to manage waste at Benadir Hospital. The study concluded that handling of medical wastes through treatment using various technologies. It therefore, recommended that health workers should be sensitized on proper management of the medical wastes, and stakeholders should provide adequate and appropriate personal protective equipment.*

**Keywords: Infections, medical waste, policies**

## **1. Introduction**

Medical waste management is a global concern, affecting healthcare systems worldwide. The improper handling of medical waste can lead to the transmission of infections, endangering public health (WHO, 2017). Studies around the world have investigated the relationship between improper medical waste management and infection transmission. For instance, a study in Nigeria highlighted the risks associated with healthcare waste mismanagement (Patwary et al., 2014). Improper disposal of medical waste can also have adverse environmental effects. Studies from countries like China have explored the environmental contamination resulting from improper waste disposal practices (Yang et al., 2011). Many countries and regions have adopted international best practices in medical waste management. For example, the European Union has established directives for the management of healthcare waste (European Parliament, 2010). The occupational safety of healthcare workers involved in waste management is a global concern. Research from countries like India and Kenya has examined the risks and challenges faced by these workers (Mani et al., 2016; Ziraba et al., 2010)

The African continent faces unique challenges when it comes to medical waste management. These challenges include inadequate infrastructure, limited resources, and varying levels of healthcare facilities and services across different regions (Moyong and Diffo, 2019). Africa is disproportionately affected by infectious diseases such as HIV/AIDS, malaria, and various emerging infectious



diseases. Proper medical waste management is crucial to prevent the transmission of these diseases in healthcare settings (Nahimana et al., 2016). Many African countries have limited access to safe healthcare services, and in some regions, healthcare facilities struggle to provide even basic sanitation and waste management services (Sawalem et al., 2017). Healthcare workers in Africa often face increased risks due to insufficient training, inadequate protective equipment, and unsafe disposal practices, making them vulnerable to infections through occupational exposure (Izugbara et al., 2018).

Improper disposal of medical waste is a significant environmental concern in Africa. Landfills and open dumping sites are often used, leading to soil and water contamination (Olaniyi et al., 2020). African countries have developed varying regulatory frameworks for healthcare waste management. Some countries have comprehensive regulations, while others lack clear guidelines and enforcement mechanisms (Izugbara et al., 2018). International organizations, such as the World Health Organization (WHO) and the United Nations Environment Programme (UNEP), have worked with African nations to improve healthcare waste management practices (WHO, 2017). Various local initiatives and research studies in African countries have aimed to address healthcare waste challenges. For example, research in South Africa has explored innovative waste treatment technologies (Matete and Trois, 2008).

Inadequate waste management practices in Mogadishu and other parts of Somalia can lead to environmental pollution, including soil

and water contamination. This can have adverse effects on the health and well-being of local communities (WHO, 2005). Somalia has experienced challenges in establishing and enforcing comprehensive healthcare waste management regulations. There is often a lack of clear guidelines and institutional capacity for oversight (WHO, 2017). International organizations and NGOs have played a role in supporting healthcare waste management initiatives in Somalia. These efforts have aimed to improve infrastructure, provide training, and promote safer practices (UNDP, 2021).

Patients, medical experts and general population therefore ought not to suffer from risks related to supplier services together with handling of aid waste generated throughout medical procedures carried in our health facilities. These effective non-personal health interventions, in keeping with the research worker, includes safe management of aid waste to manage health risks identified with taking care of, treatment and transfer and zone unit the premise for this analysis that the research worker deeply entrenched into the service delivery pillar of health systems.

In developing Countries, the know how about the potential for harm resulting from the risks related to waste from the healthcare sector has currently become more eminent to all fractions of the population; the civil society, the governments and also the health practitioners. Moreover, managers and employees in the medical area unit are expected to be take responsibility of the effects of waste from medical activities. The irregular taking care of and uncouth disposal of medical waste among health facilities is rampant and is a major

contributor of infections which may be avoided and which bears a similarity with the public perception of poor health care standards (WHO, 2014).

The management of medical waste in Benadir hospitals in Mogadishu, Somalia, presents a pressing problem characterized by inadequate infrastructure, non-compliance with best practices, occupational hazards for healthcare workers, threats to public health through disease transmission, environmental contamination, a lack of comprehensive regulations, and the potential for disease outbreaks. The improper handling, disposal, and lack of adequate infrastructure for medical waste management in this region have raised significant concerns regarding the potential for infections to spread within healthcare facilities and into the broader community. The government has initiated the management of medical wastes however the infrastructure is still limited and less has been done to assess the impact of these wastes on infection prevention. This complex issue poses a severe challenge to infection prevention in healthcare facilities and the broader community. In light of these critical concerns, a thorough study is necessary to assess the current state of medical waste management in Benadir hospitals, evaluate their direct impact on infection prevention, thereby providing a foundation for effective interventions and improvements in this vital healthcare area.

## **2. Methods**

The study employed cross sectional design using both qualitative and quantitative research approaches. The study target population was 100 and the sample size was 70 respondents. Stratified sampling technique was used where medical workers from four-selected healthcare facilities within Mogadishu participated in the survey. Data was gathered through observation, interviews, and questionnaires. The questionnaire was semi-structured having both open-ended and closed questions while an open ended/structured for key informant schedule/interview guide for the four selected healthcare facilities to measure and compare similarity of facilities. Similarly, secondary data containing appropriate information were captured from available documentations in related research reports, journals, books, internet from hospital websites, conference reports, strategic plan, policy and procedure manual, government publications. Notably, data was analyzed through SPSS Version 25 to run descriptive statistics (frequencies, mean and standard deviation), and inferential statistics inferential statistics (correlation, regression and normality test) from which interpretation and analysis were made.

### 3. Results and Discussion

#### Medical waste management methods at Benadir Hospital

**Table 4.2: Medical waste management methods at in Benadir Hospital**

Response	Frequency (n=70)	Percentage
Incineration	15	20.0
Microwave disinfection	07	9.3
Chemical disinfection	25	33.3
Autoclaving	28	37.4
Landfill	20	26.7
Composting	13	17.3
Recycling	30	40.0
Pyrolysis	12	16.0

***Source: Primary Data, 2023***

A total of 52 (74.3%) respondents indicated that procedures for handling of medical wastes are clearly indicated. However, only 52.9% of these confirmed that medical wastes were being treated using technologies such as autoclaving (37.4%), chemical disinfection (33.3%), incineration (20.0%), microwave disinfection (9.3%) before disposal. The wastes were being primarily disposed by recycling (40.0%) and landfilling (26.7%), although composting (17.3%) and pyrolysis (16.0%). These results confirm that HCWM could be problematic in Benadir Hospital. A previous study conducted in Tanzanian health care facilities found that in Ilala and Kinondoni, 54% and 10% of the surveyed facilities had waste disposal areas. Some of the MCW were being disposed into open areas, latrines or rubbish pits (Manyele, & Lyasenga, 2010). Another study in in some Ethiopian health facilities reiterated that the most

common methods of MCW disposal were open burning in a hole (54%), low-temperature incineration (52%) and open-air burning on the ground (18%) (Habtetsion et al., 2009). A study conducted in Sidama zone of Ethiopia indicated that 42.5% of the health care facilities employed incinerators for disposing used needles and other sharps while the rest preferred open burning and other methods to dispose used needles and other sharps (Yoseph, 2004). A study from Nigerian indicated that some of the healthcare facilities were attempting to treat infectious wastes prior to disposal using either barakina or alcohol (Muluken et al., 2013). Although treatment technologies and disposal methods may differ for each type of HCW, segregation at source into different categories reduces the management, operation and treatment costs along with the risk of infection with these contaminants (Ananth et al., 2010).

#### **4. Conclusions**

A total of 52 (74.3%) respondents indicated that procedures for handling of medical wastes are clearly indicated. However, only 52.9% of these confirmed that medical wastes were being treated using technologies.

#### **5. Recommendations**

1. There is need to create awareness among healthcare workers on proper management of the medical wastes.
2. The stakeholders should provide adequate and appropriate personal protective equipment, it is also necessary to supervise

employees to ensure that there is proper and consistent use of such gears.

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# **Influence of Sports Betting on Students' Academic Performance in Tertiary Institutions in Mandera County, Kenya**

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## **Abstract**

*Globally, sports betting has gained popularity and acceptance across different countries. Although gambling may provide some excitement, it can have dire consequences to compulsive gamblers. The main purpose of this study was to assess the influence of sport betting on students' academic performance in selected tertiary institutions in Mandera East Sub County, Mandera County. The study used both qualitative and quantitative methods with a descriptive research design. Two principals were selected using purposive sampling, while simple random sampling was used to interview 9 teachers. A total of 94 students were included using systematic sampling method. Questionnaire and interview surveys were used to obtain primary data. Data collected was analyzed using SPSS, and then interpreted using descriptive and inferential statistics. A large percentage of the students (84.1%) who were betting got poor grade point average of D, suggesting that it impacted their academic performance negatively. Possession of smart phones (89.4%), media advertisements (44.7%), and a combination of unlimited internet access, attractive media advertisements and ease of access to credit (73.4%) were the combination of contributing factors for students' involvement in mostly online sports betting (95.7%). The study found that there is laxity in the implementation and effectiveness of sports betting mitigation measures in tertiary institutions, with no honesty by bettors when asked for the mandatory requirement of being above 18 years of age. It was suggested that regulation of credit companies to moderate credit access and clearing operators once they fully protect users were the main measures that could reduce the harmful effects of sports betting in the tertiary institutions. It is*



*recommended that education on the effects of gambling and its addiction among students should be incorporated into tertiary institution programs. Further, amendments should be made in by-laws and regulations to limit sports betting in tertiary institutions.*

***Keywords:*** *Academic performance, sports betting, tertiary institutions*

## **1. Introduction**

Globally, the betting industry has experienced rapid growth which is attributable to advertising mainly in the media houses. In addition to the popularity created on sports betting there are also sporting events that provide betting tips. Different studies have documented the existence of social networking sites that give assurance of successful tips hence luring site visitors to betting. The existence of such content is harmful to the site visitors more so the young learners who lack critical thinking skills on the information (Ricijaš & Dodig, 2014).

In the modern era, a majority of the systems are digitalized. This implies that a student's life mainly relies on technology for recreational and entertainment activities. This has led to video games and sports betting becoming a routine part of the youth which consumes much time as part of the youths' leisure activities (Maina, 2018). Unlike in the past when video games and gambling was done to make money and earn points, majority of the video games incorporate gambling. The online video games pay players for every kill they make which increases traffic on those willing to make money from the video game. A study found out that about a quarter

of the youths population engaged in simulated video game as a bonus or a virtual gambling encounter (King et al., 2014). The exposure to a past engagement in simulated sports betting is a significant predictor of the escalating problem of betting among young people.

