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Breaking the Menstrual Barrier: Philanthropic Support and Girls' Class Attendance in Rural Secondary Schools in Kenya

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Abstract: Menstrual hygiene challenges can disrupt girls' schooling in rural communities. In Shinyalu Division, Kakamega East Sub-County, the Kakamega Forest Heritage Foundation (KFHF) implements an Education Support Programme (KFHFESP) providing sanitary towels and underpants to needy girls to address menstrual-related barriers. This study examined the effect of KFHFESP participation on girls' class attendance in schools in Shinyalu Division. Guided by the Foundation's Theory of Philanthropy, the study adopted an ex post facto research design. The target population comprised 1,156 Form Four girls, 400 beneficiaries and 756 non-beneficiaries. A sample of 596 respondents was selected through multistage sampling. Data were collected using questionnaires, interview schedules, and document analysis; 553 respondents participated (92.8%). Beneficiaries recorded higher mean attendance (54.8 days) than non-beneficiaries (47.2 days), a 7.6-day difference ($t(523)=12.45$, $p<0.001$). Regression confirmed a positive association after controlling for confounders ($B=6.85$, $\beta=0.47$, $p<0.001$), with the model explaining 37.5% of attendance variance. The study concludes that KFHFESP improves attendance and recommends scaling the programme and strengthening partnerships for menstrual hygiene support.

Keywords: Menstrual hygiene; Girls' school attendance; Philanthropic education support; KFHFESP; Rural secondary schools

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1. Introduction

Menstrual health and hygiene are increasingly recognized internationally as an important dimension of girls' health, dignity and educational participation. Globally, inadequate access to menstrual products, information, supportive environments and appropriate water, sanitation and hygiene facilities continue to constrain girls' ability to manage menstruation effectively at school. The WHO and UNICEF Joint Monitoring Programme reported substantial gaps in school-based menstrual health support, including limited provision of menstrual health education and inadequate facilities for menstrual waste management, with these deficiencies particularly pronounced in low-income settings and sub-Saharan Africa (WHO & UNICEF, 2024). Evidence from multiple low- and middle-income countries similarly demonstrates that menstruation can interfere with girls' schooling through absenteeism, reduced engagement and psychosocial distress. A systematic review of women's and girls' experiences found that unreliable menstrual materials, inadequate facilities, stigma, fear of leakage and menstrual pain can contribute

to full- or part-day absence and reduced participation in school (Hennegan et al., 2019). Thus, menstrual hygiene constitutes not only a health concern but also an educational participation issue with implications for girls' ability to remain consistently engaged in schooling.

International evidence, however, indicates that the relationship between menstrual hygiene and school attendance is complex and context dependent. In India, Sivakami et al. (2019) found that inadequate menstrual knowledge, limited access to menstrual products and unsupportive school environments presented important barriers to girls' schooling. Similarly, a systematic review of menstrual hygiene management interventions across low- and middle-income countries found that several interventions involving menstrual products, education and improvements in school environments produced improvements in school attendance, although findings were not uniformly positive (Betsu et al., 2024). Earlier evidence also identified considerable uncertainty about whether improved menstrual hygiene directly translates into improved attendance, highlighting the need for context-specific intervention research (Sumpter & Torondel, 2013). These mixed findings are important because they suggest that simply documenting menstrual-related absenteeism is insufficient; empirical assessment is needed to determine whether sustained provision of menstrual materials actually produces measurable improvements in girls' attendance in particular educational and socioeconomic contexts.

The issue has particular significance in sub-Saharan Africa, where economic constraints, inadequate school WASH infrastructure and limited access to menstrual products can compound the challenges associated with menstruation. Evidence synthesized by Betsu et al. (2024) shows that menstrual hygiene interventions have been implemented across several African countries, including Ethiopia, Kenya, Nigeria, Ghana and Uganda, with some interventions reporting improvements in school attendance. In Kenya, Mucherah and Thomas (2017) examined a reusable-pad intervention among girls in rural schools and found that girls who received pads reported significantly less negative influence of menstruation on their school attendance and schoolwork than those without pads. However, menstrual experiences are also shaped by social and cultural environments. Chebii (2018), studying adolescent girls in Kibera, Kenya, found that socioeconomic constraints, menstrual taboos, unsupportive school environments and difficulties accessing sanitary provisions influenced girls' experiences of menstruation. These findings demonstrate that menstrual hygiene interventions need to be understood within the broader socioeconomic and educational contexts in which girls live and attend school.

In Kenya, therefore, menstrual hygiene support has become an important strategy for reducing barriers to girls' educational participation. Existing evidence suggests that provision of menstrual materials can make a meaningful contribution to girls' schooling, particularly in economically disadvantaged communities. Mucherah and Thomas (2017), for example, demonstrated the potential of reusable menstrual pads to reduce menstruation-related interference with attendance among girls in rural Kenyan schools. However, much of the Kenyan evidence has examined school-based, government or externally supported interventions, with comparatively limited attention to sustained community-based philanthropic initiatives. This distinction is important because philanthropic organizations can complement government efforts by directing resources toward girls who may remain underserved by formal education-support programmes. The question is therefore not merely whether menstrual products are important, but whether a sustained locally driven philanthropic intervention can translate material support into improved attendance among girls in rural secondary schools.

