

Physical Facilities as Predictors of the Quality of Girls' Education at Primary School Level in Oyam District, Lango Sub-region, Uganda

American Journal of Creative Education
Vol. 5, No. 2, 31-41, 2022
e-ISSN: 2706-6088



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ABSTRACT

The significance of school environmental factors to girls' education remains central because they have a tremendous impact on the quality of teaching and learning of pupils as well as the extent of attention they pay to lessons when in classrooms. This means that schools that fail to provide a conducive atmosphere for teaching and learning may hardly achieve quality in their pupils particularly the aspect of educational excellence. This situation continues to be among the reasons for wider disparities in the performance of girls and boys in a number of districts in Uganda. The main thrust of this research was to determine the effect of physical facilities on girls' education in Oyam district. The study was guided by the cross-sectional survey using a mixed methods approach and structured questionnaires were administered to 139 respondents. Both Means and Standard Deviations were used to describe the variables while correlation analysis and regression analysis were used to determine the relationship and the effect respectively. The results reveal that physical facilities predict approximately 21% variation of all the possible factors that are likely to account for the quality of girls' education in Oyam district (Adj. $R^2 = 0.205$). It is encouraged that a conducive school environment in terms of quality physical facilities becomes a central concern among key stakeholders if the quality of girls' education is to be enhanced in Oyam district.

Keywords: *Girls' education, Oyam, School, Physical facilities, Primary school.*

DOI: 10.55284/ajce.v5i2.778

Citation | Alem Robert Okwang; David Mwesigwa (2022). Physical Facilities as Predictors of the Quality of Girls' Education at Primary School Level in Oyam District, Lango Sub-region, Uganda. *American Journal of Creative Education*, 5(2): 31-41.

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Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

History: Received: 20 September 2022/ Revised: 26 October 2022/ Accepted: 10 November 2022/ Published: 24 November 2022

Publisher: Online Science Publishing

Highlights of this paper

- Women and girls have been traditionally prepared for occupations, which involve taking care of others, for example, treatment and instruction.
- Although schooling is unrestricted, the different school requirements are not free and when confronted with choosing between a boy-child and a girl-child, the boy-child will customarily be given priority.
- A child's environment influences how they grow and study; the school environmental factors affecting girls' education are relevant among primary schools in Oyam district.

1. INTRODUCTION

Education is a continuous process of experiencing and of revising or non-revising experiences. It involves the development of all those capacities in the individual, which enable him or her to control his environment and fulfil his or her possibilities (Arul & Vimala, 2012). The forces of the environment begin to influence the growth and development of the individual right from the womb of the mother. Education as a process of development, occurs in physical, social, cultural and psychological environment. A proper and adequate environment is essential for a fruitful learning of the child (Arul & Vimala, 2012). The home and the school should complementarily provide the necessary stimulus for learning experiences. This is because a child spends most time in school and here the environment exerts different influences on the child's performance through curricula, teaching techniques, relationships. As a consequence, the general condition of our schools, colleges and universities is a matter of great concern to the nation.

Women and girls have, over the past three centuries, been traditionally prepared for occupations, which involve taking care of others, for example, treatment and instruction. The adoption of the Education Amendments Act of 1972, that was expected to provide for protection of schoolchildren from discrimination based on sexual differences in public financed training as well as the Women's Educational Equity Act, embraced in 1974, occasioned a major change in that period. Following the passing of the *No Child Left Behind* in 2002 and the subsequent outcomes in state protocols, previous constraints on the formation of solitary gender public colleges were removed. Previous studies on the learning involvements of teenagers and women based on single sex programs suggest hope of academic achievement for girls and reveals socio-emotional benefits for girls attending single sex schools in urban, high poverty areas. Current advocates of single-sex education believe that it should be available as an option for all students, not just for children of privilege.