Tertiary learners have for the past few years been the risk group with regards to online betting (Koross, 2016). This segment entails high school graduates who may have just had increased freedom which and are frequent internet users. A study conducted in Canada revealed that the student's education level and status were significant predictors of online betting (Koross, 2016). The students in this age group spent much of their time on the social media which greatly affects the social status. This is consistent to the findings of a study conducted in Denmark which documented that youths encountered their first gambling experience from the social media and social settings such as from the family and peers as well (Kristiansen et al., 2015).

In Africa many nations continue to encounter the growth of betting companies which has intensified the act of betting. This is in light with the findings of a study conducted in Uganda which documented those one out of four students had gambled in one way or another during the previous year of study (Okoti, 2019). The study also found out that the household factors such as employment status and level of income pushed students to gambling. Economically disadvantaged students were found to spend a higher proportion of income in gambling than those from a rich background. This is

consistent with the findings of a study conducted in Australia which documented that youth gambling was prevalent among the youths from low socio-economic background. Other contributing factors were situations where the parent's education was below secondary school, parents had a history of smoking and studying in a vocational secondary school (Derevensky & Gilbeau, 2019).

In Kenya sports betting has been on the rise having registered the first betting company in 2013. A study conducted in Africa found majority of the betting youths to be from Kenya followed by Uganda and Kenya at 76% and 57% respectively (Wangari, 2017). Majority of the youths in Kenya have embraced technological change. Technological advancements such as watching football have also created awareness of the existence of the different betting sites due to the numerous advertisements placed by the broadcasting channels. A study conducted in Nairobi city found out that majority of the bettors were male and used social media to make decisions regarding to betting (Mwandime, 2017). Internet access has also provided students in tertiary institutions with an easy access to online betting sites with many of the sites being offshore which renders the sites as legal entities. The most motivating factor is that tertiary students can borrow data and staking cash from the rising lending companies.

Tertiary education is an important stage in a student's life in that such education introduces a learner on the different means in which they have to face the outside world. Tertiary learners have for the past few years been the risk group with reference to online betting.

The rate of gambling in tertiary institutions is on the rise having been escalated by the cheap access devices and ease of internet access as well. Different nations have focused on access to education for all with the provision of HELB to the needy students and subsequent provision of TVET loans to students joining tertiary poly-techniques who were not previously eligible for loans. Despite this huge investment in tertiary education, little education has been provided to address sports betting. Betting has been so detrimental to the extent that some of the youths have ended up taking their life upon losing a bet. Others end up committing their fees on bet where they fail to do examinations and end up dropping out of the tertiary institution. The rising number of youths in sports betting is wanting and has caused a public outcry from the society and parents. Although some studies have focused on how sports betting influence youth's behaviour fewer studies have addressed the influence of betting on academic performance. This creates a gap which this study seeks to fill. Academic performance among students in Mandera County is poor which is also characterized by low completion rates in the tertiary institutions. Sports betting have been a major contributing factor especially for the male child who has been majorly affected by betting. This study therefore seeks to assess the influence of sports betting on academic performance among students in tertiary institutions in Mandera County, Kenya.

## **2. Methods**

The researcher used both qualitative and quantitative methods. Qualitative methods provided an in-depth layout of the research

content that stipulate the characteristics of the population (Taylor et al., 2016). The study also adopted both descriptive and statistical methods. The target population was 1683 out of which sample size of 105 was sampled. The study used both closed and open-ended questionnaire which were self-administered to allow the respondents to give honest opinions on the questions at their own convenience. Also Interview guides were used. Quantitative data were recorded, coded and then analyzed using SPSS version 20. The analyzed data were presented using descriptive statistics in form of frequencies, percentages and means. On the other hand, qualitative data obtained from open ended questions were grouped into broad themes as per the study objectives after which they were reported through content analysis.

### **3. Results and Discussion**

#### **Why student engage in betting activities while at the tertiary intuitions**

The respondents from the students are presented detailed in Table below:

**Table 1: Common betting activities students engage in tertiary institutions**

Statement	SA	A	N	SD	D
Students spend time analyzing games ending up not completing classwork		✓	✓		✓
College life freedom and the urge to experiment allows student to engage in sports betting		✓			✓
I engage in sports betting due to increasing demands	✓	✓			
I participate in sports betting due to less supervision from teachers	✓	✓			
Students who engage in sports betting score lower GPA than those who don't bet	✓	✓			

***Source: Primary Data, 2023***

In a similar study in Spain, López-del-Hoyo et al. (2022) found that betting is perceived as a normal leisure activity by a significant proportion of university students. These results agreed with a previous observation that sports betting in Kenya has swept the country like storm in that most people bet on a daily basis (Koross, 2016). The poor grades attained by students who participate in betting aligns well with the conclusions of Wahlström and Olsson (2023) and Kapukotuwa et al. (2023) who indicated that Swedish and United States students with low school performances were those that had gambled. This is because they spend time analyzing games, and end with uncompleted classwork, which is similar a similar observation from Ghana (Avenyo et al., 2024).

### 4.3 Effects of sports betting on academic performance of learners in tertiary institutions in Mandera County, Kenya

The responses are recorded in Table below:

**Table 2. Effects of sports betting on learners' academic performance**

Question	Response	Frequency	Percentage
How often do you participate in sports betting?	Daily	85	90.4
	Weekly	3	3.2
	Twice a month	4	4.3
	Monthly	2	2.1
	None	0	0
What was your grade point average in the last semester?	A	5	5.3
	B	5	5.3
	C	3	3.2
	D	79	84.1
	Pass	2	2.1
	I did not do	0	0
Do you engage in sports betting during class time?	Yes	72	76.6
	No	22	23.4

**Source: Primary Data, 2023**

While assessing the effects of sports betting in tertiary institutions on the academic performance of learners in Mandera County, it was found out that majority of the students (90.4%) participate in betting on a daily basis, which could be considered an addiction (Table 5). Although all the students had done end of semester exams, majority of them got grade point average of D (84.1%). A significant portion of students agreed (81.9%;  $n = 77$ ) that they spend time analyzing games, and end with uncompleted classwork. This is because college life freedom and the urge to experiment allow them to engage in sports betting (79.9%). All students strongly agreed or agreed that they engage in sports betting due to increasing demands

and less supervision from teachers but also confessed that students who engage in sports betting score lower GPA than those who do not bet. Teachers and principals also agreed that students who participate in sports betting tend to have poor academic performance.

#### **4. Conclusions**

Sports betting negatively impact the academic performance of students in tertiary institution, in Mandera County, Kenya.

Possession of smart phones, media advertisements and a combination of unlimited internet access, attractive media advertisements and ease of access to credit are the contributing factors to sports betting among students in tertiary institution, in Mandera County, Kenya.

There is laxity in the implementation and effectiveness of sports betting mitigation measures in tertiary institutions, with no honesty by bettors when asked for the mandatory requirement of being above 18 years of age.

#### **5. Recommendation**

Education on the effects of gambling and its addiction among students could be incorporated into tertiary institution programs.

Amendments should be made in by-laws and regulations to limit sports betting in tertiary institutions.

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# **Agroforestry practices and climate change mitigation in Akwang sub-county Kitgum district.**

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## **Abstract**

*The study established the relationship between agroforestry practices and climate change mitigation. Specifically, it identified agroforestry practices on farmland, assessed factors influencing adoption of agroforestry practices and examined the influence of agroforestry practices on climate change mitigation in Akwang Sub County. The study used a cross sectional survey using quantitative and qualitative methods to explore the research problem which has helped in obtaining data and information which may be applicable in other organizations. In this case systematic random sampling was used to select the sample done by the researcher, questionnaires were given to the respondents to fill in with the help of the researcher. The data obtained from the study was analyzed, interpreted by using tabulation and graphs. The findings from study was that farmers do practice more on Alley cropping which was revealed by majority of respondents followed by Farm Forestry practice on the farm land and on the factors Influencing Adoption of Agroforestry Practices was found to be Economic Incentives which is one of the greatest factors that is Influencing Adoption of Agroforestry Practices in Akwang subcounty followed by the environmental benefits which is another factor that also Influence adoption of agroforestry practices the research concluded that agroforestry practices play a significant role in climate change mitigation in Kitgum District, Uganda. The integration of trees into agricultural landscapes has been found to contribute to carbon sequestration, thereby helping to reduce the concentration of greenhouse gases in the atmosphere. and finally the research recommended that to promote the adoption of agroforestry systems among smallholder farmers in Kitgum District. There is need for capacity building programs, extension services, and farmer-to-farmer knowledge exchange initiatives. By providing training and technical support, farmers can learn about the benefits of integrating trees with crops and livestock, such as improved soil fertility, increased biodiversity, and enhanced resilience to climate change impacts.*

**Keywords: Agroforestry, Carbon sequestration, Climate change, Climate mitigation**

## **1.0 Introduction**

The study of climate change adaptation and its impact on agriculture and forestry has a long history, with numerous previous studies conducted on a global, continental, regional, country, and district level. These studies have provided valuable insights into the challenges faced by various regions and countries, as well as the potential solutions and adaptive strategies.

At the global level, the Intergovernmental Panel on Climate Change (IPCC) has been a leading authority in providing comprehensive assessments of the current state of knowledge on climate change and its impacts. The IPCC has consistently emphasized the importance of agroforestry practices as a means of enhancing resilience to climate change, particularly in the context of smallholder farmers in developing countries. (IPCC, 2018)

On a continental scale, African scientists and policymakers have also recognized the potential of agroforestry practices to mitigate climate change effects. For instance, a study by the Food and Agriculture Organization of the United Nations (FAO) has shown that agroforestry systems can improve soil fertility, reduce erosion, and increase agricultural productivity, all of which are crucial for adapting to climate change in Africa. (Ruthenberg, 2019)

At the regional level, studies have been conducted to examine the potential of agroforestry practices in specific regions, such as Eastern Africa. A study by the International Centre for Tropical Agriculture (CIAT) found that incorporating trees into agricultural

systems can increase crop yields, improve soil quality, and reduce the vulnerability of smallholder farmers to climate change.

On a country level, the government of Uganda has recognized the potential of agroforestry practices to address climate change and has implemented policies and programs to promote these practices. The National Agroforestry Policy of Uganda, for example, emphasizes the importance of agroforestry in enhancing resilience to climate change, improving soil fertility, and promoting sustainable land management.

