

School Hygiene Management Practices and Regularity of Girl-Child in Government-Aided Secondary Schools in Soroti District, Uganda

Achola Alice Susan¹, Dr. Kamonges Wahab Asad²

¹Teacher, Soroti Secondary School,

²Lecturer, Department of Educational Psychology, Faculty of Education, Islamic University in Uganda

ABSTRACT: The general objective of the study was to examine the relationship between school hygiene management practices and regularity of girl-child in government-aided secondary schools in Soroti District, Uganda. Specifically, the study examined the relationship between provision of hygiene education, promotion materials and monitoring and evaluation and regularity of girl-child in government-aided secondary schools in Soroti District. The sequential explanatory design was employed. Data was collected from 87 girl-children, 5 senior women teachers and 5 head teachers. Quantitative data was principally gathered from the girl children using a self-administered and closed ended questionnaire. Qualitative data was gathered from the head teachers and senior women teachers using an interview schedule. Data was analyzed using descriptive, inferential statistics, themes (for qualitative), presented in Tables and interpreted with narratives. The Pearson Correlation Coefficient results showed strong positive and statistically significant relationship between provision of hygiene education ($r = 0.985$, $n = 87$, $P < 0.05$), promotion materials ($r = 0.987$, $n = 87$, $P < 0.05$), and monitoring and evaluation ($r = 0.984$, $n = 87$, $P < 0.05$) and regularity of girl-child in government aided secondary schools in Soroti District. The study concludes that there exists a strong positive and statistically significant relationship between school hygiene management practices (provision of hygiene education, promotion materials and monitoring and evaluation) and regularity of girl-child in government-aided secondary schools in Soroti District. Recommendations were: integration of hygiene into the national curriculum, regular school assessments, institutionalizing hygiene education sessions, and active engagement in hygiene education activities.

KEYWORDS: School Hygiene, Management Practices, Regularity, Girl Child and Secondary School

1. INTRODUCTION

Globally, regularity of girls in schools is influenced by the availability and quality of Water, Sanitation, and Hygiene (WASH) facilities, with menstrual hygiene management (MHM) being a key determinant UNICEF (2020). While the issue is often more acute in low- and middle-income countries, even in developed countries, girl child regularity in school is a great concern. In the United States, a study by (Schmitt et al, 2021) affirms that nearly 1 in 5 girls have either left school early or missed school entirely because they lacked access to menstrual products. This has prompted several U.S. states such as California, Illinois, and New York to mandate free menstrual products in public school restrooms. However, implementation gaps still exist, especially in rural and underserved communities. In the United Kingdom, the government launched the Period Product Scheme in 2020, which offers free period products in schools and colleges across England. This initiative was introduced after studies by (Plan International UK, 2018) showed that 1 in 10 girls aged 14–21 had been unable to afford period products, leading to missed school days. The UK's focus has shifted not just to product provision but also to menstrual education and dismantling social taboos, helping girls stay in school consistently. A case of India, a study by (UNICEF, 2021) found that 23% of girls are irregular in school due to inadequate sanitation facilities. Similarly, in Bangladesh, a survey by the (International Centre for Diarrheal Disease Research, 2020) found that 41% of girls, miss school due to poor hygiene facilities. These global statistics highlight the necessity of improved hygiene management to enhance the regularity of the girl child in school. The lack of sanitary products, cultural taboos, and inadequate sanitation facilities exacerbate the issue.

The Nigerian Federal Ministry of Education and UNICEF (2022) found that more than 50% of girls in public secondary schools lacked access to safe toilets and menstrual products, leading to frequent irregularity in school. In East Africa, girls face similar barriers to regular attendance. According to the Ministry of Education and Sports (2017), over 60% of schools in rural areas lack girl-friendly toilets with water and privacy. Further still, the National Bureau of Statistics, (2020) found that 1 in 4 girls are irregular in schools due to menstrual hygiene challenges. The lack of separate toilets and inadequate water supply in schools

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contribute significantly to absenteeism, in Uganda government aided secondary schools, menstrual hygiene management remains a key factor influencing girls' school attendance. According to the (Ministry of Education and Sports, 2021), 35% of Ugandan girls miss school during their periods due to inadequate menstrual hygiene facilities and products. According to the (Soroti District Health Inspector of Schools, 2023) in a 2023 survey conducted in selected government-aided secondary schools found that: 42% of girls miss school for at least 2-3 days per month due to menstrual-related challenges.

Regular attendance enhances the girl child learning outcomes, boosts confidence, and fosters equal opportunities for academic success. A conducive learning environment, where hygiene management practices are well established empowers girls to attend school without fear of discomfort, stigma, or health complications related to poor menstrual hygiene. However, in reality, many girls in these schools face significant challenges due to inadequate hygiene management practices, particularly during their menstrual periods (Soroti Government Aided Secondary School Status Report, 2023). Many schools do not have adequate clean and private washrooms, water supply and proper waste disposal systems. The inconsistent availability of sanitary pads forces some girls to resort to unhygienic alternatives or miss school entirely AGM Minutes Report (2024). However, the extent to which these hygiene management practices influence the regular attendance of the girl child, especially in Soroti District, remains unclear. It is against this backdrop that the current study examined the relationship between hygiene management practices and the regularity of the girl child in government-aided secondary schools in Soroti District, Uganda.

This study was guided by the Hygiene Behavior Change Theory by Eric (2005) as a public health and behavioral science framework that emphasizes improving hygiene practices through targeted interventions, education, and environmental modifications. It focused on the interplay between knowledge, attitudes, and practices (KAP) related to hygiene, while addressing structural, social, and institutional factors that influence behavior (Hennegan, 2020). This theory is particularly relevant in school settings, where access to adequate sanitation facilities, clean water, and waste management systems is essential for promoting sustainable hygiene behaviors. The theory aimed to create sustainable behavior change by empowering girl child, improving access to resources, and fostering supportive environments for better hygiene practices, the theory is relevant to the study because it advocates for adequate sanitation facilities, clean water supply, and waste management systems in schools. In addition, the study focuses on knowledge, attitudes, and practices (KAP) related to hygiene. For example, educating girls about menstrual hygiene management (MHM) and providing access to sanitary products can significantly reduce absenteeism (Sommer, 2019). However, the theory is compounded by some weaknesses among which include a potential over-reliance on individual behavior change without adequately addressing systemic issues such as inadequate funding, poor infrastructure, and deeply entrenched cultural norms that may hinder effective implementation. Additionally, the theory may not fully account for the diverse socio-economic and cultural contexts of different schools, which can affect the feasibility and success of hygiene interventions.

