

Influence of the Adequacy of Sanitary Facilities on the Participation of the Girl-Child in Public Primary Schools in Garissa County, Kenya

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Abstract

Every child has the right to quality education and good health care. The government of Kenya introduced Free Primary Education to ensure all school aged children acquire basic education. Despite this government investment, the participation of girls in primary school education has been low. This study aimed at assessing the influence of sanitation on participation of the girl-child in public primary schools in Garissa County, Kenya. The study adopted a descriptive survey research design. The targeted population was made up of girls and teachers in public primary schools. A sample size of 704 respondents comprising of 640 class seven girls, 32 head teachers and 32 class seven class teachers was sampled. Questionnaires, observation schedules and interview schedules were used for data collection. Validity of the research instrument was ascertained through experts in research of Chuka University. Descriptive statistics were used for data analysis aided by the Statistical Package for Social Sciences (SPSS) Version 20. The results were presented in tables. Most schools did not have adequate toilets and did not provide adequate sanitary pads. The schools did not have hand washing points and tissue papers. The study revealed that adequacy of sanitary pads, washing water points /soap and toilets influenced enrolment, concentration, self-confidence, attendance and performance of girls in education. The study recommends development of clear policies on provision sanitation facilities, increase the number of sanitary pads supplied per girl. The government should set aside adequate budgetary allocation to provide school with sanitary facilities.

Keywords: Adequacy, Sanitary Facilities, Participation and Girl-Child

1. Introduction

To improve access and participation in socio-economic development, the government of Kenya implemented the free primary education programme in January 2003 with the aim of providing more opportunities to the disadvantaged school age children (Sifuna, 2005). The programme created a positive outcome because it resulted in significant increase in enrolment in a majority of the schools (Elimu Yetu Coalition, 2004). The free primary education (FPE) policy abolished school fees and other levies arguing that fees and levies posed a serious hindrance to children wanting to access education in schools (Sifuna, 2005). With the introduction of free primary education policy the gross enrolment rate (GER) increased from 92% in 2002 to 104% in 2003 of the school age children population (Elimu Yetu Coalition, 2004). This resulted to overcrowding in schools as the existing facilities were not proportionately expanded. People perceive empowerment differently. Although this concept has been developed decades ago, but the role of emotional intelligence in the employee empowerment is a new issue [1]. Emotional intelligence is defined as capability of perceiving and controlling self and others emotions. Mayer and Salovey are the first authors that have developed the concept of emotional intelligence for showing individual ability in managing their emotions. According to Mayer and Salovey, emotional intelligence is ability of controlling emotions and effect of self and others for differentiating these from each other and using them in directing people thoughts and actions. Despite the heavy investment serious challenges have bedeviled the implementation of the FPE policy (RoK,

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2005). Free Primary Education led to pressure on provision of sanitation facilities specifically the toilet, washing water points, tissue papers and sanitary pads (Benta & Simatwa, 2010). According to Yieke (2006) pressure on existing sanitation facilities has negatively influenced the quality of teaching and learning on one hand and contributed to indiscipline, dropout and repetition especially among female pupils. The legal provisions and policies governing education in Kenya as spelt out in the School Management Guide, outlines the number of sanitation facilities (toilets) required in primary school in the ratio: 1:30 for boys; 1:25 for girls; at least a urinal for boys; and at least one toilet for staff (ROK, 2003).

According to the Ministries of Public Health and Sanitation all sanitary facilities must be constructed as per the requirement of the building code, Public Health and Education Acts should ensure that boys and girls have separate sites and take cognizance of children with special needs and age especially aperture design (Rok, 2009). These sanitary facilities should provide privacy, easy to clean, maintain and appropriate bins (where possible pedal operated) for disposal of sanitary towels (RoK, 2009). Schools should have a policy on waste collection; storage and appropriate disposal hence need to have containers for waste collections at specific sites/areas (RoK, 2009). The ministry of education emphasizes the need to have girls facilitated to acquire sanitary pads and be educated on their safe disposal (RoK, 2009). The government of Kenya hence established the primary school sanitary pads program in the year 2012 with the aim of ensuring consistency in class attendance and curbing drop out among the girls. Despite the effort by the government of Kenya to provide sanitary pads to primary school girls, drop out among girls in primary schools persists (UNESCO, 2009). The current study endeavored to establish the adequacy of sanitary facilities in Public primary schools in Garissa County in relation to the participation of girl child in education.