In the context of Kitgum District, Uganda, previous studies have documented the challenges faced by local farmers due to climate change, such as reduced crop yields, increased pest damage, and declining soil fertility. However, these studies have also identified the potential of agroforestry practices to address these challenges. For example, a study by the Makerere University Agricultural Research Institute (MUARI) found that incorporating trees into farming systems can increase crop yields, improve soil quality, and reduce the vulnerability of smallholder farmers to climate change.

In conclusion, the historical perspective on climate change adaptation has demonstrated the importance of agroforestry practices in mitigating the effects of climate change. Studies conducted at various levels, from global to district, have consistently shown that incorporating trees into agricultural systems can improve soil fertility, increase agricultural productivity, and enhance resilience to climate change. The study of “Agroforestry Practices and Climate Change Mitigation in Kitgum District, Uganda” builds

upon this rich body of research to examine the potential of these practices in addressing the specific challenges faced by smallholder farmers in the region.

## **2. Methods**

### **2.1 Research Design**

The researcher used a cross sectional survey using quantitative and qualitative methods to explore the research problem by assessing the agroforestry practices and climate change mitigation in Akwang Sub County, Kitgum district; the data was collected by quantitative and qualitative data from respondents. This was vital because of their perceived in-depth knowledge and experience and knowledge within the field of agroforestry, so they were consulted due to their experience and knowledge within their area of operations and performances.

### **2.2 Population of the study**

The target population for this study is representative of the entire population residing within the geographical boundary of the five (5) main villages: Pem, Bajere, Vitnam, Adyee, and Ping munu. This collective population, with a population estimate ranging from 5000 people according to the 2021 NBS PES and 2022 UN OCHA estimates, respectively, all form the focus of this study's exploration. To ensure a comprehensive understanding, a sample size of 180 respondents has been identified. In the planned distribution of these respondents, 80 are male and 100 are female. This distribution is purposefully guided by the acknowledgment of a relatively higher proportion of females within the overall population of the selected

villages, providing a balanced and representative sample for the study.

### **2.3. Sample Size**

The determination of the sample size for this study followed the Krejcie & Morgan (1970) formula, yielding a total of 180 respondents. This sample distribution comprises 80 males and 100 females, a selection that aligns with the relatively greater representation of females within the context under investigation. A confidence level of 95% was chosen to establish the robustness of the sample size. This strategic choice reflects the researcher's intent to ensure a high level of accuracy and reliability in the collected data and subsequent insights.

### **2.4. Data Collection methods**

#### **Questionnaires**

A questionnaire is a structured tool for collecting data through a set of predetermined questions. It can be administered in various formats, such as paper-based or online surveys. In the context of the study, a questionnaire was designed to gather information on farmers' knowledge, attitudes, and practices related to agroforestry and climate change mitigation. It was designed in that the Questions were clear, concise, and easy to understand, and response options were provided for each question. To ensure validity and reliability, the questionnaire was piloted with a small sample of the target population before being administered to the larger study population. To achieve a comprehensive perspective, self-administered questionnaires was deployed as survey tools. These questionnaires

offer objective data collection from a wide participant range. Administered to a selected sample, the questionnaires contain pre-formulated questions designed to gather detailed responses on complex subjects. This method enhances data collection efficiency, minimized interview bias, and yields comprehensive insights across various study aspects (Ole & Katherine, 2005; Sekaran, 2003).

### **Observations**

Observations are a valuable data collection tool for gathering both quantitative and qualitative data. They involve directly observing and recording the behaviours, practices, and interactions of the target population. In the study of agroforestry practices and climate change mitigation in Kitgum District, Uganda, observations have been enabled a researcher understand the actual implementation of agroforestry techniques and the challenges faced by farmers.

To conduct these observations, researcher developed a detailed observation protocol that outlined the specific behaviours, practices, and interactions to be observed and recorded. This protocol was based on the research objectives and the target population's context. Researchers considered the ethical implications of conducting observations and obtain informed consent from the participants whenever necessary.

### **Key Informant Interviews**

The study employed Key Informant Interviews (KIIs) as a qualitative data collection method. This approach involved conducting semi-structured interviews with individuals possessing specialized knowledge and expertise pertinent to the study's focus.



Guided by a prepared key informant interview guide, these interviews fostered interactive and relaxed conversations to extract valuable insights (Vanderstoep & Johnson, 2008). Similarly, in-depth interviews investigated participants' values, experiences, worldviews, and perspectives. These face-to-face interviews seek to capture rich qualitative data, reflecting participants' deeper insights. This method, acknowledged for its depth and detail, provided a comprehensive understanding of participants' viewpoints (Crossman, 2019).

## **2.5. Data Analysis**

Data processing and analysis encompassed both qualitative and quantitative methods. Qualitative data from interviews were systematically categorized into themes aligned with the study's variables. Documents gathered from the field were promptly checked for precision. The collected raw data went through cleaning, sorting, and editing to rectify any errors. Subsequently, data were organized into distinct themes and categories to facilitate analysis. For quantitative data derived from questionnaires, a comprehensive approach was adopted. This included screening, coding, and computerized data entry for computation of descriptive statistics. Utilizing the Statistical Package for Social Sciences (SPSS) Version 20, the descriptive analysis yielded frequency distributions, standard deviations, means, and percentages. Objectives 1,2,3 was analyzed using T-Test and correlation statistics.

### 3. Results and Discussion

#### 3.1. Agroforestry practices on farmland

**Table 1: Agroforestry practices on farmland**

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Alley cropping	66	36.7
Silvopastoral Systems	38	21
Farm Forestry	41	22.8
Live Fencing	35	19.4
<b>Total</b>	<b>180</b>	<b>100</b>

*Source: Primary Data, 2023*

Table 1 above shows the agroforestry practices on farm land where 36.7% of the respondents revealed that Alley cropping is one of the best agroforestry practices on farm land, this practice involves growing crops between rows of trees or shrubs. The trees provide shade and reduce soil erosion, while the crops benefit from the increased organic matter in the soil. The trees also help sequester carbon dioxide from the atmosphere, contributing to the mitigation of climate change. 22.8 of the respondents revealed that Farm Forestry is another agroforestry practices on farm land in Akwang sub county, in that Farmers can plant trees and shrubs on their land to provide multiple benefits, such as timber production, soil protection, and wildlife habitat. Farm forestry can also contribute to carbon sequestration and mitigate climate change, 21% of the respondents revealed that Silvopastoral Systems is also one the agroforestry practices that is done by farmers in Akwang sub county whereby This practice combines forestry and livestock production, where animals are raised under trees or shrubs. Silvopastoral

systems improve animal welfare, reduce greenhouse gas emissions, and enhance biodiversity. And finally, 19.4% of the respondents revealed that live fencing is also a common agroforestry practices in Akwang subcounty where By incorporating live fencing into agroforestry practices, farmers can create sustainable and resilient agricultural landscapes that contribute to both food production and environmental conservation.

### 3.2 Factors Influencing Adoption of Agroforestry Practices.

**Table 1: Factors Influencing Adoption of Agroforestry Practices**

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Economic Incentives	71	39.4
Knowledge and Awareness	38	21
Environmental Benefits	42	23.3
Policy Support and Institutional Frameworks	29	16.1
<b>Total</b>	<b>180</b>	<b>100</b>

***Source: Primary Data, 2023***

Table 2 above shows the factors Influencing Adoption of Agroforestry Practices where 39.4% of the respondents revealed that Economic Incentives is one of the factors that is Influencing Adoption of Agroforestry Practices in Akwang subcounty, Economic incentives play a significant role in influencing the adoption of agroforestry practices. Farmers are more likely to adopt agroforestry if they perceive economic benefits such as increased income, improved crop yields, and diversified sources of revenue.

Agroforestry systems can provide multiple products such as timber, fruits, fodder, and medicinal plants, which can contribute to

enhanced economic returns for farmers. Additionally, agroforestry practices can contribute to cost savings through improved soil fertility, reduced erosion, and efficient water use, further enhancing their economic appeal. 23% of the respondents revealed that Environmental Benefits is another factor that Influence adoption of agroforestry practices, since Agroforestry systems contribute to biodiversity conservation, carbon sequestration, soil improvement, and watershed management. Farmers who recognize the environmental advantages of agroforestry may be more inclined to adopt these practices as a means of sustainable land management.

Furthermore, agroforestry can help mitigate the impacts of climate change by enhancing resilience to extreme weather events and contributing to overall ecosystem health, 21% of the respondents revealed that Knowledge and Awareness is also another factor that can influence the adoption of agroforestry practices where the level of knowledge and awareness about agroforestry practices within farming communities significantly influences their adoption.

Access to information about the potential benefits of agroforestry, technical support, and training programs can increase farmers' understanding of these practices and their implementation. Extension services, farmer field schools, and demonstration plots can play a crucial role in disseminating knowledge about agroforestry techniques and their positive outcomes, thereby encouraging adoption among farmers. And least responses were on policy support and institutional frameworks as one of the factors that

influence the adoption of agroforestry practices in Akwang subcounty.

In that the presence of supportive policies and institutional frameworks is instrumental in driving the adoption of agroforestry practices. Government policies that incentivize or promote agroforestry through subsidies, land tenure security, and research funding can create an enabling environment for farmers to engage in agroforestry activities. Furthermore, institutional support from agricultural extension services, research institutions, non-governmental organizations (NGOs), and community-based organizations can facilitate the dissemination of best practices and provide technical assistance for implementing agroforestry systems.

### **4.3 Influence of agroforestry practices on climate change mitigation**

**Table 3: Influence of agroforestry practices on climate change mitigation**

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Carbon Sequestration	69	38.3
Enhanced Soil Fertility and Erosion Control	41	22.7
Increased Resilience to Climate Variability	32	17.7
Enhanced Biodiversity and Ecosystem Services	38	21.1
<b>Total</b>	<b>180</b>	<b>100</b>

*Source: Primary Data, 2023*

Table 3 above shows the Influence of agroforestry practices on climate change mitigation where 38.3% of the respondents revealed that Carbon Sequestration is one of the influences of agroforestry practices on climate change mitigation in Akwang subcounty, since one of the most significant ways agroforestry practices contribute to climate change mitigation is through carbon sequestration. Trees and shrubs in agroforestry systems absorb carbon dioxide (CO<sub>2</sub>) from the atmosphere during photosynthesis, converting it into organic matter.

This process not only helps reduce the amount of CO<sub>2</sub> in the atmosphere, but also stores the carbon in the soil and biomass, contributing to long-term climate change mitigation. 22.7% of the respondents revealed that Enhanced Soil Fertility and Erosion Control is another one way that can influence agroforestry practices on climate change mitigation, whereby there is improved soil fertility and structure by increasing organic matter content. This helps to create a more stable soil environment, reducing soil erosion and maintaining nutrient availability for crops.

