

Relationship Between Schools' Sanitation Facilities And Girl's Regular Learning In Public Day Secondary Schools In Ekerenyo Division, Nyamira County, Kenya

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ABSTRACT: *Suitable sanitation facilities are those that give girls the comfort they need in terms of their health, hygiene, security and at the same time provide them with privacy that they desire adequately. This study determined the relationship between schools' sanitation facilities and girls' regular learning in public day secondary schools of Ekerenyo division, Nyamira County. The study majorly targeted female students in secondary schools because of their need of special hygienic facilities that affect them especially during the adolescence stage of their development. The study looked at this fact and how they are related to their regular learning. They cannot be compared with boys. This is why this study was necessary. The researcher used simple random sampling to pick 7 schools and principals in these schools were identified as automatic respondents. Then, the researcher employed stratified random sampling to choose 7 students from forms 1-4 which were the strata from the 7 secondary schools giving a total sample size of 225, although 224 responded to the questionnaires. Descriptive survey design was then used where qualitative data from both the students and the principals was analyzed by identification of themes and the descriptors on the situation of sanitation in participating schools. Equally, constructs like "Availability" of facilities, "Skip" when the facilities are not in a good condition, "Comfort" while using the facilities and "Attitude" towards the sanitation facilities were then constructed through the use of factor analysis. They were then correlated and were found to significantly correlate 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.*

KEYWORDS – *Adolescent, Gender, Hygiene, Relationship.*

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I. INTRODUCTION

The gender needs in terms of personal hygiene and sanitation differ significantly during adolescence. It is therefore critical to take gender needs and potential gender differentiated impacts into consideration in the designing of school sanitation facilities. UNICEF (2010) emphasizes on how sanitation is important for facilities in schools, which are built in order to accommodate girls who are menstruating for their specific needs, their privacy, space, washing facilities and also correct disposal or cleaning of the menstrual pads. This is complimented by Gujjar (2010) who says that while affecting all school-aged children, inadequate sanitation facilities hit girls more, pushing many out of the classroom for lack of privacy and dignity during the crucial stage of adolescence. Elizabeth (2010) on the same reports that in some cases girls put up with the deplorable conditions only to leave when they begin to menstruate.

In Malawi and South Africa as reported by Human Rights Watch (2001), girl's absentee themselves from learning institutions during menstruation, sometimes pretending to be sick, due to the conditions of toilets and water at school. It further asserts that provision of safe water and sanitation facilities is the first step towards a healthy physical environment benefiting both learning and health. However, provision of mere facilities does not make them sustainable or produce the desired impact. It is the use of latrine and related appropriate hygiene behavior that provides health benefits Biran, &Hagard (2003).

According to UNESCO (2003), in Ethiopia, fewer than half the schools had latrines and only one school had a separate latrine for boys and girls; while in Ghana, only a third of schools had latrines and in many cases, they were unfit for use. A study on the provision of educational facilities in primary schools in Rigoma division in Nyamira County by Motuka (1999) found out that 5.6% of the schools that were involved in the

study had been closed down due to lack of toilets. The closure was directed by the public health officials until the pit latrines were constructed. This uncondusive school environment altogether brings learning to a standstill impacting the regular learning of both boys and girls hence influencing negative performance Nyaigoti (2013).

Ngure (2009) studied on sanitation and hygiene situation in public primary schools in Thika municipality, remarked that most schools had semi-separate (back to back design) toilets, were shared, or boys' and girls' toilets were constructed close to each other. When girls reach puberty, they drop out of school, go late or leave early due to embarrassment of having to share latrines with boys. They do so because of lack of privacy and security, even from their colleague students during the use of the facilities.

Human Rights Watch (2001) observed that sexual violence against girls in South African schools is due to latrines situated close to public roads, next to classrooms, adjacent to boys' latrines and, in most cases the doors are missing or broken presenting an opportunity for harassment from outsiders, other students and sometimes adults in the school. If there are no latrines at school, girls go far into the bush to relieve themselves, for fear of being seen, where they may be at risk of snake bites or even sexual attack. UNICEF (2005) noted that education for girls can be supported and fostered by something as basic as a girls-only toilet arguing that lack of access to separate and decent toilet at school is impeding girls' access to education. In Bangladesh, a school sanitation program increased girls' enrolment by 11%, a level that is beyond the reach of conventional educational reform (Cairn cross, 1998).