Proper sanitation facility in schools is closely interwoven with female literacy, especially after the age of 14 when the girls attain puberty. However, there is high morbidity and mortality related to lack of water, poor sanitation and poor hygiene globally, with the developing countries bearing the greatest load (UNICEF, 2008). Burgers (2000) argues that conditions of sanitation facilities of schools in developing countries are often appalling, creating health hazards and other negative influences. Sanitation facilities are recognized as fundamental for hygienic behaviour and children's well-being, in practice, the sanitary conditions in most schools are inadequate (Snel, 2004). Sanitation has influence on quality of education in schools (Furlong & Morrison, 2000). This study sought to establish the adequacy of sanitary facilities and how it influences participation of girl-child in public primary in schools in Garissa County, Kenya.

Statement of the Problem

The education of girls yields benefits that extend beyond themselves to their communities and to the society at large. The Government of Kenya introduced Free Primary education in an effort to promote access and completion rates. Despite this initiative however low participation of girls is a concern to educationists and stakeholders especially in the arid regions. This has been blamed on in-adequate sanitation facilities to cater for the needs of the girl-child. The objective of the current study was to investigate the influence of the adequacy of sanitary facilities on the participation of the girl-child in public primary schools in Garissa County, Kenya.

2. Methodology

This study used the descriptive survey research design. The study was carried out in Garissa County. Garissa County is located in North Eastern Kenya and covers an area of 44,174.1Km². The location of this study was chosen because primary schools in Garissa County have been affected by low enrolment, high incidences of absenteeism, poor academic performance and high drop out among girls. The target population was 98,936 subjects comprising of 98,475 girls and 461 teachers in public primary schools in Garissa County, Kenya. A sample size of 736 respondents was sampled for the study. The sample constituted of 640 class seven girls, 32 head teachers and 32 class seven class teachers.

Questionnaires, Focus Group Discussions and observation schedule were used for data collection. The instruments were piloted in the neighbouring Isiolo County. The cronbach coefficient alpha method was used

to estimate reliability of the instruments. Reliability co-efficient of 0.8 and 0.9 was obtained with the teachers and pupil's questionnaires. Validity of instruments was ensured by use of research experts in Chuka University. Data was analyzed using descriptive statistics and presented by use of figures and tables.

3. Results and Discussion

Demographic Characteristics

Background information of the schools in which the participants were drawn was gathered in relation to the enrolment of both girls and boys, number of toilets and the number of toilets reserved for each gender. Enrolment of boys and girls in these schools is shown in Table 1.

Table 1: Pupils' Enrolment by Gender

Gender	frequency	%
Boys	17,066	61.9
Girls	12,274	38.1
Total	29,340	100.0

According to the finding revealed in Table one, there were more (61.9%) boys than girls (38.1%) who were enrolled in primary schools in Garissa County. This indicates that measures put in place by the ministry of education to address gender disparity in primary schools have not adequately addressed the problem of low participation.

The study also established the availability and number of toilets in the study schools. All the schools had pit latrines which were mainly ordinary and ventilated improved pit latrines. Table 2 presents the distribution of toilets among the boys and girls.

Table 2: Distribution of Toilets

Category	Number of Toilets	
	F	%
Boys	116	40.6
Girls	123	43.0
Both boys and girls	47	16.4
Total	286	100.0

Information in Table 2 show that out of a total of 286 toilets counted in the study schools, 116 toilets were set aside for boys while another 123 were for the girls. A total of 47 toilets in the study schools were shared by both boys and girls.

From the information obtained on enrolment of pupils and the number of toilets by gender in the study schools the toilet pupil ratios were computed and the information is presented in Table 3.

Table 3: Pupil-Toilet Ratio

Category	Number	Number of toilets	Toilet – Pupil ratio
	F	F	
Boys	12,448	116	1Toilet : 107 Boys
Girls	7656	123	1 Toilet : 62 Girls

Table 3 shows that the ratio of toilets to boys was 1 toilet for every 107 boys while that of girls was 1 toilet for every 62 girls in the study schools. The legal provision governing education in Kenya as spelt out in the school management guide outlines the number of sanitation facilities required in primary school in the

ratio of 1: 30 for boys, 1:25 for girls, at least a urinal for boys and one toilet for staff (GoK, 2003). The findings therefore established that the number of toilets in the study schools were inadequate for both boys and girls.