School Hygiene Management Practices encompass a comprehensive set of strategies, policies, and routines designed to maintain cleanliness, promote health, and prevent disease within the school environment (Snilstveit, et al, 2016). Besides, UNICEF (2023) passives school hygiene management practices as the systematic planning, implementation, and monitoring of measures that promote cleanliness, health, and sanitation within the school environment. These practices include the provision of clean water, adequate sanitation facilities, menstrual hygiene management, regular handwashing, proper waste disposal, and hygiene education integrated into the school curriculum. Effective hygiene management is supported by school leadership, community involvement, and health partnerships, ensuring that students not only learn in a clean and safe environment but also develop lifelong hygiene behaviors. The successful implementation of school hygiene practices also aligns with broader health and education policies, including the Sustainable Development Goals (SDGs), particularly those focused on health (SDG 3), education (SDG 4), and clean water and sanitation (SDG 6), making it a critical component of holistic child development and effective education systems. Regularity of the Girl Child means the consistent and uninterrupted attendance of girls at school, which is vital for their academic progress, personal development, and long-term empowerment (Kato, 2020). Regularity is influenced by a range of socio-cultural, economic, and health-related factors. These include menstrual hygiene challenges, domestic responsibilities, early marriages, poverty, and societal attitudes towards female education (UNESCO, 2023). In many developing contexts, including Uganda and parts of sub-Saharan Africa, irregular school attendance among girls is often driven by inadequate sanitation facilities, lack of access to menstrual hygiene products, and gender-based violence or discrimination within and around schools (Haver, 2023). When girls are unable to attend school consistently, they are at greater risk of falling behind academically, repeating grades, or dropping out entirely, perpetuating cycles of poverty and gender inequality. Promoting the regularity of the girl child requires a holistic approach that addresses both infrastructural and cultural barriers such as providing gender-sensitive WASH (Water, Sanitation, and Hygiene) facilities, enforcing laws against child marriage, and offering community-based awareness programs that champion girls' education (Haver, 2023). The study by Mohammed and Johnson (2021) reported limited access to affordable sanitary products and cultural stigma. In contrast Sharma and Desai, (2020) observed that community-led intervention resulted into a 35% reduction in absenteeism and enhanced hygiene practices, improved knowledge about menstrual hygiene, with 80% of girls reporting better hygiene practices, community involvement reduced cultural stigma and increased support for girls. UNICEF

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(2022) found out that 67% of girls reported missing school during menstruation due to lack of access to sanitary products and poor sanitation facilities. Schools with hygiene education programs saw a 30% reduction in absenteeism among girls, while cultural taboos and stigma were significant barriers to effective hygiene education. However, UNICEF's study provided a broader geographic scope which may not reflect key concerns at district level hence the current study examining the provision of hygiene education and regularity of girl-child in government-aided secondary schools in Soroti district, Uganda.

Austrian (2021) study found that the provision of menstrual hygiene products (sanitary pads) and hygiene education led to a significant reduction in absenteeism, especially during menstruation. Sommer, et. al (2016) reiterated that, menstrual hygiene management interventions, which included the provision of sanitary materials and hygiene education, significantly reduced absenteeism, particularly among adolescent girls. Vivas and Singh, (2017) study reported that, menstrual health education significantly reduced absenteeism among girls. It also improved girls' knowledge about menstruation and menstrual hygiene, leading to higher confidence and increased participation in school. Naigaga (2019) findings revealed that poor maintenance of sanitation facilities correlates with increased absenteeism among girl students due to health concerns and lack of privacy. Ochan (2015) findings showed a strong positive relationship between adequate sanitary facilities and improved educational outcomes for girls, with hygiene education programs playing a significant role in boosting attendance and performance. Kato (2020) results indicated a statistically significant improvement in regular attendance, with schools that actively promoted hygiene reporting up to a 15% increase in consistent attendance compared to those with minimal interventions.

Byamugisha and Namusoke (2021) results showed a significant improvement in attendance regularity, with qualitative insights revealing enhanced awareness and improved menstrual health management. The analysis suggests that integrating hygiene education with practical materials contributes to better attendance; however, the study also noted that cultural norms can moderate these benefits. Okello, et al (2022) study findings revealed that the introduction of hygiene education sessions along with distributed materials (like brochures and hygiene kits) resulted in a 15% improvement in regular attendance among girl students. Kisakye, and Okot, (2020) study revealed a significant improvement in attendance post-intervention, with self-reported increases in menstrual management confidence contributing to lower absenteeism rates. The analysis affirms that hygiene materials can directly affect school attendance by mitigating menstrual-related challenges. In support Nsubuga and Mugisha (2022) observed that regular exposure to hygiene promotion interventions resulted in a 20% improvement in attendance among girl students, along with enhanced self-reported awareness of menstrual health management. Asiimwe et, al (2024) examined menstrual hygiene management facilities and primary school girls' class attendance in Uganda. The study established that secondary data from the Eighth Uwezo Learning Assessment, covering 954 schools, were analyzed using descriptive statistics and Spearman rank correlation. It was established provision of separate latrine stalls was common, but private rooms and functional handwashing facilities were limited. Kutosi (2018) research revealed that family background significantly influences students' sanitation practices. It highlighted the necessity for continuous and effective home sensitization about sanitation hygiene to achieve good health among children. The study indicates that students' hygiene practices are shaped by their family environments, suggesting that improving sanitation awareness at home can positively affect hygiene behaviors in schools. UNICEF Uganda (2019) noted that improved hygiene reduces school dropout in Napak and Moroto Districts. This program evaluation involved training school health/WASH clubs, school management committees, and parent-teacher associations in promoting good hygiene practices across schools in Napak and Moroto districts. Parker et. al (2014) study revealed that 61.7% of girls reported missing school each month due to menstrual-related reasons, averaging 1.64 days of absence.

