



School Environmental Factors Influencing Female Pupils Academic Performance in Public Primary Schools in Iringa Municipality

Chesco Aloyce Motto^{1,2*}

¹*Department of Arts in Community Development and Project Management, University of Iringa (UoI), Tanzania.*

²*Department of Monitoring & Evaluation, Wildlife Conservation Society-Ruaha Katavi Landscape Conservation Programs-SHARPP, Iringa, Tanzania.*

Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Article Information

DOI: 10.9734/AJESS/2021/v23i130546

Editor(s):

(1) Prof. Bashar H. Malkawi, University of Arizona, USA.

Reviewers:

(1) Jeverson Santiago Quishpe Gaibor, Salesian Polytechnic University, Ecuador.

(2) Olufunmilayo D. Ayodele, Oduduwa University, Nigeria.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/75725>

Received 12 August 2021

Accepted 25 October 2021

Published 03 November 2021

Original Research Article

ABSTRACT

This study intended to explore the school environmental factors influencing female pupils' academic performance in public primary schools at Iringa Municipality. A cross-sectional study design was used where structured questionnaire using open and closed ended questionnaire as well as interviews to participants were used to collect primary information from 123 girls' pupils and 36 key informants from seven selected public primary schools. Data analysis was done through descriptive statistics (SPSS). The study findings revealed that harsh environmental factors contributing to poor academic performance through sexual harassment by pest teachers, longer distance of a female pupils form schools that affect pupils attendance and drop out, Shortage of teaching and learning resources as well as facilities i.e. text books, library and shortage of latrines while teaching and learning it is difficult for them to derive pedagogical principal of teaching following large class size 68-80, and the bias attitude of the teacher towards subject matter that girls are always do performs poor in science subjects than boys. Finally, the study recommends that the government should build hostels for standard six and seven female pupils for solving the issue of long distance and drop out. Good and enough latrines should be built for girls and boys.

Teachers should be well trained in order to handle girls well and also government should organize regular workshops for teachers. Either girls pupils should all the time helped by both male and female teachers in their problems and academic matters openly to avoid bias and mistrust among male teachers.

Keywords: Education; pedagogy; environment; society factors influencing female pupils' academic performance –Iringa municipality.

1. INTRODUCTION

The provision of education for all children, specifically in primary schools, has been a focus of many Governmental and Non-Governmental Organizations. However, there are gender specific challenges in academic performance on final primary education examinations around the world. As a result, some countries show an equitable balance in primary education achievement and others face difficulties in meeting educational objectives either for boys or for girls [1]. Sub-Saharan Africa (SSA) is among the few regions with comparatively poor academic performance of girls in their final primary education examinations compared to boys [2]. Contrary to all other regions, in Sub-Saharan Africa girls' academic performance in public primary school compared to boys has decreased since 2000 by 30% in this sense, Tanzania characterizes many countries in Sub-Saharan Africa in which poor academic performance among girls in education, specifically at primary level, has been a great obstacle. This is one of the serious challenges for the Tanzanian government in attaining the Millennium Development Goals (MDGs), especially goal number three, to promote gender equality and empower women [3]. Several organizations including Action Aid, Campaign for Female Education (CAMFED) Tanzania and Salvation Army are working in Tanzania to promote girls' education in order to close the gap between girls and boys and improve girls' school academic performance in primary education [4].

The decline in academic performance among girls is also evident through other indicators of quality education. There are a number of girls in Tanzania who complete primary school without having acquired primary education. For instance, the studies conducted in Tanzania by [5], indicated that in any three out of five girls' pupils who have completed primary school cannot read or write even a simple sentence in Swahili language. The study indicates that sixty-seven (67) years after independence, the country faced

big problem of girls' academic performance. For example, two-third of girls who completed standard seven and joined secondary education could not read and understand any connected test in English. Between 95% and 60% of secondary school girls lacked mastery of English language, and that only 20% of all university girls could understand and attempt correctly essay questions in English. The implication of this situation is that girls could not perform better given the fact that almost all the subjects were studied in English with exception of Kiswahili subject.