The presence of trees and shrubs on farmlands also helps to protect the soil from wind and water erosion, further contributing to a more resilient agricultural system that can better withstand the impacts of climate change. 21.1% of the respondents revealed that Enhanced Biodiversity and Ecosystem Services is also another influence of agroforestry practices in climate change mitigation, in that Agroforestry practices can help to maintain and enhance

biodiversity, which is essential for the long-term sustainability of agricultural systems.

The presence of trees and shrubs in agroforestry systems provides habitat for various species of plants, animals, and microorganisms, contributing to the overall health of the ecosystem. This increased biodiversity can help to improve the resilience of agricultural systems to the impacts of climate change and enhance the provision of ecosystem services such as pollination, pest regulation, and water purification and lastly it is Increased Resilience to Climate Variability which has the last response by the response with 17.7% of the respondents where by the increased resilience to climate variability through Agroforestry systems provide a buffer against the impacts of climate variability, such as droughts, floods, and extreme temperatures. The presence of trees and shrubs on farmlands can provide shade and shelter for crops, protecting them from extreme heat and cold.

Additionally, the diverse plant species found in agroforestry systems can help to buffer against pest outbreaks and disease, increasing the overall resilience of the agricultural system.

#### **4. Conclusion**

Firstly, the study has shown that agroforestry practices play a significant role in climate change mitigation in Kitgum District, Uganda. The integration of trees into agricultural landscapes has been found to contribute to carbon sequestration, thereby helping to reduce the concentration of greenhouse gases in the atmosphere.

This finding underscores the importance of promoting agroforestry as a sustainable land management practice in the region.

Secondly, the research has highlighted the potential of agroforestry systems to enhance the resilience of local communities to the impacts of climate change. By diversifying agricultural production and providing additional sources of income, agroforestry can help farmers adapt to changing environmental conditions and improve their livelihoods. This aspect is particularly crucial in regions like Kitgum District, where vulnerability to climate-related risks is high.

Lastly, the study emphasized the need for targeted policies and interventions to support and promote agroforestry practices in Kitgum District. This includes providing technical assistance, access to quality tree seedlings, and financial incentives for farmers to adopt agroforestry systems. Such measures can facilitate the widespread adoption of climate-smart agricultural practices and contribute to sustainable development in the region.

## **5. Recommendations**

1. Kitgum District carry on capacity building programs, extension services, and farmer-to-farmer knowledge exchange initiatives.
2. Farmers should be encourage to diversify local tree species within agroforestry systems as means to enhance the ecological resilience of the landscape and provide a wider range of ecosystem services.
3. The government should extend subsidies for tree planting,



- access to affordable tree seedlings, and market incentives for agroforestry products.
4. Community participation and engagement are essential for the successful implementation of agroforestry practices.
  5. Continued research and monitoring efforts are necessary to assess the effectiveness of agroforestry practices in mitigating climate change impacts in Kitgum District.

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# **Effect of Training on staff Performance at the Ministry of Foreign Affairs, Uganda**

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## **Abstract**

The Ministry of Foreign Affairs (MoFA) strives to promote and protect Uganda's national interests abroad through robust foreign policy implementation in a dicey, dynamic, demanding and competitive global environment. This study sought to examine the effect of on-job training on staff performance at the ministry of internal affairs, Uganda. The study employed a cross-sectional design. A sample of 124 participants was included in the study, and data was collected using questionnaire interview and documentary review. Quantitative data was analyzed, through SPSS while qualitative data was analyzed thematically. Results indicated that on-job training such as induction (55%), staff coaching (58%), employee delegation (68%) and training workshop (97%) contributed to staff performance significantly. The study recommended that MoFA should champion enactment of a Foreign Service Act to streamline its operations; negotiate appropriate reclassification and increased funding; improve staff remunerations; and establish a diplomatic institute to build sustainable internal capacity through tailor-made staff training programmes.

**Keywords: Capacity building, on-job training, staff remuneration**

## **1.0 Introduction**

Staff training plays a crucial role in the performance of public sector organizations (Bartel, 1989; Russel et al. 1985). Organizations flourish, institutions progress and nations prosper when they marshal sufficient human and technical capacity to pursue their desired goals effectively. In Uganda, Ministries, Departments and Agencies (MDAs) have made deliberate efforts to improve performance by enhancing staff skills, knowledge and attitudes through systematic training programmes (Public Service Training Policy [PSTP], 2006). This study examined the contribution of staff training to the performance of Ugandan FSOs. Staff training was conceived as the independent variable, performance as the dependent variable and resources as the moderating variable that affects performance as well as staff training. Resources were considered in terms of their availability and adequacy while staff training will be tackled under on-job training and off-job training. Performance was discussed in respect of key deliverables in Uganda's Diplomatic Service. These include promoting regional and international peace and security; promoting trade, tourism and education; attracting investments and resources for national development; acquiring and managing properties abroad; managing ceremonies, conferences and events; handling travel documents and Ugandan Diaspora; sourcing international jobs for Ugandans; and protecting Uganda's image abroad.

The Ministry of Foreign Affairs is mandated to coordinate, implement and manage Uganda's foreign policy in order to promote and protect national interests abroad (Constitution, 1995). The

Ministry executes its Strategic Objectives at home and abroad through FSOs who operate within the framework of the Foreign Service. As public Officers, FSOs are expected to receive systematic and continuous training based on identified current or projected training needs, supported by adequate funding from Uganda government (PSSO, 2023). However, it is apparent that FSOs are not fully equipped to meet the global demands and challenges in an ever-dynamic diplomatic arena. Inadequate skills development and insufficient capacity continue to affect the Ministry's ability to perform effectively (MoFA Policy Statement, 2014). Uganda's diplomats are poorly trained, poorly remunerated and poorly housed while the Ministry is understaffed and indebted to international organizations (Walubiri, 2022). Kafeero (2022) notes that MoFA's approach to staff training, guidance and promotions is ad hoc; that it ignores the short- and long-term needs and aspirations of the organization as well as those of individual officers.

The Ministry of Foreign Affairs conducts induction for new FSOs, orientation for new Heads of Missions, annual workshops for Accounting Officers and biennial conferences for all Ambassadors (PSS, 2022). The Ministry also sponsors a handful of FSOs for short and long- term training at home and abroad. Besides, MoFA solicits for foreign scholarships as part of its effort to build capacity, improve skills and bolster the performance of FSOs.

Despite the various efforts to enhance the capacities of the Foreign Service, the performance of Ugandan FSOs is still faced with capacity challenges (PSSO, 2022). For example, there is inadequate

capacity to effectively promote trade, investment, tourism and education; settle contributions to international organizations; acquire and manage mission properties; and effectively protect Uganda's image abroad (PSSO, 2022; DHRDP, 2023; MoFA Policy Statement, 2014). Such devastating challenges which impact on performance of Ugandan FSOs, if not urgently and effectively addressed, the foregoing challenges will constantly diminish the morale, confidence and commitment of FSOs; continuously undermine effective foreign policy implementation; and inevitably undercut the realization of Uganda's national interests pursued in a competitive global environment (DHRDP, 2023). Thus, it is against this background that the study examined contribution of staff training to the performance of Ugandan Foreign Service Officers, Kampala.

## **2. Methods**

This study adopted a cross-sectional survey employing both quantitative and qualitative data collection approaches. The study was based on a total population of 192 people and from this, a sample of 130 participants was determined using Yamane Formula. Data was collected through interviews, and questionnaires. The data collected was organized, sorted and edited; the answered questionnaires were coded and entered into the computer and analyzed using SPSS to generate descriptive statistics and inferential statistics including Regression analysis and Pearson rank correlation as means to establish the relationship between variables.

## **3. Results and Discussion**

### 3.1 Results on On-job Training and Staff Performance

The level of the respondents' agreement or disagreement was indicated by the statements below and the corresponding rating scale.

Results of the respondents' responses are indicated below:

**Table 1: Descriptive results of On-job Training**

ON-JOB TRAINING	SA	A	NS	D	SD
Induction Training					
I underwent induction training when I joined this Ministry.	23	15	8	13	10
I received induction training within 6 months after joining this Ministry.	20	17	7	14	11
The induction training I received enabled me to understand my work better.	25	13	6	16	9
<i>Overall Percentage</i>	55%		10%	35%	
Staff Coaching	SA	A	NS	D	SD
I coach my colleagues on how to handle some challenging assignments	31	12	9	9	8
Coaching has helped me to improve my own skills. attitude and performance	20	14	6	12	17
Coaching can provides an excuse for supervisors to exploit their subordinates	14	8	9	16	22
<i>Overall Percentage</i>	58%		7%	35%	
Employee Delegation	SA	A	NS	D	SD
My supervisor briefs me whenever s/he wants me to stand in for him/her.	29	21	3	6	10
My supervisor gives me feedback after acting on his or her behalf	19	17	2	22	9
Whenever I represent my Department/ Mission, I feel empowered	41	12	1	9	6
<i>Overall Percentage</i>	68%		3%	29%	
Training Workshops	SA	A	NS	D	SD
Workshops facilitate learning and sharing of knowledge and experience.	69	0	0	0	0
Attending workshops with colleagues builds comradeship and team spirit.	50	19	0	0	0
My department carries out training needs assessment to prepare for training.	20	7	12	19	11
<i>Overall Percentage</i>	79%		6%	15%	

***Source: Primary Data 2023***

Induction, the majority, 55% of the respondents, agreed that induction contributed positively to the performance of Ugandan

FSOs. Only 35% disagreed, and 10% was undecided. The essence of induction is to introduce new officers to the Ministry's structure, functions, tasks and expectations, and to acquaint them with authentic tools of trade. However, induction for some FSOs was not always timely or adequate, due to resource constraints.

Staff coaching, staff coaching, as an approach to staff training, positively contributed to performance, and was supported by 58% of the respondents. Coaching could help to inculcate skills and know-how, build teams and relations, and provide career guidance and feedback. This view is shared by the University of South Carolina (2015) which notes that effective coaching and mentoring strengthen communication, increase employee motivation, commitment and self-esteem, and enhance staff confidence, competence and performance. Goldsmith (2007) asserts that the essence of coaching is to enhance success and to provide necessary professional advice to resolve identified performance problems and delusions. Coaching and mentoring help to clarify expectations, set objectives, identify goals, evaluate progress and provide feedback through performance management.