II. STATEMENT OF THE PROBLEM

Education is universally recognized as key to national development. It has a critical role in addressing issues of gender equality and equity. In spite of all the steps that Kenyan government has made to facilitate the attainment of gender equality, schools in Nyamira County are characterized by poor conditions whereby others do not have water and hand washing facilities at all. This is particularly difficulty for girls whose specific needs require them to access water and certain specific facilities. Failure to provide such basic facilities could cause discomfort and probably affect the girls' learning more compared to boys. This is particularly so because of the differences in their needs during adolescence. Gender gap in academic achievement is an area of interest to educational stakeholders. Efforts to close or reduce this gap are documented including affirmative action in in the constitution and other policies. So all issues related to learning of both gender need to be studied in any part of Kenya. Sanitation facilities in most day schools are not gender specific yet needs are different according to gender. What could be the extent of relationship between the school sanitation facilities and regular learning of girls in the area of study? Would it be that the state of school's sanitation facilities is inhibiting regular learning of female students in public day secondary schools of Ekerenyo Division? While efforts in closing the gender academic achievement gap are being put in place by all types of authorities, it is not clear whether girl child's regular learning is disrupted by the girls' sanitation needs. There is need to explore more how such needs can be met for the girls to learn normally and at par with boys. This study focuses on the Relationship between Schools' Sanitation Facilities and Girl's regular learning in Public Day Secondary Schools in Ekerenyo Division, Nyamira County, Kenya.

III. RESEARCH METHODOLOGY

Descriptive survey research design was used in this study. Kothari (1985) argues that a descriptive survey describes, records, analyzes and reports the conditions in the way they exist or existed. On the other hand Kerlinger (1973) emphasizes that survey method is used widely in obtaining data that is useful in evaluation of the present practices and also provide the basis through which decisions can be made concerning a particular situation. Therefore, in this study, the researcher employed a Descriptive research design to identify the challenges the girls studying in public day secondary schools face in EkerenyoDivision of Nyamira County. It is through this research design that the researcher was able to collect and analyze data related to various sanitation situations from all the participating school principals and their female students from the location of the study. Simple random sampling technique was used to select schools and girls to take part in the study. Kothari (2003) says that a sample of between 10% and 30% is appropriate for a study. He argues that in this method, each element has an equal probability to be selected as a sample. This is because the technique is bias free and no element can be selected twice as a sample. The girl students were purposively selected to participate in this study. They were required to give their experience concerning sanitation facilities in their schools Principals gave background information; challenges experienced by female students, and suggested some of the solutions to sanitation problems relating to girls' regular learning. The girl students were stratified into four strata according to grade levels -form 1, 2, 3 and 4 and then girls proportionally randomly selected from each stratum. At least 8 students from every stream were expected to respond to the questionnaire, however 218 questionnaires were responded to by girls and, 7 others were responded to by the school principals totaling to a sample size of 225.

IV. RESULTS AND DISCUSSIONS

Relationship between the state of sanitation facilities and Girls regular learning in Public Day Secondary Schools in Ekerenyo Division of Nyamira County

The researcher collected data from girls on various indicators of regular learning with an aim of determining if there is a relationship between the state of sanitation facilities and regular learning. Girls were asked to rate the availability and sufficiency of latrines/toilets, bathrooms, soap, basins/buckets, disposing bins and water on a scale of 1 to 4 (where 1 represented the best and 4 the worst as shown in Appendix 1). Confirmatory factor analysis yielded a Cronbach alpha of 0.643 for the combination of bathrooms, soap, buckets and disposing bins. The inclusion of water in this construct resulted in a slightly lower Cronbach alpha of 0.631. The research opted to use the construct without water (higher Cronbach alpha) and coded it "level of availability (AVAIL)" of the girls needs in terms of sanitation facilities. The mean of the four items (bathrooms, soaps, buckets and disposing bins) was computed to provide a measure for each respondent for the new variable AVAIL.