According to Okoye and Okoh (2021) there are several environmental factors which affect a student's education, they include; family factors, school factors (e.g. school proximity, teacher's factors (e.g. teachers' professionalism) and child factors (e.g. Peer pressure, peer conformity). adds, the environment is necessary to the development of individuals in the society. However, Ramli, Zain, Zain, and Rahman (2020) described three environmental components namely infrastructure and services; pollution and healthy environment and environmental hazard, with quality of life (QoL) as a mediator. Nine of the top 10 most difficult nations for girls to be educated are in sub-Saharan Africa and they are, South Sudan, Nigeria, Ethiopia, Central African Republic, to mention but a few. Nearly three-quarters of girls in South Sudan do not attend primary school. In Nigeria alone, approximately 5.5 million girls were not in college while the case of Ethiopia suggested that in excess of a million were victims, in the Central African Republic, there is only one teacher for every 80 students, and in Niger, only 17 per cent of young women are literate (Owen, 2021).

In Uganda, girls' schooling is different in different regions even if the gender disparity has reduced; nevertheless, certain concerns relating to their schooling are stated. For instance, the United Nations Girls' Initiative suggested that about one million girls in the country aged between six and twelve are illiterate. In effect, approximately half of all girls aged between fifteen and twenty-four are uneducated and 90% of the girls missed post-primary education.

Also, approximately 35% of girls do not complete the education cycle as a result of early marriage or teenage pregnancy. Actually, the rate of adolescent pregnancy is among the uppermost worldwide given that the nationwide statistic is 24%. Nonetheless, these numbers are different across regions as the poorest region has the highest percentage since poverty is perceived to be the main factor leading to stumpy standards in girls' schooling in the country. Accordingly, it can be stated that although schooling is unrestricted, the different school requirements are not free and when confronted with choosing between a boy-child and a girl-child, the boy-child will customarily be given priority. Thus, this study hypothesised that quality physical facilities are predictor of girls' education in Oyam district in northern Uganda.

2. THEORETICAL FRAMEWORK

The study was guided by the ecology theory, which suggests that a person's environment, for example, home, college, place of work, religious, and locality, have an influence on how a youngster grows. According to [Chinyoka and Naidu \(2014\)](#) this theory studies how schoolchildren progress within the context of the relations that constitute their location. Accordingly, the micro-system constitutes the child's immediate environs. Additionally, the ecological model suggests that a child's development occurs within a multifaceted system of nested influences from the environment. Microsystems, mesosystems, exo-systems, macro systems, and chronosystems are the five nested structures that make up the ecological world of a child. Any immediate interactions or organizations with which children engage, such as their immediate family, school, peers, neighbours, and carers, will be included in their microsystems. How these groups interact with the child yields an effect on how that child grows; encouraging and nurturing these relationships and places become helpful to the child's growth.

The mesosystem demonstrates how the different parts of a child's microsystem interact together for the benefit of a child. The exo-system level encompasses different individuals and places that the child may not interact with often but have a substantial impact on him or her, such as the parent's place of work, extended relatives, and the neighbourhood. Accordingly, the macro system is comprised of dominating social and economic institutions, as well as values, beliefs, and practices that impact all other social systems. The chronosystem is a time-based system that governs the relationships between various systems as well as their impact on learners' academic and intellectual growth. Given the foregoing, understanding the relationship among these systems is key to understanding how the child develops and what influences their performance.

In conducting this inquiry, the study focused on school environmental factors affecting girls' education among selected primary schools in Oyam district. The constructs studied under environmental factors are; instructional materials, physical setting and teaching and learning processes. Girls' education was studied in terms of Completion rate, Enrolment, Attendance rate and Performance in Primary Leaving Examination (PLE). The study was conducted in Oyam district. Oyam District is located in Northern Uganda and it is bordered by Gulu District to the north, Pader District to the northeast, Kole District to the east, Apac District to the south, Kiryandongo District to the southwest and Nwoya District to the west. The administrative headquarters of the district at Oyam, are located approximately 78 kilometres (48 mi), by road, west of Lira, the largest city in the sub-region. The coordinates of the district are: 02 14N, 32 23E. The study covered a period of 5 years that is from 2016 to 2020. This is the period when girls' education has been very poor. It is also a period in which government of Uganda and other development partners channelled resources to rebuild livelihood and infrastructure that had for about two decades been destroyed by the activities of Lord's Resistance Army rebellion. This support included reconstruction of education facilities and other supports which would raise hope for improvement of pupil academic excellence as compared to a period when people were living in camps and there was high wave of insecurity.