The 30% decline of girls' academic performance since 2000 has been one among the major topics of discussion among educators, politicians, administrators and parents in Iringa Municipality. Different reports have indicated that the standard of girls' academic performance has persistently been poor from primary school level to the tertiary level (secondary schools, colleges and university). It is important to note that educating a woman is to educate the whole society. Thus, therefore this study objectively intended to explore the schools' environmental factors influencing girls' academic poor performance in primary schools at Iringa Municipality.

2. REVIEWED LITERATURE

Mupa [6] defined an ideal environment as one in which girls and boys feel safe and able to achieve their full intellectual physical and emotional potential in whatever that respects differences in gender, inabilities in kind and degree in culture while [7], describes school as an institution, with specialized personnel apparatus, formal and stereo typed means of instruction, a curriculum and rationally defined manifesto objective, Cohen further noted that schools intended so that pupils may learn things and do so under the guidance of the teachers. Harsh school and classroom, environment including sexual harassment of the girl pupil by male teachers were common practices experienced in urban public primary schools in Abuja. Okwach & Anyango [8], but again Daniel

[9] supported by stating that more than 1,000 teachers had been sacked in Kenya for sexually abusing school girls in the past two years. Gender children and social development ministry official Abiero [10] said most of the victims were rural primary school pupils aged between 12 and 15 years. Weke (2005), a program director for Cradle, a Child Rights Foundation in Kenya concurred with the above that the problem was widespread, citing a primary school in Nyanza which had over 20 pregnant girls of which teachers were responsible.

Many studies reviled that distance from schools is one among the main factors that influences girls' poor academic performance in primary education [11], noted that children who lived a long way from school are prone to absenteeism and fatigue. This particularly increased the constraints for girls while it said for every kilometre of distance a girl child was to walk to school had the highest number than the boys (Oparanya & Okiiya, 2015).

According to Kwesiga [12] school facilities determined the quality of the school which in turn influenced the achievements and attainment of its pupils. He emphasized that in rural Africa children start school late and once girls reach puberty they need special facilities, which had been and still are lacking in schools. Recent studies pointed to the fact that lack of privacy for girls such as the absence or poor toilet facilities contributed to periodic truancy and ultimately led to some girls dropping out of school. [13] Lack of or inadequate sanitation facilities particularly toilets negatively affected girls' education more than boys. This is because girls need sanitary facilities that give them privacy. He described that in some places where girls share toilets with boys as it happens in many rural primary schools, they are embarrassed especially when they reach puberty (Oriedo, 2010). The introduction of Free Primary Education (FPE), pupils had adequate exercise books; however, classrooms and other physical facilities such as desks are far from adequate. Girls feel shy to share desks with boys and this may affect their attention [14].

The harmful effects of unsatisfactory teaching are made worse by the grave shortage of textbooks, science apparatus teaching materials and by large classes found in many schools while the instructional materials especially textbooks, school library activity, teacher quality

and school administration are quality elements related to the achievements of academic excellence. Teachers should make use of teaching resources because they arouse learner's interest and promote their desire to learn, and therefore the class with shortage of these learning resources conditions under which a class was working affected the girls moral and their degree of motivation [4].

A number of issues regarding factors influencing girls' academic poor performance in primary school education have been explored by various literature [15,2,4,8]. However, these studies do not specifically focus on public primary school at the study area. Therefore, the present study sought to find the schools environmental factors influencing girls' academic poor performance in selected primary schools in Iringa Municipality.

3. METHODOLOGICAL APPROACH TO THE STUDY

This study was conducted at Iringa Municipality. The municipality has 14 wards which include: Kiheza, Mkwawa, Mwangata, Kitwiru, Ruaha, Mtwivila, Ilala, Makorongoni, Mivinjeni, Kitanzini, Mshindo, Gangilonga, Kwakilosa and Mlandege [16]. Of these ward only seven has public primary schools. In the recent years (2017, 2018 and 2019) the performance of the selected schools' performance of girls who joined the better secondary schools like Ifunda, Malangali, Iringa Girls, Lugalo and Isimila secondary school shows an average of 30% girls while 70% of the students passed were Boys [16]. It is against this background that the area was chosen to be studied. A mixed methods approach namely qualitative approach and quantitative approaches were used to collect and analysed data to generate the conclusions of the study. The use of the mixed methods approach enriched the data [17].