Further exploratory factor analysis of the 18 items from the likert scale section of the questionnaire yielded two other variables with Cronbach alpha 0.614 and 0.537 respectively. The constructs were coded SKIP (to indicate the level of possibility of girls skipping school due to sanitation related issues) and COMF (the girls' comfort in the use of sanitation facilities in their school). The constructs with their respective Cronbach alpha levels were as follows;

VARIABLE ITEMS

SKIP

1. The condition of the toilets can make girls skip school
2. Lack of water in the bathrooms can make girls skip school
3. Lack of water in the bathrooms can make boys skip school
4. Some girls skip school when they are menstruating Cronbach alpha = 0.614

COMF

1. I feel insecure when using the school sanitation facilities
2. Some girls report late to school because of the condition of toilets
3. Some girls leave school early to use toilets and bathrooms at home
4. Some girls avoid using the school sanitation facilities altogether because of their conditions
5. Lack of privacy when using school sanitation facilities affects girls learning
6. I'd skip school if I cannot access proper sanitation facilities

Cronbach alpha = 0.537

The researchers considered variables SKIP and COMF indicators of regular learning. The items in the construct SKIP indicated the issues that could make a girl in a public day secondary school in the area of study fail to go to school, hence missing out on learning. The items on the construct COMF indicated the extent of discomfort girls experience when using the sanitation facilities in their schools.

The means of items in each of the above two constructs were computed for each respondent. This represented the measure of each of the construct for each respondent. The responses were all arranged in such an order that on a scale of 1-4, higher scores indicated low comfort, more skipping of school, and little availability of facilities.

The researcher also coded another variable ATTITUDE resulting from the response to the item on the questionnaire seeking the respondents' choice among the following 4 options.

1. I do not have a problem using sanitation facilities in my school
2. There are problems using the sanitation facilities but they are not serious
3. I hate using the facilities but have no choice
4. I don't use school sanitation facilities because they are unfavorable

The statements are arranged in such a way that the respondents' choice of a higher value on a scale of 1 to 4 could indicate a negative attitude towards the sanitation facilities in their schools. The four constructs resulting from the exploratory factor analysis were then correlated using SPSS version 21. The Pearson's correlation coefficients and their significance levels are presented in the Table 4.8.

| | ATTITUDE | COMF | SKIP | AVAIL |
|----------|----------|--------|--------|-------|
| ATTITUDE | 1 | | | |
| COMF | .319 | 1 | | |
| SKIP | .563** | .310** | 1 | |
| AVAIL | .466** | .567** | .566** | 1 |

Sources: Field data. Note: ** Correlation is significant at the 0.01 level.

Table 1: Pearson's Correlation Coefficients for the Indicators of Regular Learning and Sanitation Facilities

From Table 1 above it can be noted that there was moderate positive correlation between all the variables (0.310 to 0.567). All the correlation coefficients were significant at 0.05 (those with ** indicate significance at 0.01 which is less than 0.05) except the correlation between ATTITUDE and COMF of .319. It can therefore be concluded that there is significant relationship between sanitation facilities and regular learning indicators.

V. CONCLUSION

The study assessed the state of sanitation facilities in the 7 sampled schools. The state of sanitation facilities was viewed from their availability, adequacy, security, privacy and comfort according to the girls' needs. This was in view of the fact that there are differences in the need and use of the facilities according to gender. Their description was based on the perspective of the school principals' and the girls' respondents. The sanitation facilities described were latrines/toilets, bathrooms, soap, basins/buckets, sanitary pads disposing bins and water. The study showed significant relationship between states of school sanitation facilities and indicators of regular learning. The state of sanitation facilities (AVAIL) which was derived from the girls' perceptions of level of adequacy, security, privacy and availability of soaps, bathrooms, buckets and toilets was correlated to three indicators of regular learning. The three indicators were school attendance (SKIP), comfort in use of the facilities (COMF) and attitude towards the facilities (ATTITUDE). Results indicated that there was significant correlation between the state of sanitation facilities and all the indicators of regular learning.

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