From the theory, it was discovered that the nature of relationship between the physical facilities and the quality of girls' education is essential. This suggests a link between physical facilities and quality of girls' education. By looking at the two variables, it was predicted that the results of this study would provide information for stakeholders such as parents, teachers, government, and school administrators to reflect on the various physical facilities, which can support students in achieving their academic goals.

3. REVIEW OF LITERATURE

3.1. The Girls' Education Deficit

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) estimates that, worldwide, 132 million girls are not in school; this includes 34.3 million of primary school age, 30 million of lower-secondary school age, and 67.4 million of upper-secondary school age. In countries affected by conflict, girls are more likely to drop out of school than girls living in non-affected countries. And in many countries, among girls who do enter primary school, only a small portion will complete the cycle and fewer will complete secondary school. Nine of the top 10 most difficult nations for girls to be educated are in sub-Saharan Africa (SSA). Nearly three-quarters of girls in South Sudan do not attend primary school. Nigeria has approximately 5.5 million girls not in school while in Ethiopia they are over a million. In the Central African Republic, there is only one teacher for every 80 students and in Niger, only 17% of young adults are literate (Owen, 2021). These statistics appear to suggest that even if girls in much of SSA find their way to school, a number of factors affect the quality of their education.

3.2. School Physical Facilities and the Quality of Girls' Education

Many of the barriers to girls' education are either within the school system or in the home system. A study by Alam and Jaffer (2018) revealed that the Pakistan government had failed to create an education system acceptable enough to meet the desires of the children, particularly girls. Whereas the decision by government to surrender much of the responsibility to private school operators and religious schools might offer an optimistic impression, nothing can absolve the state of its obligation under both the international law and the domestic legislation, to ensure that every child receives quality education. Alam and Jaffer (2018) reveals that the government does not adequately invest in schools neither does it mind about the presence or quality physical facilities and so it spends far less on education than is recommended by the United Nations Educational, Scientific and Cultural Organization in its guidance on education.

Dagane and Aden (2021) investigated the causes and consequences of female students' dropout in a secondary school in the Dadaab Refugee Camp and the findings revealed that school-related factors including physical facilities emerged as significant factors influencing the decision to either drop out or stay in school. Also, Masita, Kabage, and Nyarik (2021) sought to determine how physical school facilities affected the academic achievement of girls. The findings suggested a strong link between school physical facilities and the overall academic achievement among female students. It was revealed that over half of the girls in public elementary schools in Turkwel Zone, Loima Sub-County, lacked adequate sanitation facilities, affecting the quality of their performance. Similarly, in public day secondary schools in Ekerenyo division, Ondari, Nyamwange, and Andima (2018) investigated the relationship between school sanitary facilities and the frequency of learning among girls using qualitative data from both students and principals in a descriptive survey design; it included the identification of themes and descriptors on the state of cleanliness in participating schools. Similarly, component analysis was used to generate constructs such as "Availability" of facilities, "Skip" when facilities are in poor condition, "Comfort" while using the facilities, and "Attitude" toward sanitation facilities. They were then connected and shown to have a strong relationship with

regular learning. Data collected from all the respondents enabled the researcher to make recommendations / suggestions on how to curb the problem on sanitation facilities in school. This includes sensitizing principals on differences in needs according to gender in the provision of school sanitation facilities.