This study used a cross-sectional research design. Both random and purposive methods were employed to gather required data for the study. Simple random sampling technique was used to draw pupils so as to provide equal chance of pupils' opinions and purposive to draw key informants to the study so as they provided important information that others wouldn't. A sample of 123 respondents and 36 key informants involved in the study. The sample of pupils was a reduced by 50% from a total sample of 318 from the population of 2802 based on Payne and Payne (2004) table of appropriate

sample to be studied. The key informants included seven academic teachers, seven head teachers, and seven school teachers. Others included 14 school committee members and one District Education Officers.

Both the questionnaire and interviews were used to collect data from respondents and key informants. While the questionnaire was used to collect data to the pupils, interviews were used to gather data from key informants. A descriptive analysis was used to analyzed quantitative data and content analysis was used to analyze qualitative data.

4. RESULTS AND DISCUSSION OF THE FINDINGS

4.1 Demographic Data Distribution

The demographic data of respondents were sought for this study. The aim was to use the demographic characteristics to compare the responses to other core data of the study. The demographic data of the respondents is indicated in Table 1 shows.

Table 1. Demographic data of respondents (n=123)

Variables	Standard six	Standard seven	percentage
Sex			
Female	61(49.6)	62(50.4)	
Total	123		100%
Age			
11-13	61(49.6)	0	
14+	0	62(50.4)	100%
Total	123		
Education level			
Primary school	61(49.6)	62(50.4)	
Total	123		100%

Given that the study focused on female pupils, all respondents were female pupils. A small majority of respondents 62 (50.4%) were aged 14 years and above, and 61 (49.6%) were aged 11-13 years old. The data also show that while 61 (49.6%) were standard seven pupils, 62 (50.4%) were from standard six. The findings imply that female pupils were equality represented with regards to age and class they are in.

4.2 School Environmental Factors Influencing Girls' Academic Poor Performance in Public Primary Schools

Respondents were asked questions regarding environmental factors influencing their poor academic performance. These questions included harsh environment for them, presence of cases of pest teachers, distance from school, availability of facilities and resources. The response to these questions is summarized in Table 2 shows.

Table 2. The environmental factors influencing girls' academic poor performance in public primary schools (n=123)

Variable	Response	Standard 6	Standard 7	Frequency	Percentage (%)
The school has a harsh environment pupils	Strong agree	22	31	53	43
	Agree	27	23	50	41
	Un decided	0	0	0	0
	Disagree,	12	8	20	16
	Strongly disagree	0	0	0	0
	Total	61	62	123	100
Does harsh school environment influence girls' academic poor performance?	Yes	49	54	103	84
	No	12	8	20	16
	Total	61	62	123	100

Variable	Response	Standard 6	Standard 7	Frequency	Percentage (%)
Presence of pest cases of pest teachers	Strong agree	19	30	49	40
	Agree	31	22	53	43
	Un decided	0	0	0	0
	Disagree,	10	2	12	10
	Strongly disagree	1	8	9	7
	Total	61	62	123	100
Does pest teacher influence girls' academic poor performance?	Yes	50	52	102	83
	No	11	10	21	17
	Total	61	62	123	100
Longer distance from School for pupils	Strong agree	0	0	0	0
	Agree	4	9	13	11
	Un decided	0	0	0	0
	Disagree,	57	53	110	89
	Strongly disagree	0	0	0	0
	Total	61	52	123	100
Does distance from school influencing girls' academic poor performance in public primary schools?	Yes	4	9	13	11
	No	57	53	110	89
	Total	61	52	123	100
Adequate School facilities availability	Strong agree	2	5	7	6
	Agree	10	6	16	13
	Un decided	0	0	0	0
	Disagree,	36	40	76	62
	Strongly disagree	13	11	24	19
	Total	61	62	123	100
Does shortage of teaching facilities influence girls' academic poor performance in public primary school?	Yes	12	11	23	19
	No	49	51	100	81
	Total	61	62	123	100
Availability of Resources	Strong agree	1	2	3	2
	Agree	8	7	15	12
	Un decided	0	0	0	0
	Disagree,	41	27	68	56
	Strongly disagree	11	26	37	30
	Total	61	62	123	100
Does inadequate school resources influence girls' academic poor performance in public primary school?	Yes	9	9	18	15
	No	52	53	105	85
	Total	61	62	123	100