2.METHODS AND MEASURES

The study employed the sequential-explanatory design to link research concepts to the pertinent and feasible empirical investigation (Plano & Ivankova, 2022). the population of the current study reflected head teachers (5), senior women teachers (selecting 1 from each school totaling to 05 senior women teachers) and (87) girl students selected from senior 3 and senior 4. The selection of the girl children of senior 3 and senior 4 was that, they in their adolescent stages and often times experience menstrual cycles that disrupt their regularity in schools. The information was obtained from school records (2024). The study adopted the table for determining sample size from Krejcie and Morgan (1970) to work out the sample size of the study. The table scientifically proved to bring out a sample that fully represented the population for effective generalization. Simple random sampling was used to select the girl children in the schools considered since they are quite many and a lottery technique which utilizes pieces of paper is adopted from which as sample is selected from the entire population. The census inquiry technique was applied to select head teachers and the senior women teachers having established their numbers as manageable, were all taken via a census inquiry. The study utilized a questionnaire to collect data from the girl children. The questionnaire was based on a 4-point Likert scale featuring strongly disagree, disagree, agree and strongly agree. The Likert scale is able to measure perception of individuals towards a given phenomenon as posited by (Hira & Mugenda, 1999). In this study, head teachers were interviewed because this category represents highly mobile individuals who can only be targeted for interview. The study ensured that the

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instruments have face validity through obtaining views of colleagues, construct validity through the supervisor's ratification, content validity through expert judgment. In this case, 3 experts in the field of education was asked to rate the items in the instrument using the scale of relevant and irrelevant. The computation of the validity index was based on the construct; Hygiene Education, Hygiene promotion materials, Hygiene monitoring and regularity of girl children in government aided secondary schools in Soroti district and it was found to be 0.73. which was appropriate. The instrument was piloted to determine its reliability. This was done in a selected secondary school in Kumi district which may have the same characteristics as the schools bound to be studied but otherwise not part of the study. The researcher ran a pretest targeting around 10 senior women teachers. The instruments were entered into the statistical package for the social sciences (SPSS) and the conbach:s alpha of .99 was found implying that the instrument was reliable.

Data quality control for the interview data focused on issues of truthfulness, trustworthiness, credibility, dependability, confirmability, transferability and rigor. These processes improve on the clarity of information captured in a research study (Creswell & Creswell, 2022). The study used the Statistical Package for Social Sciences (SPSS) version 23. Descriptive statistics was used to understand the characteristics of respondents and responses in form of frequencies, percentages, mean and standard deviation all in table format. Inferential analysis in form of Pearson moment correlation coefficient analysis was employed to examine the relationship of each of the elements of hygiene management practices and regularity of Girl-child in Government-aided secondary schools in Soroti District, Uganda focusing on the nature of relationship, significance as well as strength of the relationship. Quantitative data analysis helped in summarizing large quantities of data. The researcher brought out the implication of each variable made. Data collected from interviews was subjected to transcription and transcripts were read through. Thereafter, re-reading the transcripts as well as comparing transcripts with audio records was done to ascertain authenticity of information obtained and captured. The study then set up themes to guide the analysis while utilization of content analysis technique to bring out meaning in data collected that is applied. Mason (2002) contends that data gets a wider picture and meaning when themes are developed and content analyzed under each theme. Being a sequential explanatory design, the researcher endeavored to bring out the missing links in quantitative data covered by qualitative data as a strong triangulation strategy.

3.RESULTS AND DISCUSSION OF FINDINGS

It is necessary to have a good response rate so that the interpretation of findings is representative of the study population and sample size and can therefore be generalized to other settings. Accordingly, the researcher endeavored to have as many respondents accessed as possible. It is however, very hard to access the entire sample targeted in a study owing to technical challenges. The response rate for the current study is presented in table 2.1 as follows:

Table 3.1 Response Rate

Instrument	Targeted	Accessed	Percentage
Questionnaire	87	87	100%
Interview Guide	10	07	70%
Overall	97	94	97%

Source: Field Data (2025)

Table 3.1 presents findings regarding the response rate of the respondents. 87 out 87 questionnaires were returned indicating 100%, all the required 4 interviews were conducted representing 100%. Therefore, the response rate was considered as effective just like Cooper and Schindler (2001) stated that the response rate of 75% and above is deemed appropriate.

Table 3.2 Demographic Characteristics of Respondents (N = 97)

Demographic Element	Forms	F	%
	Female	87	100

Source: Field Data (2025)

Table 3.2 presents findings about the demographic details described as follows; regarding gender representation, all the girl children were represented in the study. This shows that all the girl children were represented.

Table 3.3: Distribution of Respondents by Academic Qualification

Academic Qualification			
	Diploma	02	17
	Bachelor's Degree	07	68
	Master's Degree	01	15

Source: Field Data (2025)

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Regarding academic qualifications of the respondents, it was revealed that 02 respondents equal to 17% were Diploma holders, 07 of them equal to 68% were Bachelors' holders while 01 respondents equal to 15% were Masters holders. With majority of the respondents being from the bachelors group shows that they are educated enough to interpret questions as well as give clear and objective responses. This is also compounded that adequate academic qualifications enable respondents to read, interpret and supply valid responses to a study (Amin, 2005). The study findings can also be trusted as they are based on a diversity of academic qualification among the respondents.

Table 3.4: Distribution of Respondents by Duration of Service

Duration of Service	5 Years & Below	02	15
	6 – 10 Years	06	67
	11 – 15 Years	01	15
	16 Years & Above	01	03

Source: Field Data (2025)

About duration of service, it was realized that 02 respondents representing 15% had worked for 5 years and below, 06 of them equal to 67% had worked between 6-10 years, 01 respondents representing 15% had worked between 11-15 years and 1 of them equal to 3% had worked for over 16 years. With majority of the respondents having worked at their schools for over 5 years, it was deduced that they gave much reliable information given that they had worked for long. This coincides with what Lutwama (2009) stated that experience is used to confirm the truthfulness of the results of the given study. Equally, there was an element of diversity in the findings based on inclusion of all categories of duration of respondents.

Table 3.5: Regularity of Girl-Child

Regularity of Girl-Child	SA F(%)	A F(%)	D F(%)	SD F(%)	Mean	Std
Girls attend school regularly throughout the term.	18 (20.7%)	25 (28.7%)	22 (25.3%)	22 (25.3%)	2.46	1.08
Most girls do not miss school due to hygiene-related challenges	33(37.9%)	14(16.1%)	18(20.7%)	22(25.3%)	2.67	1.22
There is a noticeable improvement in girl-child attendance in recent terms.	31(35.6%)	18(20.7%)	22(25.3%)	16(18.4%)	2.73	1.13
Menstrual periods rarely interfere with girls' school attendance.	29(33.3%)	24(27.6%)	18(20.7%)	16(18.4%)	2.76	1.12
School attendance among girls is closely monitored and documented.	32(36.8%)	20(23%)	25(28.7%)	10(11.5%)	2.85	1.05
Girl children drop out due to menstruation challenges	18(20.7%)	32(36.8%)	16(18.4%)	21(24.1%)	2.54	1.08
The absenteeism rate of the girl child is high	37(42.5%)	22(25.3%)	18(20.7%)	10(11.5%)	2.98	1.05
School records and registers report the attendance of the girl child	37(42.5%)	16(18.4%)	14(16.1%)	20(23%)	2.80	1.22
The girl children are questioned on the irregularity in school	43(49.4%)	18(20.7%)	14(16.1%)	12(13.8%)	3.06	1.10