Between 2013 and 2018, [Abbas \(2021\)](#) assessed the association between a school having a toilet facility and enrolment at school. It was discovered that a school with a toilet facility has a higher enrolment rate. According to the gender breakdown of the results, having a toilet facility was associated with a higher enrolment in girls-only schools. However, no strong evidence of a link between a bathroom facility at school and enrolment was observed for males only schools or mixed schools. Furthermore, [Nyalusi \(2013\)](#) investigated the elements that influence girls' academic achievement in Mbeya City's community secondary schools. It looked at the role of school matrons and female instructors as role models, as well as physical amenities (sanitary facilities and hostels), social practices, and school schedules as major factors influencing females' academic success in community secondary schools. Six community secondary schools were contacted for data. According to the conclusions of this study, girls at community secondary schools perform poorly academically. Lack of matrons and female instructors as role models, as well as a lack of and inadequate supply of physical facilities, dormitories, social practices, and school schedules, have all been identified as major causes to poor academic performance among girls at community secondary schools. It is advised that the government and society enhance school infrastructure for girls and modify attitudes about girls' education in order to improve girls' academic achievement.

[Arshad, Qamar, and Gulzar \(2018\)](#) investigated the impact of physical school facilities on student achievement. The research was quantitative, and a survey method was used. The current study's sample was drawn from the Sahiwal district of Punjab, Pakistan, using a multi-stage random sampling procedure. Prior to data collection, the researcher created and validated a Check-List for Physical Facilities (CLPF). In the current study, data is examined using multiple regression analysis. The achievement of children is assessed using test scores from the eighth grade administered by the Punjab Examination Commission in 2017. Thus, the issues of ventilation, play grounds and first aid appear to have an influence of the level of student achievement. Besides, [Tisia \(2012\)](#) sought to establish the institutional factors influencing girl-child education in public primary schools in Tenges division, Baringo district, Kenya. Sanitation including use and disposal of sanitary towels influenced the participation of girl-child in education. Lack of water and good toilets influenced girl-child participation in education. In Uganda, a study by [Kigongo \(2018\)](#) examined the effect of school environment on students' academic performance in Girl-child among Secondary school students of Mubende District. The results suggested that adequacy of physical facilities improves students' academic performance.

The results of a study by [Ilomo and Mlavi \(2016\)](#) suggests that a number of factors such as student accommodation affect the level of student academic performance in secondary schools. Also, [Chepkonga \(2017\)](#) examined the impact of teaching and learning aids on the delivery of quality education in early childhood development education (ECDE). It was revealed that there was positive significant relationship ($p < 0.01$) between teaching and learning aids and the quality ECDE in that area. As a result, the dearth of satisfactory physical learning facilities yielded a negative influence on the quality of education. This study filled gaps that have arisen from the empirical literature review. There are few studies on the impact of school environmental influences on girls' education in Uganda's primary schools. The majority of the research was carried out in Nigeria ([Okorie, 2017](#)), Zimbabwe ([Dakwa, Chiome, & Chabaya, 2014](#)), and South Africa ([Nekesa 2018](#)). Also, the results are inconclusive. From obtainable literature, it is noted that there is a close link between school physical facilities and the quality of girls' education at primary school level in a number of nations around the world.

3.3. Research Gap

In spite of the fact that the government of Uganda embraced a robust policy aimed at providing universal primary education in 1997, the ratio of primary school enrolment between girls and boys is poor. For instance, between 2013 and 2018, the number of girls and boys attending elementary school in northern Uganda decreased by approximately 20%. Accordingly, one of the key issues posed in education in Oyam district is the high percentage of school dropout among girls; it is possible that the quality of physical facilities within schools could be among the contributing factors for this condition. In spite of this, there is very little documentation on how school physical facilities affect girls' education in primary schools.

4. MATERIALS AND METHODS

4.1. Study Design

A cross-sectional study design with a mixed method approach combining quantitative and qualitative approaches to provide strengths that counterbalance each other's weaknesses was adopted. The quantitative method facilitated the researcher obtain systematic and empirical results through the use of statistical, mathematical and computational techniques. This approach was used because of its suitability in addressing the research questions. The qualitative approach you to ask questions that cannot be easily put into numbers to understand human experience.

4.2. Study Population

The population comprised of the District Education Officer, the Inspector of schools, Head teachers of primary schools who represents the administrative authority in the schools and act as secretaries of School Management Committees, Teachers for upper primary classes, Chairpersons Parents Teachers Association, School Management Committees and primary seven Pupils. All these categories of respondents were selected because they are the key stakeholders in education. Due to the scattered nature of the schools, only twenty out of 109 primary schools were selected.