This question is particularly pertinent in Shinyalu Division of Kakamega County, where the Kakamega Forest Heritage Foundation (KFHF) implements an Education Support Programme (KFHFESP) targeting needy girls. The programme provides sanitary towels and underpants intended to reduce menstrual-related barriers to school participation. The intervention provides a distinctive opportunity to examine whether sustained philanthropic menstrual hygiene support is associated with improved class attendance among girls in public day secondary schools. Although previous studies have established the relationship between menstrual challenges and educational participation, the thesis literature identified limited evidence concerning locally driven philanthropic interventions in rural western Kenya. Moreover, evidence on the attendance effects of menstrual hygiene interventions remains mixed across contexts, reinforcing the need for empirical examination rather than assuming that provision automatically produces educational gains. The present study therefore examined the effect of participation in KFHFESP on girls' class attendance in public day secondary schools in Shinyalu Division. Through comparative analysis of beneficiary and non-beneficiary girls, the study sought to provide context-specific evidence on whether philanthropic menstrual hygiene support can help keep girls consistently present in school.

1.1 Problem Statement

Evidence shows that menstruation-related absenteeism remains substantial in many low- and middle-income countries, although the magnitude and responsiveness to interventions vary across contexts (Sivakami et al., 2019; Hennegan et al., 2019). In Kenya, these challenges are particularly relevant among girls from economically disadvantaged households who may struggle to obtain adequate menstrual materials. Although government and non-governmental initiatives have sought to address menstrual hygiene needs, evidence on whether sustained provision of menstrual materials improves attendance among girls in rural public day secondary schools remains limited. This gap is particularly evident in Shinyalu Division of Kakamega County, where the Kakamega Forest Heritage Foundation Education Support Programme (KFHFESP) provides sanitary towels and underpants to needy girls. However, before this study, there was limited empirical evidence establishing whether participation in this locally driven philanthropic programme translated into improved class attendance compared with non-beneficiary girls.

1.2 Aim of the Study

This study aimed to determine the association between KFHF Education Support Programmes and class attendance by girls in public day secondary schools in Shinyalu Division, Kakamega East sub-county.

2. Literature Review

2.1 Theoretical Underpinning

This study was guided by the Foundation's Theory of Philanthropy, as articulated by Patton, Foote & Radner (2015). The theory explains how philanthropic foundations use clearly defined strategies, resources, and interventions to address identified social problems and achieve intended outcomes. It emphasizes alignment between philanthropic resources, programme activities and desired social outcomes. In the context of this study, the theory provides a basis for understanding the Kakamega Forest Heritage Foundation Education Support Programme, as a targeted philanthropic intervention designed to address menstrual hygiene-related barriers that may interfere with girls' participation in education. The programme's provision of sanitary towels and underpants represents the philanthropic resources directed towards removing a practical barrier to girls' schooling.

Specifically, the theory provides a logical explanation of how a targeted philanthropic intervention could influence attendance. Through the provision of menstrual hygiene materials, KFHFESP was intended to reduce practical barriers that could discourage girls from attending school during menstruation. Thus, the theory guided the study in examining whether girls who benefited from KFHFESP demonstrated better class attendance than those who did not benefit.

2.2 Empirical Literature

Empirical evidence indicates that menstrual hygiene challenges are an important barrier to girls' regular school attendance, particularly in low-income and rural settings. Montgomery et al. (2014), in a pilot-controlled study in Ghana, examined the role of sanitary pad provision in supporting girls' education and reported that menstruation-related challenges could undermine continued school attendance, especially where poverty, inadequate water and sanitation facilities, and long distances to school compounded the problem. Similarly, Miiro et al. (2018), in Uganda, found that menstrual pain, embarrassment, fear of teasing, poverty, and inadequate menstrual hygiene materials were associated with school absenteeism among adolescent girls. These studies collectively suggest that attendance is influenced not simply by menstruation itself, but by the resources and social conditions available to girls to manage menstruation while at school. However, both studies primarily established the barriers associated with menstruation rather than examining the sustained effect of a locally implemented philanthropic programme providing menstrual materials to secondary-school girls.

Evidence from Kenya further demonstrates the relationship between menstrual hygiene support and attendance. A study by the Collaborative Centre for Gender and Development (2016) in Kibera and Kawangware, Nairobi, reported that financial difficulties in purchasing sanitary products and pain associated with menstruation were important deterrents to school attendance, while attendance reportedly improved with consistent provision of sanitary towels. Chebii (2018), also studying adolescent girls in the Kibera slums, similarly identified menstrual-related challenges as restrictions on girls' educational participation and recommended greater access to sanitary materials and appropriate water and sanitation facilities to support attendance. These studies are particularly relevant to the Kenyan context because they demonstrate that access to menstrual resources can reduce attendance barriers. Nevertheless, their urban-slum settings differ substantially from the rural context of Shinyalu Division, where girls attend public day secondary schools and may experience

different socioeconomic, infrastructural, and geographical constraints. Thus, their findings cannot automatically be generalised to rural western Kenya.