Source: Primary Data, (2025)

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Girls attend schools regularly throughout the term

Results in 3.5, indicate that 43 (49.4%) agreed that girls attend schools regularly throughout the term. Slightly, 44 (50.6%) disagreed. The responses are almost evenly divided, indicating no clear consensus whether girls maintain regular attendance throughout the term. The fact that half of the respondents disagreed with the statement suggests irregular attendance of girls throughout the term, possibly linked to hygiene-related challenges. Findings further note that a mean of 2.46 and standard deviation of 1.08 was obtained. The mean score (2.46) falls below midpoint of 2.5 on a 4-point Likert scale, suggesting a generally negative perception about girls' regular attendance. The slightly higher portion of disagreement on regular attendance imply that girls may miss school during menstruation due to lack of clean toilets, privacy, water or sanitary pads. Similar results were reported by in the Ugandan study which revealed that 19.7% of girls missed at least one day of school during their most recent periods and this was linked to lack of privacy, and inadequate menstrual periods.

Most girls do not miss school due to hygiene related challenges

Results in 3.5, indicate that 47 (54%) agreed that most girls do not miss school due to hygiene related challenges while 40 (46%) disagreed, implying that hygiene is a significant factor for girls' irregular attendance. The fact that more than half of the respondents agreed with the statement suggests hygiene-related challenges are not a major cause of absenteeism among the girl-children. Findings further note that a mean of 2.67 and standard deviation of 1.22 was obtained. The mean score is slightly above the midpoint (2.5), suggesting a leaning towards agreement, but not strongly. The findings suggest a slight majority believes hygiene is not a major barrier to attendance. However, the significant proportion of disagreement cannot be ignored as it points to hygiene related challenges for a notable group of girls. It means that hygiene-related challenges may not be the dominant reason for missing school among the girls but still affect a significant number. However, this contradicts the study findings reported in Uganda that affirming that hygiene challenges still affect a significant number of girls, even if not that majority. As supported by the Hygiene change behavior theory, Eric (2005) affirmed that improving hygiene practices through targeted interventions, education, and environmental modifications is imperative towards enhancing girl child education.

In addition, results indicated that a mean of 2.73 and standard deviation of 1.13 was obtained on the statement that there is noticeable improvement in girl-child attendance in recent terms. Majority, 49 (56.3%) of the respondents agreed with the statement while 38 (43.7%) disagreed with the statement. The mean score being above the midpoint of 2.5 implied that majority of the respondents observed positive change in attendance, suggesting progress in girl-child attendance in recent terms. These findings suggest that school hygiene management practices are beginning to positively influence girl-child attendance. Similarly, in Kenya, Mohammed % Johnson, 2021) concluded that girls who had access to sanitary products and clean toilets were less likely to miss school during menstruation.

Results 4.5 indicate that, a mean of 2.76 and standard deviation of 1.12 was obtained with 53 (60.9%) of the respondents agreeing with the statement while 34 (39.1%) disagreeing with the statement that menstrual periods rarely interfere with attendance. This implies that menstruation may not be perceived as a major barrier to school attendance by majority of the girls. The mean score being moderate and above the midpoint of 2.5 implied that menstruation does not interfere with regular attendance for a noticeable portion of the respondents. UNESCO report (2021) emphasized that menstruation remains a barrier to education in many developing countries, especially where stigma, lack of privacy, and inadequate facilities persist.

Results indicated that majority of the respondents agreed with a response rate of 52(59.8%) while 35(40.2%) disagreed with the statement that school attendance among girls is closely monitored and documented, a mean of 2.85 and the standard of 1.05 was obtained. The findings suggest that respondents had mixed perception with less than half leaning towards agreement, an implication that monitoring may not be universally practiced and documented. The theory of Hygiene monitoring is linked to create sustainable behavior change by empowering girl child, improving access to resources, and fostering supportive environments for better hygiene practices, the theory is relevant to the study because it advocates for adequate sanitation facilities, clean water supply, and waste management systems in schools.

Results 2.5 indicate that, a mean of 2.54 and standard deviation of 1.08 was obtained with 50 (57.5%) of the respondents agreeing with the statement while 37 (42.5%) disagreeing with the statement that girl children drop out due to menstruation challenges. With 57.5% agreeing, a substantial portion of respondents believe menstruation contributes to school dropout among girls. The data suggests that menstrual hygiene management is a noticeable barrier to regular attendance of girls in school. This may be linked to lack of access to sanitary products, private changing areas, or supportive school policies. In Kampala, Mugisha & Kato (2024) found that menstruation is associated with stigma, sickness, and absenteeism. The study recommended provision of menstrual products, sensitization, and supportive school environment to reduce dropout rates.

Results indicate that 59 (67.8%) agreed that the absenteeism rate of the girl-child is high while 28 (32.2%) disagreed. The fact that majority of the respondents gave a strong positive perception suggests high absenteeism among girls, potentially linked to hygiene-related challenges, especially during menstruation. Findings further note that a mean of 2.98 and standard deviation of 1.05 was obtained. The mean score is close to agree on a four-point Likert scale, indicating a general consensus that absenteeism

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is a significant issue among the girl-children. In Kampala, Mugisha & Kato (2024) found that menstruation is associated with stigma, sickness, and absenteeism. The study recommended provision of menstrual products, sensitization, and supportive school environment to reduce absenteeism rates.

Results on the statement “the school records and registers report the attendance of the girl child” obtained a mean of 2.80 and standard deviation of 1.22, with 53 (60.9%) of the respondents agreeing and 34 (39.1) disagreeing with the statement. The mean score leans towards agree, implying most schools seem to track attendance of the girl-child. However, if nearly 40% of the respondents disagreed, it questions the reliability of attendance records in some school, suggestion underreported absenteeism rates. The theory aimed to create sustainable behavior change by empowering girl child, improving access to resources, and fostering supportive environments for better hygiene practices, the theory is relevant to the study because it advocates for adequate sanitation facilities, clean water supply, and waste management systems in schools.

Results on the statement “the girl children are questioned on their irregularity in school” obtained a mean of 3.06 and standard deviation of 1.10, with 61 (70.1%) of the respondents agreeing and 26 (29.9%) disagreeing with the statement. The mean score indicates a high level of agreement, suggesting this is a common practice. The results may imply that schools are actively monitoring girls’ attendance, perhaps due to concerns about dropout, early marriage, or domestic responsibilities. A Ugandan study on menstrual health and school absenteeism among adolescent girls observed that active questioning and support from teachers can help identify and address these issues (BMC Women’s Health, 2023).