Source: Research Data, 2021

4.2.1 Harsh school environment

In Table 2 shows data shows that while majority respondents 103 (84%) agree that the school has harsh environment for them, 20 (16%) disagree. The data further indicate that of 123 respondents, 103 (84%) were of the opinion that the harsh environment affects their academic performance. The majority of pupils with such opinions are standard seven.

School environment factors for the surveyed schools are not friendly to students and that it contributes to their poor academic performance although the extent of poor performance was not studied. The findings are in line with findings of Kivuli [18] who found that girls' pupils are performing poorly in their academics because most of the time they were cooking unlike their male counterparts who were always in class, some female teachers were harsh and hostile to the girls because they looked at them as their rivals and not learners, with regards of all this, girl's academic performance deteriorated. The key informants also affirm to the findings as they assert that girls served as cooks for teachers in some schools. One school committee member responded that *"it is normal to see girls are cleaning the teachers' houses"*.

4.2.2 Pest teachers

With the Table 2 shows that while majority respondents 102(83%) agree that pest teachers engaged in love relationship with girls, 21(17%) disagree. The data further indicate that of 123 respondents, 102(83%) were of the opinion that the Pest teachers affects their academic performance, they were biased treated in class and some pupils were involved in love affairs with male teachers that psychologically affects their attendance and activeness in class hence resulted to poor academic performance The majority of pupils with such opinions are standard seven.

The school environment factors for surveyed schools are not friendly to students and that it contributes to their poor academic performance although the extent of poor performance was not studied. The findings are in line with Okwach and Anyango [8], Harsh school and classroom, environment including sexual harassment of the girl pupil by male teachers were common, more than 1,000 teachers had been sacked in Kenya for sexually abusing school girls in the past two years. Ngaroga [14] noted that the pupils are

over crowded with a poor pupil teacher ratio, girls shy off because they cannot be attended to by the teacher. The key informants also affirm to the findings as one of the committee member assert *"some teacher developed relationship with girls' pupils from standard six and seven but again those girls' pupils with intimate relationships with teachers are those fevered in class and even are those used to clean teachers' houses and fetch water for them"*.

4.2.3 Longer distance from the school

The data in Table 2 shows that while majority respondents 110, (89%) agree that there are Longer distance of pupils from schools 13 (11%) disagree. The data further indicate that of 123 respondents, 110, (89%) were of the opinion that longer distance of pupils from schools affects their academic performance. The majority of pupils with such opinions again are standard seven.

The school environment for surveyed schools is not friendly to students and that it contributes to their poor academic performance although the extent of poor performance was also not studied. The findings are in line by Lockheed and Vespoor [11] whom noted that children who lived a long way from school are prone to absenteeism and fatigue. This particularly increased the constraints for girls and it affected their school attendance and concentration in class and therefore affects their academic performance. The key informants also affirm to the findings as one of the academic teacher assert *"as we are talking here, three girls from standard seven have been expelled from school because they were impregnated by bodaboda whom they used to take them to school on daily bases"*.

4.2.4 Inadequate facilities

From Table 2 shows that while majority respondents 100(81%) agree that there are inadequate teaching and learning facilities in schools. The data further indicate that of 123 respondents, 100 (81%) were of the opinion that inadequate teaching and learning facilities affects their academic performance. It was affirming by one the pupils who assert *"we are so many pupils in this school and the toilets are not enough and therefore during toileting we have to wait for the so long and sometimes do share with boys' toilets, in fact brother toilets is a huge problem in our school"* The majority of pupils with such opinions again are standard seven.