Table 1. Background information of the respondents.

| Age group | Frequency | % |
|----------------------------------|-----------|-------|
| <30 | 17 | 12.32 |
| 31-40 | 51 | 36.96 |
| 41-50 | 48 | 34.78 |
| 51 and above | 22 | 15.94 |
| Total | 138 | 100 |
| <i>Years of Service</i> | | |
| <=5 | 16 | 11.59 |
| 6 To 10 | 21 | 15.22 |
| 10 and above | 101 | 73.19 |
| Total | 138 | 100.0 |
| <i>Sex</i> | | |
| Male | 88 | 63.31 |
| Female | 51 | 36.69 |
| Total | 139 | 100 |
| <i>Educational Qualification</i> | | |
| Certificate | 62 | 45.26 |
| Diploma | 65 | 47.45 |
| Bachelor's Degree | 10 | 7.3 |

Source: Primary data, 2022.

4.3. Sample Size Determination

The sample sizes was determined by the use of table for determining sample size for research activities. Consequently, 184 respondents were sampled from the target population of 270. Below is the background information of the respondents.

The results in Table 1 above shows that a higher proportion (35%) were in the age group 41-50 years. This implies that most of the respondents interviewed are mature and probably could give well thought ideas. Regarding years of service, the majority 92(70.23%) had worked for over 10 years and only 11.45% had worked for at most 5 years. This implies that the respondents were experienced and they could give informed decisions regarding girl's education in their schools. The total number of respondents were 139; since 59.7 % were male, this suggests that both sexes were represented in this study despite higher proportion of males. The majority of the respondents (45.26%) had certificate and the least 10.1% had a bachelor's degree. This implies that the fewer respondents are highly educated.

4.4. Data Collection Instruments

Self-administered questionnaires, interview guide and documentary checklist were used to collect data. Teachers were asked to complete the questionnaire. The questionnaires consisted of closed ended questions. The background data was captured in section A of the questionnaire for teachers. Environmental elements were captured in section B, followed by girls' education in section C. Except for background information, responses to the topics were recorded on a five (5) point Likert scale, with 1 indicating strong disagreement, 2 suggesting disagreement, 3 indicating neutrality, 4 indicating agreement, and 5 indicating highly agreement. The study was conducted using the interview guide which included organized questions to assist the interviewer in prompting the interviewee to expound and enlarge on the issue for clarity. The District Education Officer (DEO), District Inspector of Schools (DIS), the chairpersons – School management committee (SMC), Parnts teachers' association (PTA), and head teachers were all to be interviewed as key informants.

4.5. Data Quality Control

Correlation analysis was applied to the pre-tested data and the Cronbach alpha value was acceptable at a minimum of 0.70 thus confirming the consistency of the questionnaire's components and, as a result, the stability required if the test is repeated. After conducting the pre-test, the questionnaire was adjusted. The overall Cronbach's alpha reliability coefficients for the questionnaire were 0.832. The value of Cronbach alpha were accepted since it was greater than 0.7 as illustrated in Table 2.

Table 2. Cronbach's coefficient alpha.

| Variable(s) | Number of items | Alpha |
|-------------------------|-----------------|-------|
| Physical facilities | 7 | 0.780 |
| Teaching and learning | 11 | 0.805 |
| Instructional materials | 5 | 0.832 |
| Girls' education | 11 | 0.790 |
| Overall Questionnaire | 34 | 0.832 |

A Content Validity Index (CVI) was computed and using a trusted rule of thumb (Haradhan, 2017). The results indicated that the validity for all the constructs was found to be 100% as indicated in Table 3.