Table 3.6: Provision of Hygiene Education

Provision of Hygiene Education	SA	A	D	SD	Mean	Std
	F(%)	F(%)	F(%)	F(%)		
The school regularly conducts hygiene education sessions for all learners	18 (20.7%)	32 (36.8%)	22 (25.3%)	15 (17.2%)	2.61	1.00
The sessions involve discussions on topic such as menstrual hygiene and personal cleanliness.	48 (55.2%)	4 (4.6%)	17 (19.5%)	18 (20.7%)	2.94	1.26
The school collaborates with health workers to provide professional hygiene education to the girl children	27 (31%)	36 (41.4%)	10 (11.5%)	14 (16.1%)	2.87	1.03
Girls feel comfortable discussing hygiene-related issues with staff.	13 (14.9%)	35 (40.3%)	23 (26.4%)	16 (18.4%)	2.57	0.98
The school provides follow-up support or counselling related to hygiene education.	26 (29.9%)	27 (31%)	10 (11.5%)	24 (27.6%)	2.63	1.18
Hygiene education has improved the awareness and confidence of girls in managing their hygiene needs.	18 (20.7%)	33 (37.9%)	28 (32.2%)	8 (9.2%)	2.70	0.90
The school has a senior women teacher who always has a one-on-one session with the girl children	15 (17.2%)	28 (32.2%)	18 (20.7%)	26 (29.9%)	2.37	1.09

Source: Primary Data, (2025)

The school regularly conducts hygiene education sessions for all learners.

Results in 3.6, indicate that 50 (57.5%) of the respondents believe that hygiene education is regularly conducted. Slightly, 37 (42.5%) disagreed, implying that relatively higher percentage of students are either unaware of such sessions or feel they are insufficient. The fact that more than half of the respondents agreed with the statement suggests regular conduction of hygiene education. Findings further note that a mean of 2.61 and standard deviation of 1.00 was obtained. The mean score is slightly higher than the midpoint of 2.5 on a 4-point Likert scale, suggesting a slightly positive perception about regular conduction of hygiene education. The results are consistent with Okello et al (2022) who revealed that the introduction of hygiene education sessions resulted in a 15% improvement in regular attendance among girl students.

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Results in 3.6, indicate that 52 (59.8%) agreed that the sessions involve discussions on topic such as menstrual hygiene and personal cleanliness while 35 (29.9%) disagreed, implying that there are gaps in the menstrual hygiene sessions. The fact that more than half of the respondents agreed with the statement suggests menstrual hygiene and personal cleanliness are being addressed, though not uniformly across the population. Findings further note that a mean of 2.94 and standard deviation of 1.26 was obtained. The mean score is above the midpoint (2.5), suggesting a leaning towards agreement. The findings suggest a high majority believes menstrual hygiene education is critical, especially for adolescent girls, to reduce stigma, absenteeism, and health issues. Similarly, Asimwe et al (2024) reported that better menstrual hygiene facilities were associated with higher girls' class attendance. And that improved menstrual hygiene facilities positively influence girls' school attendance, though regional disparities existed.

Better menstrual hygiene facilities were associated with higher girls' class attendance.

In addition, results indicated that a mean of 2.87 and standard deviation of 1.0 was obtained on the statement that the school collaborates with health workers to provide professional hygiene education to girl children. Majority, 63 (72.4%) of the respondents agreed with the statement while 24 (27.6%) disagreed with the statement. The mean score being above the midpoint of 2.5 implied that majority of the respondents believe that schools collaborate with health workers to deliver hygiene education to girls. This indicated that this practice is common in schools. It further shows that schools are actively engaging health professionals to support hygiene education for girls, which is a positive and strategic move. Such collaboration can help bridge knowledge gaps, reduce stigma and promote healthier practices among girl children. The findings here align well with existing literature by UNESCO (2021). According to UNESCO (2021), integrating health professionals into school programs enhances the accuracy, credibility, and impact of hygiene education, particularly around sensitive topics like menstruation.

Results 3.6 indicate that, a mean of 2.57 and standard deviation of 0.98 was obtained with 48 (55.2%) of the respondents agreeing with the statement while 39 (44.8%) disagreeing with the statement that girls feel comfortable discussing hygiene-related issues with staff. While over half of the respondents had a positive perception, a significant portion disagree, pointing to uneven levels of comfort, trust, openness and staff approachability when it comes to sensitive hygiene topics. Some girls may feel embarrassed, and judged, especially if staff are not trained to handle such discussions with empathy and discretion. Comfort in discussing hygiene is crucial for early intervention, emotional support, and promoting healthy practices. The findings are supported by WHO (2018) who notes that early interventions in hygiene-related issues can prevent long-term health problems and improve school attendance. The theory aimed to create sustainable behavior change by empowering girl child, improving access to resources, and fostering supportive environments for better hygiene practices, the theory is relevant to the study because it advocates for adequate sanitation facilities, clean water supply, and waste management systems in schools.

Results indicate that 53 (60.9%) agreed that follow-up support or counseling is provided while 34 (39.1%) disagreed. The fact that majority of the respondents gave a moderate positive perception suggests presence of follow-up support. Findings further note that a mean of 2.63 and standard deviation of 1.18 was obtained. The mean score is slightly close to agree on a four-point Likert scale, indicating that existence of follow-up support and counseling. Follow-up support and counseling is essential for reinforcing hygiene education, addressing personal concerns, and promoting behavioral change. Similarly, Sommer et al (2016) argue that follow-up allows girls to ask questions, clarify misunderstandings, and receive emotional support, especially around menstruation and personal hygiene.

Results on the statement "hygiene education has improved the awareness and confidence of girls in managing their hygiene needs" obtained a mean of 2.70 and standard deviation of 0.90, with 51 (58.9%) of the respondents agreeing and 36 (41.4%) disagreeing with the statement. The mean score leans towards agree, implying that most of the respondents feel that hygiene education has positively impacted girls' awareness and confidence about the hygiene needs. Confidence in managing hygiene is closely tied to school attendance, self-esteem, and overall well-being of the girl children. Similarly, UNESCO (2021) highlights that girls who feel confident in managing menstruation are less likely to miss school, which directly impacts academic performance, regular attendance and long-term opportunities.

Results on the statement "the school has a senior woman teacher who always has a one-on-one session with the girl children" obtained a mean of 2.37 and standard deviation of 1.09, with 43 (49.4%) of the respondents agreeing and 44 (50.6%) disagreeing with the statement. The mean score indicates a low level of agreement, suggesting this support is not widely experienced by most of the girl children. The results may imply that while some girls benefit from one-on-one sessions with the senior woman teacher, a significant portion disagree, suggesting inconsistent availability of the senior woman teacher. This is corroborated by UNICEF (2019), noting that one-on-one interactions are essential for building trust and providing tailored support, especially for girls who may be shy or dealing with stigma.