Employee Delegation can improve staff training and performance of Ugandan FSOs, as supported by 68% of the survey respondents. Delegated authority should be commensurate with responsibility; responsibility of the superior is absolute; delegated authority flows downwards and flows responsibility upwards; and a delegate does not delegate (Acharya, 2014). Currently, training for career promotion is inadequate, poorly facilitated, foreign- initiated and



largely foreign- driven (Kafeero, 2022). This explains why the senior managers noted that besides monumental value, the institute would support systematic career progression, professionalism, staff motivation and cost-effective training of FSOs, including political appointees.

In respect to employee delegation, an average of 30 respondents surveyed strongly agreed, 17 agreed, 2 were undecided, 12 disagreed and 8 strongly disagreed with the statements. The majority, 68% of the respondents, agreed with the assertions made under delegation, 3% was undecided, while 29%disagreed with the assertions that delegation positively contributed to the performance of FSOs.

Interview findings established that despite challenges, delegation was done in MoFA to train, motivate, empower and build staff confidence; promote teamwork, responsibility, transparency and accountability; and to recognize individual value and improve decision making. Besides honestly admitting self-interest to reduce their own workload, the managers revealed that they used delegation to ensure staff involvement and ownership, spot talent for management development, identify training gaps and build capacity for better performance, succession planning and institutional sustainability.

The managers admitted that there were several challenges associated with delegation in the Ministry including lack of mutual trust, hiding supervisor's incompetence, passing blame, credit hogging, increased red tape and supervisors redoing badly done work. They also cited

reluctance to delegate, identifying what to delegate, lack of timely feedback, limited capacity of the subordinate and continuous worry about failure to deliver. One of the managers candidly noted: "we have a tendency to delegate only when we are absent, when we are not confident or when we do not like the task"

Regarding training workshops, 46 and 9 respondents respectively strongly agreed and agreed with the statements and 4 respondents were not sure. 6 respondents disagreed and 4 respondents strongly disagreed with the assertions made under training workshops. Thus, the overwhelming majority, 79% supported training workshops, just 6% were undecided, and only 15% disagreed that training workshops contributed to performance.

#### **4. Conclusion**

Knowledge-based training makes no positive contribution to the performance of FSOs. The Ministry does not carry out proper training needs assessment, post-training evaluation and debriefing. Its current approach to staff training is ad hoc and lacks coherent planning, delivery and evaluation mechanism required of an effective knowledge transfer process.

#### **5. Recommendations**

1. The Ministry of Foreign Affairs should establish a system to carry out training needs assessment on short-, medium- and long-term basis to guide strategic planning for necessary skills, appropriate training, career progression, and succession planning within the Foreign Service.

2. Uganda should establish a national diplomatic training institute to offer skills-based, tailor-made and cost-effective training programmes for FSOs, other MoFA staff, and personnel from other MDAs; and to research, think-tank, collaborate and publish. Besides monumental value, the Institute should be used as a public diplomacy tool to increase Uganda's influence in the region.
3. MoFA should pursue enactment and implementation of a Foreign Service Act to help streamline the unique operations of the Diplomatic Service - including funding, remunerations, appointments and promotions - benchmarked against the best practices in other Foreign Services.

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# **Factors influencing teachers' performance among selected public primary schools in Kiboga district, Uganda**

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## **Abstract**

*The study explored the factors influencing teachers' performance among selected public primary schools in Bukomero Sub- County, Kiboga District, Uganda. The researcher used across sectional survey design strongly associated with qualitative and quantitative analysis. The researcher used a cross-sectional survey design because it focused on finding relationships between variables and also is cheap to undertake and takes little time. The researcher also used this design because it enabled him to compare many variables at the same time. Therefore, it helped him to find the relationship between the two variables under study i.e. influencing factors and teachers' performance. Employees in Kiboga district are compliant during working hours, employees are complaint with the orders from their leaders, headteachers and administrators supervise teachers regularly, school leaders give proper accountability to staff members as a way of ensuring transparency and that the school administration motivates teachers with remunerations are some of the influences of principal leadership on teachers' performance, In Kiboga district quality grades are considered very important by the teachers and students, there is work environment in schools which can be described as encouraging and trusting, teachers actively participate in the activities of staff associations, staff members support the school values and objectives and that staff is often updated on the new developments and their progress in the school are the influences of organizational culture on teachers' performance; and teachers in Kiboga district have skills at work, are persistent in doing work, put in much effort to improve on the quality of the work and that there is work capacity efforts in schools are the influences of teachers' competence on academic performance were the conclusions of the study.*

**Keywords:** Leadership, Teachers' competence, Teachers' performance,

## **1. Introduction**

The issue of teachers' performance at schools has been of concern ever since modern education was introduced. Many countries world over have come to realize that teachers are the heart of educational progress and that without good performance, all innovations in education are doomed to failure (UNESCO, 2018). Education is one of the fundamental rights of the individual. Article 26 of the Universal Declaration of Human Rights, which was adopted by the United Nations Education General Assembly on 10th December, 1948 stipulated this among others. Education shall be equally accessible to all on the basis of merit (quality) and parents have a prior right to choose the kind of education that shall be given to their children.

During the 1990 world conference on "Education for All", a declaration to reaffirm the commitment of the international community to ensure the right to education for all people was adopted (UNESCO, 2016). Participants of this conference stated that every person whether child or adult has to benefit from the opportunities of education that were designed to fulfill the benefit from educational opportunities designed to meet their basic learning needs. However, UNESCO (2018) global monitoring reported that only 22 countries across the world were on proper track to achieve the goals for Education for All.

According to Education for All (EFA) global monitoring report released 2008, primary school enrolment rose from 647 to 688

million worldwide between 1999 and 2005, increasing by 36 percent in Sub Saharan Africa and 22 percent South and West Asia. The Global Net Enrolment Ration (NER) rose from 83 percent to 87 percent between 1999 and 2005. Participation levels increased most rapidly in Sub Saharan Africa (23%), South West Asia (11%) (UNESCO, 2016).

UNESCO (2016) further revealed that in 2005, there were about 653 million primary school age going children live in Sub Saharan Africa, Eastern and South Western Asia. Although the literacy rate increased from 49% in 1990 to 60% in Sub Saharan Africa, around 45 million children were out of school (UNESCO, 2016).

Since pre-independence, academic performance in primary schools in the Sub-Saharan Africa, experienced decline in years of strife between 1970s and 1980s. In Uganda, arising from two decades of civil strife and war, the system of education, particularly in lower levels experienced neglect for years. This led to poor enrolment, poor quality of education and increased primary school dropout rates (MOESTS, 2018). The introduction of Universal Primary Education in (1996) and its implementation in January 1997 initially led to the increase in the primary school enrolments from 62% in 1992 to 86% in 2002/3 (Galimaka, 2018). Data by Bategeka and Okurut (2016) shows that primary school enrolment is no longer improving with a fall to 84% in 2005/2006 In addition, Nsibambi (2020) noted that the increase in enrolment in primary school has not matched the quality of performance, especially in the eastern and northern parts of the country. The government of Uganda through the Ministry of

Education and Sports (MoES) has endeavored to provide the necessary scholastic materials and many reforms made in curriculum development in order to enhance an improvement in academic performance in primary schools.

Although teachers and parents have been encouraged to support their children, and more built to cater for the bigger number of pupils, the academic performance of pupils in Kiboga District-Uganda continue to remain stagnant basing on the last ten year's PLE results.

Kiboga District is classified among the last districts in the country with regard to the primary national examination scores. Second, the majority of primary leaving learners fails or succeeds with poor marks. Schools in Kiboga District are poorly equipped, where many teachers are unqualified and there are very few of the public boarding and excellent schools where learners benefit from different advantages. Most teachers in this area get involved in personal business activities to supplement their meagre incomes as commented in the Basic Twelve (2014).

The performance obtained by pupils from exams administered by the Uganda National Examination Board (UNEB) is poor. For example, according to UNEB (2020), out of the 3,655 pupils who sat for Primary Leaving Examinations (PLE) only 151 pupils passed in division 1. It has been the same trend for the past 10 years. Evidently, 2010 had 71 pupils in division 1 out of 2,386 making a shocking percentage of 2.9, 2011 had only 80 pupils in division 1



making 3.2%, 2015, had 87 out of 2819, 2016 had 158 out of 2942, 2017 had 111 out of 2,789, 2018 had 234 out of 3098 whereas 2019 had 209 out of 3,224. Such high failure rates have not spared pupils in public school in Bukomero Sub-County-Kiboga district, Uganda. The researcher wonders whether this performance is attributed to teachers and therefore decides to carry out a study to examine the factors influencing teachers' performance in selected public schools in Bukomero Sub County, Kiboga District.

## **2. Methods**

### ***2.1 Research design***

The study used across sectional survey design strongly associated with qualitative and quantitative analysis. A cross sectional survey design is a type of study that analyzes data from a population or a representative subset at a specific point in time (Amin, 2005). The researcher used a cross- sectional survey design because it focused on finding relationships between variables and also is cheap to undertake and takes little time. The researcher also used this design because it enabled him to compare many variables at the same time. Therefore, it helped him to find the relationship between the two variables under study i.e. influencing factors and teachers' performance. The qualitative method was appropriate because it is descriptive in nature which enabled the collection of verbal data and in its natural setting.

### ***2.2 Study Population***

A population is the complete collection of elements that are of

interest in a particular investigation (Amin, 2005). The entire population of respondents in the 08 public primary schools in Kiboga district is 288, the population of the Headteachers were 08, Deputies were 08 whereas teachers were 40. The researcher used this population because they were suitable for the study. For example, the Headteachers and their Deputies are the supervisors of teachers and the teachers are the main targets and are directly involved in the study. Therefore, the target population was 288.

***Table 1: Category of Respondents and sampling techniques***

<b>Category</b>	<b>Target population</b>	<b>Sample size</b>	<b>Sampling Technique</b>
DEO	01	01	Purposive
DIS	01	01	Purposive
Headteachers	08	08	Purposive
Deputy Headteachers	08	08	Purposive
Teachers	270	80	Random
<b>Total</b>	<b>288</b>	<b>98</b>	

**Source:** Researcher, 2023

### ***2.3 Data collection methods***

The researcher used both questionnaires and interview guides.

#### ***Questionnaires***

Questionnaires were used because they ensure confidentiality of the responses, they save time and they are easy to use on a large population sample.

#### ***Interview guides***

While interviewing respondents, the researcher noted down the responses and compared them with the information in questionnaires to see if they are correct. In this research, the DEO, DIS,

Headteachers and Deputy Headteachers were interviewed. The researcher used interviews in order to get more and in-depth information that the respondents will not have included on the questionnaire.