Table 3. Content validity index (CVI).

| Variable(s) | Number of items | CVI (%) |
|-------------------------|-----------------|---------|
| Physical facilities | 7 | 100 |
| Teaching and learning | 11 | 100 |
| Instructional materials | 5 | 100 |
| Girls' education | 11 | 100 |
| Overall questionnaire | 34 | 100 |

4.6. Data Analysis

Inferential statistics were used to test the interaction between the variables. Pearson correlation was applied to determine the degree of correlation between the independent variables in this test (school physical facilities and Girl's education. Finally, linear regression analysis was used to establish the simultaneous effect of independent variables on girl's education. Thematic analysis was based on the transcription made for qualitative data generated.

5. RESULTS AND DISCUSSIONS

This section presents findings from data analysis and testing of hypothesis.

5.1. Physical Facilities

The physical facilities variables analysed are; status of school library, school playground that is used for games and sports, classroom size, sitting facilities (e.g., Desks), sanitary facilities at school, and latrine for girls and boys.

Table 4. Descriptive statistics of physical facilities in the schools of Oyam district.

| Constructs | Mean | SD |
|--|------|------|
| Our school library has all the necessary books that we need to improve our performance | 2.89 | 0.89 |
| Our school has large playground that is used for games and sports | 3.42 | 0.84 |
| Our classrooms are enough for all pupils (there is no overcrowding in class) | 2.46 | 0.75 |
| The classrooms have enough sitting facilities (e.g., Desks) | 2.81 | 0.92 |
| Adequate sanitary facilities at school are ensured | 2.70 | 0.85 |
| Our school have good and enough latrine for girls and boys | 2.79 | 0.89 |
| Total | 2.84 | 0.86 |

Source: Primary data (2022).

Table 4 indicates that approximately 70% disagreed that their classrooms are enough for all pupils (there is no overcrowding in class), 53% disagreed that the classrooms have enough sitting facilities (e.g., Desks), ~56% disagreed that adequate sanitary facilities at school are ensured and 52% disagreed that their school have good and enough latrine for girls and boys. However, 66% agreed that their school library have all the necessary books that we need to improve our performance. The average mean of 2.84 is below 3.0 indicating that generally, the school physical facilities were lacking.

5.2. Girls' Education

The variables of girl's education analysed are; completion in terms of transition rate of girls to upper primary, the transition rate of girls to secondary, the rate of school dropout and repeating classes), enrolment (Girls' enrolment), attendance (regular attendance).

Table 5. Descriptive statistics of the quality of girls' education in Oyam district.

| Constructs | Mean | SD |
|--|------|------|
| The transition rate of girls has improved in the past two years | 2.99 | 0.89 |
| The transition rate of girls to secondary has improved in the past two years | 2.77 | 0.87 |
| The rate of school dropout has reduced among girls in this school | 2.93 | 0.87 |
| Most students' progress to the next class without repeating or skipping | 3.14 | 0.88 |
| Girls' enrolment has improved in the past two years | 3.34 | 0.87 |
| Our classes are always full with both female and male pupils | 3.41 | 0.82 |
| Pupils regularly attend their classes | 2.84 | 0.90 |

Source: Primary data (2022).

From Table 5 above, approximately 60% agreed of the respondents that Girls' enrolment has improved in the past two years, 62% agreed that their classes are always full with both female and male pupils. However, 52% disagreed that the transition rate of girls to secondary has improved in the past 2 years, ~50% disagreed that pupils regularly attend their classes. Generally, the mean of girls' education of 2.94 indicates that girls' education has stagnated.

5.3. Relationship Between School Physical Facilities and the Quality Of Girls' Education

The study used Pearson product-moment correlation analysis to establish the strength of relationship between school environmental constructs and girls' education.

Table 6. Pairwise correlations.

| Variables | (1) | (2) | (3) | (4) |
|------------------------------------|--------|---------|--------|-------|
| (1) Quality of girls education | 1.000 | | | |
| (4) Quality of physical facilities | 0.324* | 0.618** | 0.228* | 1.000 |

Note: ** p<0.01, * p<0.05.