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Table 3.7: Pearson Moment Correlation Coefficient between Provision of Hygiene Education and the Regularity of the Girl Child.

		Provision of Hygiene Education	Regularity of the Girl Child
Provision of Hygiene Education	Pearson Correlation	1	.985**
	Sig. (2-tailed)		.000
	N	87	87
Regularity of the Girl Child	Pearson Correlation	.985**	1
	Sig. (2-tailed)	.000	
	N	87	87

** . Correlation is significant at the 0.01 level (2-tailed).

According to Table 3.7. above, the Pearson product moment correlation index obtained on provision of hygiene education and Regularity of the Girl Child is represented as ($r=0.985$, $p=0.000$), $p = .000 < .05$). The Correlation Coefficient is extremely high, indicating a very strong positive linear relationship between provision of hygiene education and regularity of the girl child in school. The p-value ($p=0.000$) implies that the result is statistically significant at the 0.05 level. The data strongly suggests that when girls receive hygiene education, their school attendance improves significantly. It means that educating girls about menstrual hygiene likely reduces absenteeism caused by fear, stigma or lack of knowledge. It also shows that schools that integrate hygiene education may provide better facilities and emotional support, further boosting regular attendance among the girl children. This significant relationship is in line with Austrian (2021) who found that the provision of menstrual hygiene education led to a significant reduction in absenteeism, especially during menstruation. The girls in the treatment group showed improved attendance, particularly those who had previously experienced significant absenteeism during their menstrual periods due to lack of resources and knowledge.

Qualitative Data (Head teachers and Senior Woman Teachers)

- How is hygiene education currently integrated into the school curriculum, and what specific topics are emphasized to support girls' school attendance?
 - HT:** "Hygiene education is integrated mainly through Life Skills and Biology lessons. We emphasize menstrual hygiene, handwashing, personal cleanliness, and safe water use. We also run periodic health talks to reinforce these topics and ensure girls understand their importance for daily school attendance."
 - SWT:** "We focus a lot on menstrual hygiene management and proper sanitation. Girls are taught how to manage periods effectively, including the use of sanitary pads, maintaining personal cleanliness, and understanding reproductive health. This knowledge directly helps them to remain in school during their cycles."
- In your experience, what challenges do girls face in maintaining regular school attendance due to hygiene-related issues, particularly during menstruation?
 - HT:** "Many girls miss school during menstruation because they lack proper sanitary materials or private, clean facilities. Inadequate water and latrine facilities make it difficult for them to manage hygiene, which sometimes discourages attendance."
 - SWT:** "I've noticed that some girls feel embarrassed or stressed when they cannot manage their menstrual hygiene. This sometimes leads to prolonged absenteeism, particularly when periods coincide with exams or other school activities."
- What measures have the school or district implemented to improve hygiene facilities and education, and how effective have these measures been in promoting regular attendance among girls?
 - HT:** "Our school has improved latrine facilities, introduced regular handwashing stations, and holds hygiene sensitization sessions. These measures have moderately increased girls' attendance, although there is still room for improvement, especially in the availability of sanitary pads."
 - SWT:** "We've received support from NGOs and local health offices to conduct workshops and provide hygiene education materials. Attendance has improved slightly as girls feel more confident and supported at school, but consistent provision of sanitary pads remains a challenge."

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The qualitative data is relevant and linked to the Hygiene monitoring theory as the theory creates sustainable behavior change by empowering girl child, improving access to resources, and fostering supportive environments for better hygiene practices, the theory is relevant to the study because it advocates for adequate sanitation facilities, clean water supply, and waste management systems in schools.

To assess the Relationship between Hygiene Promotion Materials and Regularity of Girl-child in Government-Aided Secondary Schools in Soroti District.

Table 3.8 Pearson Moment Correlation Coefficient between Hygiene Promotion Materials and the Regularity of the Girl Child.

		Hygiene Promotion Materials	Regularity of the Girl Child.
Hygiene Promotion Materials	Pearson	1	.987**
	Correlation		
	Sig. (2-tailed)		.000
	N	87	87
Regularity of the Girl Child	Pearson	.987**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	87	87

Correlation is significant at the 0.01 level (2-tailed).

According to Table 3.8 above, the Pearson product moment correlation index obtained on hygiene promotion materials and regularity of the girl child is represented as ($r=0.987$, $p=0.000$), $p = 0.000$, $< .05$). The Correlation Coefficient is extremely strong, indicating a very strong positive linear relationship between hygiene promotion materials and regularity of the girl child in school. This implies that as access to hygiene materials such as sanitary pads, disposal bins, soap and educational posters increases, so does the girl child regular attendance. The p-value ($p=0.000$) implies that the result is statistically significant at the 0.05 level, meaning the result is highly reliable. The data highly suggests that the girls who have access to hygiene materials are far more likely to attend school regularly, especially during menstruation. This confirms that hygiene promotion materials directly improve regular attendance of school by the girl children. It also shows that hygiene materials are essential to ensure girls feel safe, clean and confident at school. Similarly, Parker et, al (2014) showed that menstruation significantly affects school attendance, and that access to water, sanitation, and hygiene services mitigates this impact. Girls with access to hygiene materials and facilities were less likely to miss school during their periods thus ensuring regularity in school.

Qualitative Data (Head teachers and Senior Women Teachers)

1. What types of hygiene promotion materials (e.g., posters, booklets, sanitary pads, handwashing facilities) are available in your school, and how frequently are they used or accessed by girls?

HT: "We have posters on menstrual hygiene, handwashing guides, and some booklets distributed by NGOs. There are also handwashing facilities at strategic points. Girls access these materials daily during lessons or breaks, but availability can sometimes be limited."

SWT: "Sanitary pads, soap, and hygiene posters are the main materials we use. Pads are distributed monthly to girls in need. Posters and booklets are always displayed in classrooms and dormitories, and we encourage girls to read and use them regularly."

3. In what ways do the availability or lack of hygiene promotion materials influence the regular attendance of girls, especially during their menstrual periods?

HT: "When girls have access to sanitary pads and private facilities, they attend school regularly. Lack of these resources, however, leads to absenteeism during periods, affecting their overall academic performance."

SWT: "Availability of hygiene materials has a direct impact on attendance. Girls are more confident to attend classes when facilities are clean and pads are accessible. Conversely, scarcity of these materials discourages them from coming to school during menstruation."