Adequacy of Sanitary Facilities

The objective of the study was to investigate the extent to which adequacy of sanitary facilities influenced enrolment, class attendance, self-confidence, concentration in class and performance of girls in school. The study sought to determine the extent to which adequacy of toilets affects the participation of girls in education under Drop out, class attendance, self -confidence, concentration in class, Performance. Information generated is presented in Table 4.

Table 4: Influence of Adequacy of Toilets on Participation of Girls in School

Item	Drop out		Class Att		Self Conf		Concentration		Performance	
	f	%	f	%	f	%	f	%	f	%
Very great extent	360	66.7	340	63.0	280	51.9	300	57.7	240	48.0
Great Extent	40	7.4	120	22.2	200	37.0	100	19.2	140	28.0
No Opinion	40	7.4	40	7.4	40	7.4	60	11.5	20	4.0
Small Extent	20	3.7	20	3.7	20	3.7	20	3.8	60	12.0
No Extent	80	14.8	20	3.7	0	0	40	7.7	40	8.0
Total	540	100.0	27	100	540	100	520	100	500	100

According to data presented in Table 4, majority (66.7%) of the respondents noted that adequacy of toilet influenced drop out of girls to a very great extent. On whether the adequacy of toilets influenced class attendance by girls most (63.0%) of the respondents agreed that it did so to a very great extent. Pertaining to the extent to which adequacy of toilets influence self-confidence of girls, majority (51.9%) of the respondents said that it did so to a very great extent, with another 37.0% reporting that it influenced self-confidence to a great extent. Information on Table 4 also reveals that concentration of girls in class was influenced by adequacy of toilets to a very great extent as cited majority (57.7%) of the respondents. Further the findings on Table 4 show that adequacy of toilets affected the performance of girls to a very great extent as cited by most (48.0%) of the respondents.

The extent to which adequacy of hand washing water point and soap/detergents affects Class attendance, self-confidence and concentration in class of girls in education was investigated. Data generated is presented in Table 5.

Table 5: Influence of the Adequacy of Washing Water Point and Soap/ Detergent on Participation of Girls

Item	Class Attendance		Self Confidence		Concentration	
	f	%	f	%	f	%
Very great extent	320	59.3	220	37.9	240	48.0
Great Extent	120	22.2	180	31.0	160	32.0
No Opinion	60	11.1	20	3.4	40	8.0
Small Extent	40	7.4	60	10.3	20	4.0
No Extent	0	0	20	3.4	40	8.0
No of Rep	540	100.0	540	100	540	100

Data presented on Table 5 shows that washing water point and soap/ detergent influence class attendance by girls to a very great extent as cited by 59.3% of the respondent. Majority (37.9%) indicated that adequacy of washing water points and soap/ detergent affects girls self-confidence to a very great extent while 31.0% reported that it did so to a great extent. Most (48.0%) of the respondents considered adequacy of washing water points influenced concentration of girls in class to a very great extent.

The study investigated the extent to which adequacy of sanitary pads affected Drop out, class attendance, self-confidence, concentration of girls in class. The information generated is presented in Table 6.

Table 6: Influence of Adequacy of Sanitary Pads on Participation of Girls in Education

Item	Drop out		Class Att		Self Conf		Concentration		Performance	
	F	%	F	%	F	%	F	%	F	%
Very great extent	15	60.0	15	62.5	12	50.0	10	41.7	12	48.0
Great Extent	2	8.0	5	20.8	10	41.7	8	33.3	7	28.0
No Opinion	2	8.0	2	8.3	2	8.3	5	20.8	1	4.0
Small Extent	4	16.0	2	8.3	0	0	1	4.2	3	12.0
No Extent	2	8.0	0	0	0	0	0	0	2	8.0
Total	25	100.0	24	100	24	100	26	100	25	100

Table 6 shows that to a very great extent and great extent adequacy of sanitary pads influence drop out among girls as cited by 60.0% and 8.0% of the respondents respectively. Class attendance by girls is influenced to a very great extent by adequacy of sanitary pads as noted by a high (62.5%) of the respondents. On whether adequacy of sanitary pads influenced self confidence among girls, the findings obtained indicated that it does so to a very great extent as reported by majority (50.0%) of the respondents while 41.7% supported the view by noting that it did so to a great extent. Majority (41.7%) of the respondents indicated that adequacy of sanitary pads influenced the concentration of girls in class to a very great extent; with another 33.3 % noting it did so to a great extent. Performance of girls in class is influenced by adequacy of sanitary pads as cited by 48.0% and 28.0 % of the respondents who reported that it did so to a very great extent and great extent respectively. The study sought the respondents' opinion on the extent to which adequacy of tissue papers influence drop out, class attendance, self-confidence, concentration and performance of girls in school. Table 7 presents the data obtained.