## ***2.4 Data Analysis***

In the process of sorting field results from administered questionnaires and interviews, the researcher will use both qualitative and quantitative methods of data analysis. Here, both expressions and explanations using words and statistical evidence from the field will be used. Data processing were guided by the objectives of the study and the research questions. Data collected was arranged according to the categories of the respondents, edited and coded for accuracy and completeness of the information given. Quantitative data from the questionnaires were processed by frequencies and percentages and presented in table form for data interpretation. Descriptive analysis was used to analyse qualitative data from interviews and processed alongside that from the questionnaires. This helped the researcher to bring together field data from different respondents and different data collection instruments.

### 3. Results and Discussions

**Table 2: Headteachers responses on factors that influence principal leadership and teachers' performance**

Item	SA		A		UD		D		SD	
	f	%	f	%	F	%	f	%	F	%
Employee are compliant during working hours	2	25	5	62.5	-	-	1	12.5	-	-
Employee compliance with orders from the leadership	3	37.5	4	50	-	-	1	12.5	-	-
Headteachers and school administrators supervise teachers regularly	5	62.5	3	37.5	-	-	-	-	-	-
School leaders give proper accountability to staff members hence transparency	2	25	5	62.5	-	-	1	12.5	-	-
The school administration motivates teachers with remunerations	3	37.5	4	50	-	-	1	12.5	-	-
The school rewards staff for achieving outstanding performance	3	37.5	4	50	-	-	1	12.5	-	-

**Source: primary data, 2023**

Responses from table above indicates that 62.5% of the headteachers agreed that employees are compliant during working hours. 25% of the same respondents strongly agreed with the statement whereas 12.5% of the respondents disagreed. In addition to the above, majority of the respondents (50%) agreed that employees are complaint with the orders from their leaders. This was followed by 37.5% who strongly agreed while 12.5% of the headteachers disagreed that employees are complaint with the orders. Findings further revealed that the majority of the headteachers (62.5%) strongly agreed that headteachers and administrators supervise teachers regularly. 37.5% of the same respondents agreed

with the same statement.

More so, in testing principal leadership, 62.5% of the headteachers agreed that school leaders give proper accountability to staff members as a way of ensuring transparency. 25% of the same respondents strongly agreed whereas 12.5% of the respondents disagreed. 50% of the headteachers revealed in agreement that the school administration motivates teachers with remunerations. 37.5% strongly agreed while 12.5% disagreed.

Finally, the majority of the respondents (50%) agreed that the school rewards staff for achieving outstanding performance. 37.5% strongly agreed while 12.5% disagreed.

***Table 3: Teachers responses on factors that influence principal leadership and teachers' performance***

Item	SA		A		UD		D		SD	
	F	%	F	%	f	%	F	%	F	%
Employee are compliant during working hours	36	45	16	20	-	-	20	25	8	10
Employee compliance with orders from the leadership	16	20	36	45	-	-	8	10	20	25
Headteachers and school administrators supervise teachers regularly	8	10	40	50	-	-	20	25	12	15
School leaders give proper accountability to staff members hence transparency	4	5	8	10	-	-	48	60	20	25
The school administration motivates teachers with remunerations	4	5	16	20	-	-	44	55	16	20
The school rewards staff for achieving outstanding performance	4	5	16	20	-	-	32	40	28	35

***Source: primary data, 2023***

Responses from table 7 above indicates that 45% of the teachers strongly agreed that employees are compliant during working hours. This was followed by 25% of the same respondents who disagreed. 20% of the teachers agreed whereas 10% of the respondents strongly disagreed with the statement. In addition to the above, majority of the respondents 45% of the teachers agreed that there is employee compliance with orders from the leadership. This was followed by 20% of the same respondents who strongly disagreed. 20% of the teachers agreed whereas 10% of the respondents disagreed with the statement.

Findings further revealed that the majority of the teachers (50%) agreed that headteachers and administrators supervise teachers regularly. 25% of the same respondents disagreed with the same statement. 15% strongly disagreed whereas 10% of the respondents strongly agreed. More so, in testing principal leadership, 60% of the teachers strongly disagreed that school leaders give proper accountability to staff members as a way of ensuring transparency. This was followed by 25% of the respondents who disagreed. 10% of the teachers agreed whereas 5% of the same respondents strongly agreed. 55% of the teachers revealed in agreement that the school administration motivates teachers with remunerations. 20% strongly disagreed and the same number (20%) agreed while 5% of the same respondents strongly agreed.

Finally, the majority of the respondents (40%) disagreed that the school rewards staff for achieving outstanding performance. 35% strongly disagreed, 20% agreed while 5% strongly agreed.

***Table 4: Deputy Headteachers responses on factors influencing organization culture and teachers' performance***

Item	SA		A		UD		D		SD	
	F	%	f	%	f	%	f	%	F	%
In our school, quality grades are considered very important by the teachers and students	5	62.5	3	37.5	-	-	-	-	-	-
The work environment in your school can be described as encouraging and trusting	3	37.5	3	37.5	-	-	2	25	-	-
Teachers actively participate in the activities of staff associations	2	25	4	50	-	-	2	25	-	-
Staff members support the school values and objectives	3	37.5	3	37.5	-	-	2	25	-	-
The staff is often updated on the new developments and their progress in the school	2	25	4	50	-	-	2	25	-	-

**Source: primary data**

Responses from the table above indicate that 62.5% of the Deputy headteachers strongly agreed that in their schools, quality grades are considered very important by the teachers and students. 37.5% of the same respondents agreed. 37.5% of the Deputy headteachers agreed that the work environment in their schools can be described as encouraging and trusting. The same number (37.5%) strongly agreed whereas 25% of the respondents disagreed. In addition to the above, majority of the Deputy headteachers (50%) agreed that teachers actively participate in the activities of staff associations. This was followed by 25% who strongly agreed whereas the same number 25% disagreed. Furthermore, 37.5% of the Deputy

headteachers agreed that staff members support the school values and objectives. This was followed by 37.5% of the same respondents who strongly agreed whereas the same number (25%) disagreed. Finally, 50% of the respondents agreed that the staff is often updated on the new developments and their progress in the school. 25% of the respondents strongly agreed whereas the same number of the respondents (25%) respondents also disagreed.

***Table 5: Teachers responses on factors influencing organization culture and teachers' performance***

Item	SA		A		UD		D		SD	
	F	%	F	%	f	%	f	%	F	%
In our school, quality grades are considered very important by the teachers and students	44	55	36	45	-	-	-	-	-	-
The work environment in your school can be described as encouraging and trusting	20	25	48	60	-	-	12	15	-	-
Teachers actively participate in the activities of staff associations	24	30	44	55	-	-	12	15	-	-
Staff members support the school values and objectives	40	50	24	30	-	-	16	20	-	-
The staff is often updated on the new developments and their progress in the school	24	30	28	35	-	-	20	25	8	10

**Source: Primary Data, 2023**

Responses from the table above indicate that 55% of the teachers strongly agreed that in their schools, quality grades are considered very important by the teachers and students. 45% of the same respondents agreed.

60% of the teachers agreed that the work environment in their



schools can be described as encouraging and trusting. 25% strongly agreed whereas 15% of the respondents disagreed. In addition to the above, majority of the teachers (55%) agreed that teachers actively participate in the activities of staff associations. This was followed by 30% who strongly agreed whereas the same number 25% disagreed. Furthermore, 50% of the teachers strongly agreed that staff members support the school values and objectives. This was followed by 30% of the same respondents who agreed whereas 20% disagreed.

Finally, 35% of the respondents agreed that the staff is often updated on the new developments and their progress in the school. 30% of the respondents strongly agreed, 25% disagreed whereas the 10% of the respondents strongly disagreed.

***Table 6: Headteachers responses on factors influencing teachers' competence and academic performance***

Item	SA		A		UD		D		SD	
	F	%	f	%	f	%	f	%	F	%
Teachers have skills at work	3	37.5	5	62.5	-	-	-	-	-	-
Teachers are persistent in doing work	4	50	4	50	-	-	-	-	-	-
Teachers put in much effort to improve on the quality of the work	3	37.5	5	62.5	-	-	-	-	-	-
There is work capacity efforts in schools	3	37.5	5	62.5	-	-	-	-	-	-

***Source: Primary data, 2023***

Responses from table above indicate that the majority (62.5%) of the headteachers agreed that teachers have skills at work. 37.5% of the same respondents strongly agreed. In addition to the above, 50%

of the respondents agreed that teachers are persistent in doing work. The same number (50%) strongly agreed. 62.5% of the respondents agreed that teachers put in much effort to improve on the quality of the work whereas 37.5% of the respondents strongly agreed. Finally, 62.5% of the headteachers agreed that there is work capacity efforts in schools whereas 37.5% of the same respondents strongly agreed.

***Table 7: Deputy Headteachers responses on factors influencing teachers' competence and academic performance***

Item	SA		A		UD		D		SD	
	f	%	f	%	f	%	f	%	F	%
Teachers have skills at work	4	50	4	50	-	-	-	-	-	-
Teachers are persistent in doing work	3	37.5	5	62.5	-	-	-	-	-	-
Teachers put in much effort to improve on the quality of the work	4	50	4	50	-	-	-	-	-	-
There is work capacity efforts in schools	3	37.5	5	62.5	-	-	-	-	-	-

***Source: Primary Data, 2023***

Responses from the table above indicate that the majority (50%) of the deputy headteachers agreed that teachers have skills at work. The same number of respondents (50%) strongly agreed. In addition to the above, 62.5% of the respondents agreed that teachers are persistent in doing work. 37.5% of the same respondents strongly agreed. 50% of the respondents agreed that teachers put in much effort to improve on the quality of the work whereas the same number of respondents (50%) strongly agreed. Finally, 62.5% of the headteachers agreed that there is work capacity efforts in schools

whereas 37.5% of the same respondents strongly agreed.

**Table 8: Teachers responses on factors influencing teachers' competence and academic performance**

Item	SA		A		UD		D		SD	
	f	%	f	%	f	%	f	%	F	%
Teachers have skills at work	56	70	24	30	-	-	-	-	-	-
Teachers are persistent in doing work	32	40	48	60	-	-	-	-	-	-
Teachers put in much effort to improve on the quality of the work	40	50	40	50	-	-	-	-	-	-
There is work capacity efforts in schools	28	35	32	40	-	-	20	25	-	-

**Source: Primary Data, 2023**

Responses from the table above indicate that the majority (70%) of the respondents agreed that teachers have skills at work. 30% of the respondents strongly agreed.