4. Can you describe any initiatives or support received from government or NGOs in providing hygiene promotion materials, and how this has affected girls' participation in school?

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HT: “NGOs like Save the Children and the Ministry of Education have helped supply sanitary pads and hygiene booklets. This has positively influenced girls’ participation; more girls are staying in school throughout their menstrual cycles.”

SWT: “We’ve received periodic support from NGOs providing pads and hygiene education. This support has encouraged girls to attend school consistently, although we still need a more sustainable provision system.”

Table 3.9: Pearson Moment Correlation Coefficient between Hygiene Monitoring and Evaluation and the Regularity of the Girl Child

		Hygiene Monitoring and Evaluation	Regularity of the Girl Child
Hygiene monitoring and evaluation	Pearson Correlation	1	.984**
	Sig. (2-tailed)		.000
	N	87	87
Regularity of the girl child	Pearson Correlation	.984**	1
	Sig. (2-tailed)	.000	
	N	87	87

** . Correlation is significant at the 0.01 level (2-tailed).

According to Table 2.9. above, the Pearson product moment correlation index obtained on Hygiene monitoring and evaluation and Regularity of the girl child is represented as ($r=0.984$, $p=0.000$), $p = 0.000 < .05$). The Correlation Coefficient is extremely strong, indicating a very strong positive linear relationship between hygiene monitoring and evaluation and regularity of the girl child in school. This implies that as monitoring and evaluation of hygiene increases, so does the girl child regular attendance. The p-value ($p=0.000$) implies that the result is statistically significant at the 0.05 level, meaning the result is highly reliable. The data highly suggests that when hygiene programs are actively tracked, evaluated, and improved, girl child attendance improves significantly. This confirms that schools that track hygiene-related indicators such as pads availability, toilet cleanliness, disposal systems can respond quickly to gaps, making the environment more supportive for girls. It also shows that hygiene monitoring and evaluation has a direct, measurable impact on girl child ability to attend school regularly. Similarly, a study in Kenya concluded that schools with structured hygiene monitoring systems were more likely to restock supplies and maintain clean facilities, leading to fewer missed schools’ days due to menstruation, (Mohammed & Johnson, 2021). Also, in Northwest Ethiopia, girls missed an average of 2.08 days per month due to menstruation-related factors. The study found that availability of hygiene services and monitoring systems significantly reduced absenteeism thus enhancing regularity of the girl child in government secondary schools.

Qualitative Data (Head teachers and Senior Woman Teachers)

How does the school monitor and evaluate the effectiveness of hygiene practices and facilities in supporting girls' regular attendance?

HT: “The school monitors hygiene through periodic inspections of latrines, handwashing stations, and tracking absenteeism of girls. Regular health talks and feedback from girls also help us evaluate effectiveness.”

What indicators or tools are used to assess the impact of hygiene interventions on the attendance and well-being of girl learners?

HT: “We track indicators such as girls’ absenteeism during menstruation, condition of latrines, availability of water and soap, and frequency of hygiene lessons. We also use surveys and interviews to understand girls’ perspectives on hygiene challenges.”

SWT: “Tools include attendance registers, hygiene observation checklists, and student feedback forms. These help us identify areas where improvements are needed and measure the effectiveness of interventions.”

Can you share any observed changes in girls' school attendance linked to improvements or shortcomings identified during hygiene monitoring and evaluation activities?

HT: “Since we started regular monitoring, we have observed a slight improvement in girls’ attendance. Where hygiene facilities are clean and materials available, girls are more consistent in attending school.”

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SWT: “Improved monitoring has allowed us to address problems promptly. Girls are more likely to attend school regularly when they know facilities are functional and support is available during menstruation. However, when shortcomings are not addressed quickly, absenteeism still rises.”

The hygiene monitoring theory is linked to the qualitative findings in supplementing and advocating for effective school hygiene management for clear policies, regular maintenance of facilities, and the involvement of school administrators, teachers, and students.

4.CONCLUSIONS AND RECOMMENDATIONS

The study concludes that while respondents generally held a moderate perception of hygiene education provision, enhanced hygiene education has a strong and statistically significant positive effect on the regularity of the girl-child in government-aided secondary schools. It was concluded that respondents had a slightly moderate perception on most of the items on hygiene promotion materials, and there was a strong positive and statistically significant relationship between hygiene promotion materials and regularity of girl-child in government aided secondary schools in Soroti District. It was further concluded that respondents had a moderate perception on most of the items on hygiene monitoring and evaluation, and there was a strong positive and statistically significant relationship between hygiene monitoring and evaluation and regularity of girl-child in government aided secondary schools in Soroti District.

The government through Ministry of Education and Sports should integrate hygiene into the national curriculum by making menstrual hygiene, sanitation and personal care of life skills and health education across all secondary schools. Government should also establish national guidelines requiring schools to provide sanitary pads, soap, clean water and disposable bins. The management team of government-aided secondary schools including head teachers, Boards of Governors, Parent-Teacher Associations, and student welfare departments should collaboratively schedule regular lessons and co-curricular activities focused on hygiene and menstrual skills.

The District Education Office in Soroti city should actively monitor the implementation of hygiene education by incorporating relevant indicators into school inspection tools, performance reviews, and assessments of infrastructure and materials. The girl-child should engage actively in hygiene education activities by participating in clubs, discussions, and peer-led sessions to build knowledge and confidence.

REFERENCES

- 1) African Population and Health Research Center (APHRC). (2019). Adolescent menstrual experiences in Kenya: Findings from Nairobi and Kilifi Counties. Nairobi: APHRC.
- 2) Asiimwe, J. A., Musisi, F., & Opit, E. (2024). Nexus between menstrual hygiene management facilities and primary school girls' class attendance in Uganda. *East African Journal of Education and Social Sciences*, 5(1), 1–10.
- 3) Austrian, K., & Biro, A. (2021). The impact of menstrual hygiene management on school attendance in rural Uganda. *BMC Public Health*, 21, 905.
- 4) Awasom, N. N., & Nyenke, C. L. (2022). Factors influencing girls' school attendance in Sub-Saharan Africa: A case study of Cameroon and Nigeria. *African Education Review*, 19(1), 35–50.
- 5) Bello, A. (2015). School management practices and girl child retention in Mbale Municipality secondary schools, Mbale District, Uganda (Master's thesis). Islamic University in Uganda.
- 6) Bryman, A. (2023). *Social research methods* (6th ed.). Oxford University Press.
- 7) Byamugisha, R., & Namusoke, J. (2021). Evaluating the impact of hygiene promotion materials on academic regularity among girl-students in Gulu District, Uganda. *East African Journal of Public Health*, 14(2), 78–95.
- 8) Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.
- 9) Federal Ministry of Education [Nigeria], & UNICEF. (2016). *Menstrual hygiene management in Nigeria: A review and guidelines for schools*. Abuja: UNICEF Nigeria.
- 10) Freeman, M. C., Greene, L. E., Dreibelbis, R., Saboori, S., Muga, R., & Rheingans, R. (2012). Assessing the impact of a school-based water treatment, hygiene and sanitation programme on pupil absence in Nyanza Province, Kenya: A cluster-randomized trial. *Tropical Medicine & International Health*, 17(3), 380–391.
- 11) Messick, S. (1989). Validity. In R. L. Linn (Ed.), *Educational measurement* (3rd ed., pp. 13–103). New York: American Council on Education.
- 12) Hennegan, J., Dolan, C., Wu, M., Scott, L., & Montgomery, P. (2020). Measuring the prevalence and impact of poor menstrual hygiene management: A quantitative survey of schoolgirls in rural Uganda. *BMJ Open*, 10(12), e041184.