The results in Table 6 suggest that the quality of girl's education in Oyam district is positively and significantly correlated to the quality of school physical facilities (r=0.430, p<0.01). This indicates that as the quality in school physical facilities is enhanced, the quality of girls' education improves. Thus, the quality of school physical facilities are key in improving the quality of girls' education (r=0.481, p<0.01).

Table 7. Linear regression for predicting the quality of girls' education.

| Quality of girls' education | Coef. | St. Err. | t-value | p-value | [95% Coef. | Interval] | Sig. |
|-----------------------------|-------|----------|---------|---------|------------|-----------|------|
| Physical Facilities | 0.22 | 0.13 | 1.63 | 0.106 | -0.047 | 0.484 | |
| Constant | 0.90 | 0.39 | 2.27 | 0.025 | 0.114 | 1.689 | ** |
| Adj. R-squared | 0.205 | | | | | | |

Note: ** p<0.05. [level of confidence].

The finding on Table 7 revealed that school physical facilities explain approximately 21% variation of all the possible factors that are likely to account for the quality of girls' education in Oyam district (Adj. R²= 0.205). This suggests that the quality of girls' education is not solely dependent on the quality of school physical facilities but a range of factors such as quality of teachers and home environment. In terms of school physical facilities, some of the interviewees stated that teachers were disheartened as a result of the bad working conditions, which included a terrible work atmosphere and a lack of suitable accommodations. Some of the teachers were said to live outside of the school grounds, which caused them to be late for class. As an example, a response was cited as follows;

"Lack of proper and decent accommodation makes some of us frustrated. The available houses in teachers' quarters are in sorry state; we feel disregarded and suffer a loss of respect." (Key informant)

The statement from the key informant shows the schools' shortcomings in terms of school facilities, particularly for teachers. Physical inadequacies affect not just students but also teachers.

The analysis of physical facilities as a school physical facilities affecting the quality of girls' education in Oyam district revealed that the quality of physical facilities has no significant effect on the quality of girl's education. However, this finding is not in line with the findings of [Dagane and Aden \(2021\)](#) who explored the causes and consequences of female student dropout in a secondary school in the Dadaab refugee camps and the findings revealed that school-related factors including physical facilities emerged as key factors influencing the decision to drop out or stay in school. In another instance, [Masita et al. \(2021\)](#) sought to establish how physical school facilities affect girls' academic achievement and findings revealed that there is a strong link between school physical amenities and overall academic achievement among female students. [Abbas \(2021\)](#) assessed the association between a school having toilet facilities and enrolment at school and discovered that a school with a toilet facility has a higher enrolment rate and according to the gender breakdown of the results, having a toilet facility was associated with a higher enrolment in girls-only schools. A similar study by [Arshad et al. \(2018\)](#) revealed that all the physical facilities contributed about 15.4% towards students' academic achievement. [Tisia \(2012\)](#) conducted a study to establish the institutional factors influencing girl-child education in public primary schools in Tenges division, Baringo district, Kenya and findings revealed that lack of water and good toilets influenced girl-child participation in education. A study by [Kigongo \(2018\)](#) on the effect of school environment on students' academic performance in girl-child among Secondary school students of Mubende District and the findings revealed that adequacy of physical facilities improves students' academic performance. Besides, [Ilomo and Mlavi \(2016\)](#) investigate issues of physical facilities in Muheza district and noted that all of them affected on the academic performance of students in the district of Tanga.

6. CONCLUSION

Basing on the findings of the study, it is maintained that the quality of physical facilities in primary schools significantly predicts the quality of girls' education. Therefore, physical facilities in primary schools enhance the quality of girls' education hence the need to give greater attention to marinating quality physical facilities if we are to maintain a number of girls in primary schools until the end of the primary school cycle.

7. RECOMMENDATIONS

The study findings have revealed the significance of quality physical facilities in reinforcing girls' education, it is thus encouraged that school authorities place efforts to ensure that the general school physical facilities are well taken care of. Also, the Government of Uganda should provide adequate school physical facilities in primary schools to enhance teaching and learning processes. Further, there is need for local governments to accelerate the process of constructing more school facilities to ensure that quality education is provided in all primary schools including Oyam district.

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