The school environment for surveyed schools is not friendly to students and that it contributes to their poor academic performance although the extent of poor performance was also not studied. The findings are in line by Kwesiga [12] who noted that school facilities determined the quality of the school which in turn influenced the achievements and attainment of its pupils. UNICEF (2012), recent studies pointed to the fact that lack of privacy for girls such as the absence or poor toilet facilities contributed to periodic truancy and ultimately led to some girls dropping out of school. The key informants also affirm to the findings as one of the committee member assert *“most of these schools are old school more emphasis was put on increasing the number of classes and desks following huge pupils’ enrolment in the schools after introduction of Fees-free education while toilets are still problems to most of the schools in the Municipality and it hence reduces academic confidences of girls’ pupils in the academic excellences.”*

4.2.5 Inadequate resources

In the Table 2 shows data shows that while majority respondents 105 (85%) agree that the school has inadequate resources, 18 (15%) disagree. The data further indicate that of 123 respondents, 105 (85%) were of the opinion inadequate resources, affects their academic performance. One of the respondents said *“Brother to perform better in exams is not possible at all bro, because how can one perform better in an environment where one text book we do share with 5 pupils, can you have some time to read alone at your home? It’s not possible, myself I don’t bother fighting for the book so to perform it’s a dream that won’t ever come ha ha ha”* The majority of pupils (respondents) with such opinions are standard seven.

The school environment for surveyed schools is not friendly to students and that it contributes to their poor academic performance, the extent of poor performance was not studied. The findings are in line with findings by Ng’aroga, [14], noted that a teacher should make use of teaching resources because they arouse learner’s interest and promote their desire to learn. Mills [19], the physical conditions under which a class was working affected the girls moral and their degree of motivation he emphasized that a student is not well motivated if he is cold or cannot see properly or is squatting on an uncomfortable stool and so without enough and usefulness of teaching and

learning materials or resources girls’ pupils will forget about attaining academic excellence. The key informants also affirm to the findings as one of academic teacher assert *“shortage of teaching and learning materials i.e. text books, unavailability of libraries to primary schools as well as teaching aids are the huge problems facing the public or government owned primary schools’ academic excellence in the Municipality”*.

4.3 Challenges

The researcher encountered only one challenge in data collection, which is language challenges – the official language for primary education in Tanzania is Kiswahili, therefore it has to translate the questions in questionnaires into Kiswahili and wrote back in English these was the same applied in interviewing school committee members as well as teachers.

5. CONCLUSION

The objective of this study was to explore the school environmental factors influencing girls’ academic poor performance in public primary schools in Iringa Municipality, under this objective the researcher searched harsh school environment, pest teachers, longer distance of pupils from the school, inadequate school facilities and resources.

103 (84%) from 123 respondents agreed that school has harsh environment that influenced to their academic poor performance. Poor latrine was one but also it found girls’ pupils were performing poorly in their academics because most of the time they were cooking and doing domestic activities in teachers houses like cleaning and moping unlike boys who normally were in studying rooms.

Also the study found that of 123 respondents, 102(83%) were of the opinion that Pest teachers influenced to their academic poor performance, they were biased treated in class and some pupils were involved in love affairs with male teachers that psychologically affects their attendance and activeness in class hence resulted to poor academic performance.

Either in longer distance of pupil from school the study indicated that of 123 respondents, 110, (89%) were of the opinion that longer distance of pupils from schools influenced to their academic poor performance. Coming far from schools

affects their attendance and in some cases drop out happened.

On inadequate facilities the study revealed that of 123 respondents, 100 (81%) were of the opinion that inadequate teaching and learning facilities affects their academic performance, facilities like library and desks. Also majority of 123 respondents 105 (85%) agree that the school has inadequate resources and that affect their academic performance. They were sharing text book in 1:5 ratio.

Therefore, the study revealed that Harsh school environment, Pest teachers, Longer distance of pupils from schools, Inadequate school teaching and learning facilities and shortage of resources are the school environmental factors influencing girls' academic poor performance in public primary schools in Iringa Municipality.