In addition to the above, 60% of the respondents agreed that teachers are persistent in doing work. 40% of the same respondents strongly agreed. 50% of the respondents agreed that teachers put in much effort to improve on the quality of the work whereas the same number of respondents (50%) strongly agreed.

Finally, 40% of the teachers agreed that there is work capacity efforts in schools. 35% of the same respondents strongly agreed whereas 25% of the respondents disagreed.

## 4.0 Conclusions

Employees in Kiboga district are compliant during working hours, employees are complaint with the orders from their leaders, headteachers and administrators supervise teachers regularly, and

school leaders give proper accountability to staff members as a way of ensuring transparency and that the school administration motivates teachers with remunerations are some of the influences of principal leadership on teachers' performance.

In Kiboga district quality grades are considered very important by the teachers and students, there is work environment in schools which can be described as encouraging and trusting, teachers actively participate in the activities of staff associations, staff members support the school values and objectives and that staff is often updated on the new developments and their progress in the school are the influences of organizational culture on teachers' performance.

Teachers in Kiboga district have skills at work, are persistent in doing work, put in much effort to improve on the quality of the work and that there is work capacity efforts in schools are the influences of teachers' competence on academic performance.

## **5. Recommendations**

1. School employers should ensure that there is constant supervision and remuneration so as to exhibit principal leadership and thus improved teachers' performance.
2. The school as an organization should ensure that teachers continuously participate in the activities of staff association.
3. Schools should ensure that they employ teachers with skills and who are persistent in performing their duties. This will

boost teachers' performance and academic performance in the long run.

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**The Influence of Management Styles on Learners' Academic  
Performance among Selected Secondary Schools in Iganga  
District, Uganda**

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**Abstract**

*This study aimed at exploring the influence of management styles on learners' academic performance among selected secondary schools in Iganga district, Uganda. The study used a cross sectional survey design with quantitative and qualitative method. The target population was 4,882 with the sample size of 170 respondents. The data was collected using questionnaires and interviews. Descriptive statistics were used to present the data. The study found that persuasive, laissez-faire, autocracy, transformational leadership, authoritative, participative, democratic and servant leadership were the common management styles exhibited by school head teachers in selected secondary schools Iganga district. The study also found that the commitment of teachers, the availability of physical and instructional materials, the assessment level of learners, and high absenteeism in schools affected students' academic performance in selected secondary schools in Iganga district. Finally, the study found that head teachers' management styles influence students' academic performance in Iganga district. The study concluded that head teachers in secondary schools in Iganga district utilize varied management styles which influence the students' academic performance. These factors included teacher competence, learner proficiency in English, and socio-economic status of the learner. Hence, the study recommended that head teachers should employ the best management styles in schools that include but not limited to persuasive, laissez-faire, autocracy, transformational leadership, authoritative, participative, democratic and servant leadership to enhance students' academic performance. The school stakeholders need to put in place measures against other factors responsible lowering learners' academic performance.*

**Keyword: Academic performance, instructional materials, management styles,**

## **1.0 Introduction**

One important aspect of education is students' academic success (Rono, 2018). It is regarded as the focal point around which the entire system of education is centred. According to Narad and Abdullah (2016), an academic institution's success or failure is determined by the academic performance of its pupils. Additionally, Singh, Malik, and Singh (2016) contended that a nation's socioeconomic progress is directly impacted by the academic achievement of its pupils. Likewise, Farooq, Chaudhry, Shafiq, and Behanu (2021) argued that academic achievement acts as a foundation for learning new information and developing new abilities. However, students' academic performance has been global concern. Relatedly public secondary schools in Iganga district continue to experience poor performance, which has raised a lot of concern among parents, students and school administrators. The District Education Department Report (2022), showed there was a steady decline in the performance of public schools in Iganga district. In 2023, more than half of the students who registered for Uganda Advanced Certificate of Education examinations did not obtain three principal passes (District Education Department Report, 2024). This problem is persisting despite the efforts put in place by different stakeholders including Board of Governors, district inspectorate, headteachers and teachers, to improve academic performance in public secondary schools in Iganga district still remains poor.



Part of the blame has been directed to school managers and teachers, while some portion of the blame has been put on the shoulders of the learners themselves and the parents (Orodho 2018), it is clear that education management in schools involves the application of managerial principles of designing, developing and effecting resources towards the achievement of the educational goals (Okumbe, 2021). Barnard (2018) defined management style as the ability of a superior to influence the behaviour of subordinates and persuade them to follow a particular course of action. Management style is simply construed as directing or being in charge of an organization. It is the general approach of a manager in dealing with people at work and exercising of authority over subordinates in an effort to reach organizational goals (Hartzell, 2016). In view of organizational effectiveness, Bays (2019) opines that the effectiveness of any organization is largely determined by the manner of work co-ordination, level of workers' commitment to the entity, and the extent to which workers co-operate with one another, management, and the community. Management style is a pre-requisite for effective accomplishment in organizations. It determines the level of subordinate participation in decision making and the way an organization is run administratively. Minimal investigation has been made to establish the measures applied by various levels of authority to resolve a school conflict and establish a positive school climate (Tumwesigye, 2018).

This effectiveness according to UNESCO (2019) is judged by the extent to which schools generally meet the expectations of the

society within which they are established. Since independence, the Ugandan government has demonstrated a commitment to the provision of quality primary school education through allocation of financial resources, provision of trained teachers, provision of instructional material, review of the curriculum, establishment of quality assurance departments and organizing workshops for continuous professional development of the staff (CPD) and peer group meetings (PGMs). The government is also putting in policies governing education and interventions which supports them. However, the academic performance of students does not meet the desired standard. Hence the researcher sought to examine the influence of management styles on learners' academic performance in government-aided secondary schools in Iganga district. The study was guided by the following objectives

In Tororo, Uganda, Oketcho, Ssempala, Ujeyo and Atibuni, (2020), examined head teachers' management styles and teachers' role in performance in secondary schools. The findings of the study indicated that headteachers mainly used democratic management style, followed by balanced-oriented style, and laissez-faire style. Task-oriented or authoritarian and staff oriented or affiliative management styles were not used at all. Nyenyembe, Maslowski, Nimrod and Peter (2016) explored the relationship between leadership styles applied by school heads and teachers' job satisfaction in Tanzanian secondary schools. Using a questionnaire, data in this study was collected from 180 teachers in ten secondary schools in Songea District in Tanzania. The results of the study

show that both transformational and transactional leadership styles were used by principals in secondary schools. The findings revealed that transformational leadership styles, like charismatic leadership, individualized consideration and intellectual stimulation, as well as active management by exception – as a transactional leadership style – were relatively most used by heads of the schools.

## **2.4 Influence of Management Styles on Learners' Academic Performance**

Day, Gu and Sammons (2016) established that the association between leadership and performance at work, and the kind of leadership a school has, determines the success of the school and the achievement of learners at all levels of education. This is because good leadership enables the administrator to work together with the staff as a team to accomplish the goals of the school. He added that the leadership style of the school managers and administrators influences their relationship with others and determines their discipline towards others, which later may translate into good academic performance. Ikegbusi and Iheanacho (2016) contend that without proper school management, effective enrolment and performance of students cannot be realized in schools. Even if the schools have all the required instructional materials and financial resources, it may not be able to use them effectively if the students are not directed in their use, or if the teachers who guide in the usage are not properly trained to use them effectively. Also, Day and Gu (2016) urged for better leadership in schools if better achievements in academic performance are to be realised in schools. Waweru and

Orodho (2019) state that head teachers /principals should endeavour to provide the best climate to entice students to perform well and complete schooling by making the school free from violence, threats, intimidations, hatred and witch hunting, and develop a rich co-curricular, remedial interventions for slow learners, to avoid repetition, frustration and dropouts. Mobegi et al (2020) suggests that head teachers should ensure that there are adequate departmental organisations and engagement in classroom supervision to ensure that a variety of teaching methods are used, and learning is taking place.

Empirical studies conducted have also revealed the influence of management styles and learners' academic performance. For example, Oyugi and Gogo (2018) examined influence of principals' leadership styles on students' academic performance in secondary schools in Awendo sub-county, Kenya and established that democratic leadership accounted for 37.4% of variation in students' academic performance. Autocratic leadership accounted for 43.8% of variation in students' academic performance and Laissez faire leadership style accounted for 15.7% of variation in students' academic performance. Bello, Ibi and Bukar (2016) studied principals' administrative Styles and students' academic performance in Taraba state secondary schools, Nigeria. The results of the study revealed that there were no significant relationships between principals' initiative administrative styles and students' academic performance in English language. Igwe and Chidi (2017) investigated the relationship principals' leadership styles and

students' academic performance in Enugu Metropolis in Nigeria. Results of the investigation reveal that autocratic leadership style was positively correlated with students' academic performance. In Ghana, investigated the effects of leadership styles of headteachers on academic performance at Seniagya-Effiduase Sekyere East in the Ashanti region and Over 60% of respondents maintained that the leadership styles of headteachers have some influence on academic performance of students.

Analysis of the literature above indicated that there was a significant effort by scholars to examine the management styles in schools, other factors that affect learners' academic performance in schools and influence of management styles on learners' academic performance. The literature showed that there were wide range of management styles applied in school, factors that affect students' academic performance, and management styles had influence on students' academic performance. Nevertheless, contextual gaps emerged with the fact that none of the studies carried out in the context of secondary schools in Iganga district. Besides, the empirical studies reviewed were case studies in nature which limits the generalisation of their findings. These gaps called for this study to find out management styles utilised in government aided secondary schools in Iganga district, Uganda, other factors that affect learners' academic performance and the influence of management styles on learners' academic performance.

### **3.0 Methodology**

The study adopted across sectional survey design with quantitative analysis. The researcher used a cross-sectional survey design because it focused on finding relationships between variables and also is cheap to undertake and takes little time. Therefore, it was useful in determining the relationship between the two variables under study i.e. headteachers management styles and learners' academic performance. The population of the study included 10 Chairpersons Board of Governors, 10 head teachers, 362 teachers and 4882 students in government-aided secondary schools in Iganga district. The sample size of 170 respondents obtained using Solven's formula. The respondents in the study were selected using purposive and simple random sampling techniques. The data was collected using questionnaire which captured background information of the respondents and their views on management styles exercised in schools, other factors affecting learners academic performance and influence of management styles on learners' academic performance in government-aided secondary schools in Iganga district. To ensure quality data was collected, the researcher established both the validity and reliability of the instrument before data collection. The validity of the instrument was 0.94 was greater than 0.7 and less than 1 the questionnaire consequently instrument was valid and was used in data collection (Amin, 2005). Test re-test method was used to assess the reliability of the instrument. The instrument was administered twice to the same pilot group of respondents at intervals of one week while keeping the initial conditions constant.