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- 13) Kato, J. (2020). Hygiene promotion and school attendance among girl-children: A case study of government-aided secondary schools in Kampala District, Uganda. *Ugandan Journal of Education Research*, 8(2), 112–129.
- 14) Kisakye, P., & Okot, D. (2020). Hygiene materials and menstrual health management: A determinant of school attendance among adolescent girls in Mbale District. *Journal of Adolescent Health in Eastern Africa*, 3(1), 22–39.
- 15) Ministry of Education and Sports (MoES). (2017). National strategy for girls' education in Uganda (2015–2019). Kampala: Government of Uganda.
- 16) Mohammed, A., & Johnson, B. (2021). The impact of school-based hygiene education on menstrual health management among adolescent girls in rural Kenya. *Journal of Adolescent Health*, 68(4), 712–720.
- 17) Montgomery, P., Ryus, C. R., Dolan, C. S., Dopson, S., & Scott, L. M. (2016). Sanitary pad interventions for girls' education in Ghana: A pilot study. *PLOS ONE*, 11(10).
- 18) Mugisha, F., & Kato, C. (2024). Impact of water, sanitation, and hygiene (WASH) programs on school attendance: A case study of Gayaza High School. *Journal of Educational Research and Development*, 3(2), 45–56.
- 19) Naigaga, P. (2019). School facilities maintenance and students' academic achievement in government aided secondary schools in Hoima District, Uganda.
- 20) Namubiru, P., & Tumwesigye, R. (2018). Sanitary facilities and hygiene promotion: Effects on girl-child school regularity in Lira District, Uganda. *African Journal of Education and Development Studies*, 5(2), 67–84.
- 21) Nsubuga, R., & Mugisha, J. (2022). The influence of hygiene promotion interventions on regularity of girl-child attendance: A case study from Busia District, Uganda. *East African Journal of Health Sciences*, 4(2), 55–73.
- 22) Ochan, J. A. (2015). Sanitation and girl child education in selected Universal Primary Education schools in Vurra County, Arua District, Uganda (Master's dissertation). Uganda Management Institute.
- 23) Okello, P., Nansubuga, E., & Tumwine, R. (2022). The role of hygiene education and materials in promoting girl-child attendance in Mbarara District government-aided secondary schools. *Uganda Journal of Educational Research*, 9(1), 34–52.
- 24) Parker, A. H., Smith, J. A., & Verdemato, T. (2014). Menstrual hygiene management amongst schoolgirls in the Rukungiri District of Uganda and the impact on their education: A cross-sectional study. *BMC Public Health*, 14(1), 1–11.
- 25) Parker, J., & Das, S. (2020). Improving sanitation in schools: A critical factor for promoting girls' education in Uganda. *World Development Perspectives*, 19, 1–7.
- 26) Plan International UK. (2018). Break the barriers: Girls' experiences of menstruation in the UK. Plan International UK.
- 27) Plano Clark, V. L., & Ivankova, N. V. (2022). Mixed methods research: A guide to the field. SAGE.
- 28) Schmitt, M. L., Clatworthy, D., et al (2021). Period poverty and menstruation-related school absenteeism among adolescent girls in the United States: A national study. *Women's Health Issues*, 31(2), 97–105.
- 29) Scott, E., & Bloomfield, S. F. (2018). The hygiene hypothesis: Implications for hygiene and public health. *American Journal of Infection Control*, 46(9), 1105–1111.
- 30) Snilstveit, B., Stevenson, J., Menon, R., et al (2016). The impact of WASH interventions on children's health and education in low-income countries: A systematic review. *3ie*.
- 31) Sommer, M., Ackatia-Armah, N., & Connolly, S. (2015). The role of menstrual hygiene management in the education of girls in Sub-Saharan Africa. *Journal of Water, Sanitation, and Hygiene for Development*, 5(3), 299–311.
- 32) Sommer, M., Caruso, B. A., Sahin, M., Calderon, T., Cavill, S., & Mahon, T. (2016). A time for global action: Addressing girls' menstrual hygiene management needs in schools. *PLOS Medicine*, 13(2), e1001962.
- 33) Sommer, M., Caruso, B. A., et al (2019). A time for global action: Addressing girls' menstrual hygiene management needs in schools. *PLOS Medicine*, 16(2), e1002807.
- 34) UNICEF. (2023). Strengthening school health and hygiene: Global status report 2023. United Nations Educational, Scientific and Cultural Organization.
- 35) UNICEF Uganda. (2019). Improved hygiene reduces school dropout in Napak and Moroto Districts. Kampala: UNICEF Uganda.
- 36) UNICEF. (2020). Menstrual health and hygiene management: A global review of practices and policies. United Nations Children's Fund.
- 37) UNICEF. (2020). WASH in schools in Eastern and Southern Africa: Progress and next steps. Nairobi: UNICEF Regional Office for Eastern and Southern Africa.
- 38) United Nations. (2019). The state of the world's children 2019: Children, food, and nutrition. United Nations.
- 39) Vivas, A., & Singh, S. (2017). Evaluating the impact of menstrual health education on school absenteeism in Tanzania. *Journal of International Women's Studies*, 18(2), 89–100.

School Hygiene Management Practices and Regularity of Girl-Child in Government-Aided Secondary Schools in Soroti District, Uganda

- 40) World Bank. (2018). The importance of regular school attendance for girls' education. World Bank Group.
- 41) World Health Organization (WHO). (2017). Water, sanitation, and hygiene in schools: A global review of the literature and practices. World Health Organization.
- 42) World Health Organization (WHO). (2018). Guidelines on sanitation and health.



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