6. RECOMMENDATIONS

Therefore, based on the environmental factors especially longer distance of a girl pupils from school the study recommends that a government build hostels for standard six and seven. Girls pupils, good and enough latrines should be built for girls and boys alone respectively. This will eventually enable girls to have huge studying hours, it will as well solve the long distance problem and again it will solve the problem of attendance and drop out. On issue of Harsh and pest teachers, the government should make sure the teachers are well trained in order to handle girls well and hence change negative attitude of teachers(pest teachers) and also government should organize as possible as it can relevant seminars and trainings to both teachers and academic teachers so as to sharpen their skills updated, either girls pupils should all the time helped by both male and female teachers in their problems and academic matters openly to avoid bias and mistrust among males teachers. Whoever on inadequate teaching and learning facilities and resources the government should provide enough text books, build libraries and teaching aids to schools that will evenly fit for the huge enrolment of pupils in the primary schools at Iringa Municipality, that will enhance pupils to access more reference books and conducive leaning environment.

SUGGESTIONS FOR FURTHER STUDY

Further study needs to be done to capture the extent to which the government and family supports girl's education. Either a research on academic performance of girls in public primary schools in rural areas is the second suggestion topic to be carried and the last one is a similar study to be done elsewhere with a larger population than the one covered in this study.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the authors.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Thomas M, Rugambwa A. Equity, power, and capabilities: Constructions of gender in a Tanzanian secondary school. *Feminist Formations*. 2011;23(3):153-175.
2. Lugayila E. Assessment of Factors Influencing pupil's standard seven' Examination Performance: A Case of Maswa District. Doctoral dissertation. The Open University of Tanzania; 2014.
3. Ellis A, et al. Gender and Economic Development in Tanzania: Creating Opportunities for Women. World Bank Group; 2007. Available:<https://openknowledge.worldbank.org/bitstream>
4. Kapinga O. Assessment of School Facilities and Resources in the Context of Fee Free Basic Education in Tanzania. Paper Presented at the Quality Education Conference, 14-16 December, 2016. Dar es Salaam; 2016.
5. Angela N. Factors Affecting Girls' Academic Performance in Community Secondary Schools, Open University of Tanzania; 2013.
6. Mupa P. Factors contributing to ineffective teaching and learning in primary schools Faculty of Arts and Education and Quality Assurance Unit, Zimbabwe Open University. Masvingo, Zimbabwe; 2015.

7. Conen YA. Schools and Civilization States. In Joseph Fisher the Social Sciences and the Comparative study of Educational Systems. Scuanton International Text Book; 2016.
8. Okwach O, Anyango A. Education and under-development, Romix Services Ltd, Kenya; 2005.
9. Daniel E. Daily Nation Annual Primary Education report; 2010. Wednesday 18th September 2010.
10. Abiero M. Curriculum Development-Nairobi: Longhorn Publishers. Asiachi, JA & Okech; 2009.
11. Lockheed B, Vespoor M. Education process, American Council Co.inc; 2016.
12. Kwesiga JC. Women Access to Higher Education in Africa; Uganda's Experience Fountain Publishers Ltd Kampala; 2002.
13. UNESCO. UNESCO Global Partnership Girls and Women's education. UNESCO, Paris; 2012.
14. Ng'aroga J. PTE Revision series for Primary Teacher Education. East Africa Educational Publishers; 2008.
15. Karin L. Contextualizing the quality of primary education in urban and rural settings: The case of Iringa Region, Tanzania, Norsk Geografisk Tidsskrift Norwegian Journal of Geography, 2018; 72(4):234-247.
DOI: 10.1080/0029195 1.2018.1492962
16. Iringa, DEO. The Municipality primary education performance assessment report, Produced by Ward Education Coordinators Team; 2019.
17. Kothari T. Research Methodology Methods and Techniques 2nd Edition New Age Willay Easter; 2004.
18. Kivuli EN. The influence of home and school based factors on performance of Girls in science subjects in KCSE. University of Nairobi; 2006.
19. Mills T. Education for Instructor, Cambridge University Press, London; 2014.

© 2021 Motto; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

*The peer review history for this paper can be accessed here:
<http://www.sdiarticle4.com/review-history/75725>*