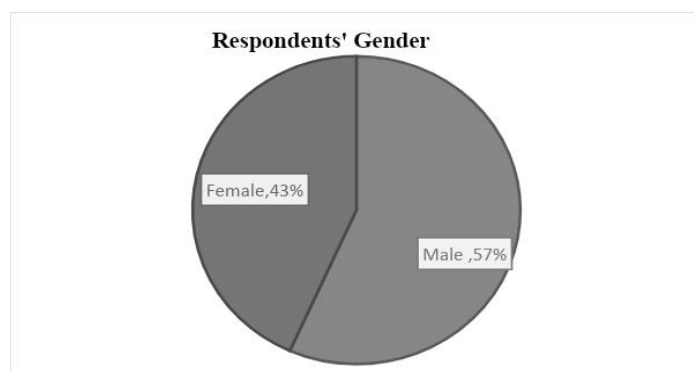
Responses from the two pilot tests were obtained and analysed, to establish the extent to which the context of the research instruments would be administered. The data collected were edited to check whether all responses were given and errors corrected. The data was then organized according to different categories of respondents used in the study and analysed according to the research objectives. The data was analysed using descriptive statistics (in form of frequencies and percentages) with the help of Statistical Package for the Social Sciences (SPSS) software for statistical data analysis. Conclusions and recommendations were made in relation to the purpose of the study.

## 4.0. Results and Discussion

### 4.1 Demographic Characteristics of the Respondents

This section presents the findings on the respondents' gender, age and level of education of which all were considered important for the study.

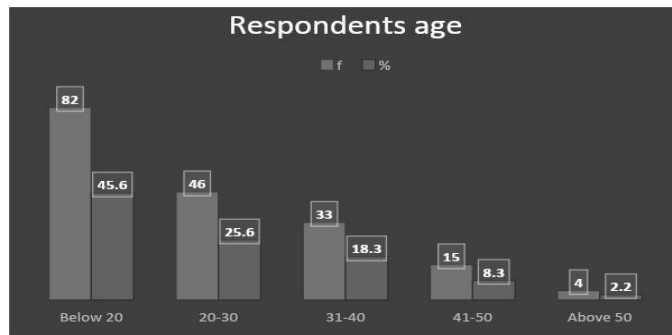
**Figure 1: Respondents' Gender**



**Source:** Primary data, 2023.

From the figure 2 above, 57% of the respondents were male whereas 43% were females. This implies that males are the biggest percentage in the schools.

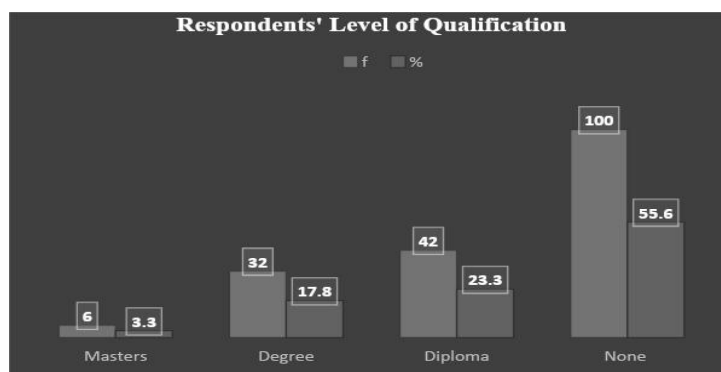
**Figure 2: Respondents' Age**



**Source:** *Primary data, 2023.*

From the above figure, majority of the respondents (45.6%) were below 20 years of age. This was followed by 25.6% who were between 20 and 30 years of age. 18.3% were between 31 and 40 years of age whereas the least number of respondents (2.2%) were above 50 years of age. This implies that since most respondents were students who are always below 20 years of age, that is why the biggest percentage of respondents were below 20 years of age.

**Figure 3: Respondents' Highest Level of qualification**



**Source:** *primary data, 2023.*



From figure 4 above, majority of the respondents (55.6%) had no qualifications, this was followed by 23.3% were diploma holders, 17.8% were degree holders whereas 6% were master's degree holders. This indicates that the majority of respondents being students, they had no professional qualifications.

#### **4.2 Management styles used in Government-aided secondary schools**

The first objective was to examine the types of management style used in selected secondary schools in Iganga District. The findings showed that, 90% of the respondents observed that Heads/ managers have absolute power over their employees, 64% agreed that managers/ heads involve other workers in all important decisions, 68% of employees are closely supervised and controlled, and much interaction or communication is expected. Furthermore, 75% agreed that employees are left to work on their own and managers are readily available in case help is needed, 66% of the respondents observed that employees are allowed to contribute to decision making, 72% of the respondents observed that managers/heads monitor what is achieved and 73% of the respondents agreed that team managers communicate back to the team regularly and authority is delegated to workers which is motivating.

The results above reveal that the common types of management styles used in schools in Iganga are persuasive, laissez-faire, autocracy, transformational leadership, authoritative, participative, democratic and servant leadership. All the above are the common management styles exhibited in selected secondary school of Iganga

district. These findings are supported by findings of the previous researchers. For instance, Oketcho, Ssempala, Ujeyo and Atibuni (2020) found that headteachers mainly used democratic management style, followed by balanced-oriented style, and laissez-faire style. Also, Nyenyembe, Maslowski, Nimrod and Peter (2016) showed that both transformational and transactional leadership styles are used by principals in secondary schools. The findings further revealed that transformational leadership styles, like charismatic leadership, transactional leadership style were also utilised. This suggests that the school heads employ wide range of management styles get the job done quickly and efficiently. A good leader chooses the right kind of leadership style for the situation. It is vital for head teacher not only rely on one leadership style but alternate them depending on the prevailing circumstances.

#### **4.3 Other Factors that affect Learners' Academic Performance in Public Secondary Schools in Iganga District**

The second objective was to assess the factors that affect learners' academic performance of selected Secondary schools in Iganga District. Results indicated that 74% were in agreement with the statement that the quality of teachers affects learners' performance, 86% agreed that the availability of physical and instructional materials influences performance, 77% agreed that assessment level of learners affects their performance, 68% of the respondents revealed that effectiveness of BOG and their educational level affects the performance of learners, 62% agreed that learners' competence in English affects their performance and 90% of the

respondents agreed that family economic level affects learners' academic performance.

Above statistics implies that quality of teachers, assessment level of learners, effectiveness of BOG and their educational level, learners' competence in English, family economic level affects learners' academic performance. This finding collaborates with the findings of the previous researchers in the same area. For instance, Amie-Ogan & Omunakwe (2020) revealed that teachers' years of experience, pedagogical skills and communication skills have positive influence on students' academic performance in public senior secondary schools. This points out that schools should employ trained and qualified teachers to enhance students' academic performance. Similarly, Ogola (2017) revealed that effectiveness of the board of governors or managers in establishing monetary incentives, provision of physical facilities and budget administration improved the performance of the students in Kenya Certificate of Secondary education. Also, Tahir, Ishfaq, Begum and Sharjeel (2021) established that parents' financial status, financial and moral support, socio-economic status of parents, affect student academic achievement, provision of learning environment at home, incentive providing by parents motivate the children to work harder and achieve higher. Furthermore, Rudd and Honkiss (2020) found a highly positive relationship between English language proficiency and GPA attainments leading to the unequivocal observation that higher English proficiency levels were associated with higher standards of GPA.

#### **4.5. Influence of head teachers' Management Styles on Learners Academic Performance**

The third objective was to investigate the influence of management styles on academic performance in selected secondary schools in Iganga District. Results indicated that 58% agreed that there is high absenteeism in schools, 81% agreed that there is an increased job dissatisfaction in schools, 74% asserted that employees are not motivated to work hard by more than financial reward, 66% agreed that there is high number of employee turnover in this school, 71% agreed that employees and the entire school academic performance is not improving, 82% of the respondents observed that the welfare of the entire staff is not improving, 68% observed that there is no improved time management and commitment, 65% of the respondents said that employees do not desire to spend most of their career in serving the organization and 70% agreed that there is no improved willingness of employees to help in serving the entire school duties.

The analysis of the data indicated head teachers' management styles influenced learners' academic performance in secondary schools in Iganga district. This finding is in concordance with the findings of the previous researchers. For example, Oyugi and Gogo (2018) established that democratic leadership, autocratic leadership accounted, laissez faire leadership style accounted for variation in students' academic performance. The later scholars encouraged head teachers to balance the use both democratic and autocratic styles but avoid Laissez faire style. Similarly, Igwe and Chidi (2017) revealed

that management styles such as autocratic leadership style was positively correlated with students' academic performance. This implies that application of autocratic leadership style by the head teachers has the capacity of increasing the level of students' academic performance. Also, Boampong, Obeng-Denteh, Issaka, and Mensah (2016) found that the leadership styles of headteachers have influence on academic performance of students. Headteachers should therefore be equipped with knowledge and skills in leadership and teacher training institutions should incorporate into their curriculum, training in the art and science of leadership in order to groom leaders, right from school. On the contrary to the study findings, Bello, Ibi and Bukar (2016) study revealed no significant relationships between principals' administrative styles and students' academic performance in subjects such as in English language.

## **Conclusions**

The study concluded that head teachers in secondary schools in Iganga district use persuasive, laissez-faire, autocracy, transformational leadership, authoritative, participative, democratic and servant leadership as the common management styles. Teachers' content delivery availability of physical and instructional materials, assessment practices, effectiveness of BOG and their educational level, learners' competence in English, family economic level affects students' academic performance in secondary schools in Iganga district. The study also concluded that in secondary schools in Iganga district there is high absenteeism in schools, increased job

dissatisfaction in schools, high number of employee turnover affecting entire school academic performance. The head teachers' management styles positively influenced the learners academic performance in secondary schools in Iganga district. The head teachers employed varied management styles which helped them to create conducive learning atmosphere which influence teacher performance which positively affected students' academic performance.

### **Recommendations**

School administrators should employ the best management styles in schools that include but not limited to persuasive, laissez-faire, autocracy, transformational leadership, authoritative, participative, democratic and servant leadership for improved management of schools. The school managers and head teachers should always organise continuous professional development trainings for teachers to improve and maintaining their standards of performance for better standards academic performance in Schools. They should also ensure availability of physical and instructional materials, quality assessment practices for improved academic standards of learners in schools. Ministry of Education and Sports should consistently be organising management-based workshops for head teachers to equip them with knowledge on management styles for better management of schools and students' academic performance.

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