Table 7: Influence of Tissue Paper on Participation of Girls in Education

Item	Drop out		Class Att		Self Conf		Concentration	
	F	%	F	%	F	%	F	%
Very great extent	160	32.0	300	62.5	180	37.5	200	43.5
Great Extent	100	20.0	100	20.8	80	16.7	40	8.7
No Opinion	40	8.0	40	8.3	40	8.3	20	4.3
Small Extent	40	8.0	40	8.3	40	8.3	60	13.0
No Extent	160	32.0	0	0	140.	29.2	140	30.4
Total	500	100.0	480	100	480	100	520	100

According to information presented in Table 7 adequacy of tissue paper affected participation of girls in education in schools in terms of Drop out, Class attendance, self-confidence and concentration.

4. Conclusion

Based on the finding of the study the following conclusions were drawn:

- i.** The ratio of toilets to girls in public primary schools revealed that the toilet facilities were inadequate and did not meet the numbers recommended by the ministry of education.
- ii.** Adequacy of toilets, sanitary pads and hand washing points influenced attendance, concentration in class, self-confidence and performance of girls in education to a very great extent.

5. Recommendations

The Government policy on the required sanitary facilities should be strictly implemented and adequate budgetary allocations provided for sanitary facilities to promote participation of girls in education.

References

- Benta, A. & Simatwa, E. (2010). Opportunities and challenges for public primary school head teachers in the implementation of free primary education in Kisumu Municipality, Kenya: An analytical assessment. *Educational Research and Review* Vol. 5 (9), pp. 484-491
- Burgers, L. (2000). *Background and Rationale for School Sanitation and Hygiene Education; School Sanitation and Hygiene Education (SSHE)*, New York: UNICEF.
- ElimuYetu Coalition, (2004). Monitoring of the Free Primary Education and establishing the unit cost of primary education in Kenya. Retrieved on 01/04/2007 & 13/09/2009 from <http://www.Commonwealtheducationfund.org/download/KenyaministryFPE.pdf>.
- Furlong & Morrison. (2000). *Foundations of behavioural Research* (3rd Ed) New York: Holt Rinehan and Winston publisher
- Republic of Kenya.(2003). *Free Primary Education. Every Child in School*. Nairobi: Ministry of Education, Science and Technology.
- Republic of Kenya. (2005). *Kenya Education Sector Support Programme 2005 – 2010*. Nairobi; Ministry of Education, Science and Technology.
- Republic of Kenya, (2009). *National School health policy*, Ministry of Public Health and Sanitation and Ministry of Higher Education, Science and Technology, Nairobi.
- Republic of Kenya, (2009). *National School Health Guidelines* :Ministry of Public Health and Sanitation, Nairobi.
- Sifuna, D. (2005). The illusion of universal free primary education in Kenya. *Wajibu: A journal of social and religious concern*. Issue 20. Retrieved from tp://africa.peacelink.org/wajibu/articles/art_6901.html on 17/09/2009.
- Snel, M. (2004). *The Worth of school sanitation and hygiene education (SSHE): Case studies*; Delft. The Netherlands: International Water and Sanitation Centre.
- UNESCO. (2005). *Challenges of Implementing Free Primary Education in Kenya Assessment Report*. Nairobi: UNESCO.

- UNESCO. (2005). *Challenges of Implementing Free Primary Education in Kenya Assessment Report*. Nairobi: UNESCO.
- UNESCO, (2005). *Global Monitoring Report: The Quality Imperative*. Paris:UNESCO.
- UNESCO (2009). *Constitution of the United Nations Educational Scientific and Cultural Organisation*, Paris UNESCO.
- UNICEF, (2008). *Sharing simple facts.Useful Information about Menstrual Health and Hygiene*.New York: United Nations Children's Fund (UNICEF).
- Yieke, F. A. (2006). *Free Primary Education (FPE) in Kenya: Examining the Benefits, Challenges and Sustainability*. Kef: Commission for development studies at the Austria academy services: MDG project database. Retrieved from <http://www.oean.ac.at/tfe/download/MDGs/MDG-project-database/MDG-db-abstractyieke.pdf> on 20/07/2009.