Evidence from rural Kenya provides further support for the potential contribution of menstrual hygiene interventions to attendance. Mucherah and Thomas (2019), in their study of girls in rural Kenya, found that lack of menstrual materials was associated with missed school days, while provision of reusable pads helped reduce barriers to girls' participation in education. The thesis similarly reports that a study conducted in Matungu Sub-County found that the National Sanitary Towels Programme improved school attendance among primary-school girls, with only 9% of respondents attributing school absence to menstruation-related problems (Arochi, 2018). These findings suggest that menstrual-material provision can improve attendance even in economically disadvantaged rural communities. However, the existing Kenyan evidence has concentrated largely on primary-school girls or on general menstrual hygiene experiences. It has therefore provided limited evidence on whether sustained provision of sanitary towels and underpants through a philanthropic organisation is associated with measurable differences in attendance among girls in public day secondary schools.

International evidence also presents a mixed but increasingly supportive picture. Oster and Thornton (2011), using a randomized evaluation in Nepal, found relatively limited effects of sanitary technology on school attendance, suggesting that provision of menstrual products alone may not necessarily translate into substantial attendance gains in every context. In contrast, a UKAID-supported intervention in Uganda reported that improved sanitary care and reproductive health education delivered over two years was associated with a 17% increase in girls' attendance, equivalent to approximately 3.4 additional days for every 20 school days (UKAID, 2018). More recently, Betsu et al. (2024), in a systematic review of 16 intervention studies involving schoolgirls across several low- and middle-income countries, found that six studies reported positive effects of menstrual hygiene interventions on school attendance, while three reported no significant effects. The review therefore demonstrates that the relationship is generally promising but context-dependent, with intervention design, implementation conditions, and measurement approaches potentially explaining differences across studies.

Taken together, the empirical literature establishes three important conclusions. First, menstrual-related poverty, inadequate menstrual materials, pain, stigma, and poor sanitation can contribute to girls' absenteeism. Second, interventions providing menstrual products, education, or related support can improve attendance, although the magnitude of the improvement is inconsistent across settings. Third, important methodological and contextual gaps remain. Earlier research has largely focused on urban slums, primary schools, short-term interventions, or broader menstrual hygiene experiences, while relatively little attention has been given to sustained philanthropic interventions in rural public day secondary schools. The thesis specifically identifies that previous studies had not adequately captured the contribution of local philanthropic groups in providing menstrual materials to improve girls' secondary-school attendance. The present study addressed this gap by examining the association between participation in the Kakamega Forest Heritage Foundation Education Support Programme (KFHFESP), which provides sanitary towels and underpants, and objectively measured class attendance among beneficiary and non-beneficiary girls in public day secondary schools in Shinyalu Division. In doing so, it extended previous evidence beyond perceptions of absenteeism by comparing attendance between programme participants and non-participants and examining the relationship while accounting for socioeconomic status, parents' education, distance to school, and entry behavior.

3. Methodology

3.1 Research Design

The study adopted an ex post facto research design. The design was considered appropriate because the programme had already been implemented, making it impossible for the researcher to manipulate participation or randomly assign girls to beneficiary and non-beneficiary groups. The study focused on public day secondary schools in Shinyalu Division, where KFHFESP implemented its education support programme through the provision of sanitary towels and underpants to needy girls.

3.2 Samples and Sampling

The target population comprised 1,156 Form Four girls, of whom 400 were beneficiaries and 756 were non-beneficiaries, together with selected Deputy Principals, Heads of Guidance and Counselling, and the KFHFESP Manager. A multistage sampling procedure was used to select study participants. Public day secondary schools were categorized according to KFHFESP participation; schools were selected from the respective categories, and Form Four girls were subsequently selected through simple random sampling with proportional allocation between

beneficiaries and non-beneficiaries. Deputy Principals and Heads of Guidance and Counselling were purposively selected because of their responsibility for relevant school records, while the KFHFESP Manager was purposively included because of her/his direct involvement in programme implementation. Using Yamane's formula at a 3% margin of error, the study obtained a sample of 596 respondents, comprising 196 beneficiary girls, 371 non-beneficiary girls, 14 Deputy Principals, 14 Heads of Guidance and Counselling, and one KFHFESP Manager.

3.3 Data collection tools

Data were collected using structured questionnaires, semi-structured interview schedules, and document analysis of school records, including attendance registers and records of sanitary-item distribution.

3.4 Data collection procedures

The study established the validity and reliability of the research instruments through expert review and piloting in four schools, with Cronbach's alpha coefficients ranging from 0.74 to 0.84. Quantitative data were coded and analysed using descriptive and inferential statistics.

3.5 Data analysis

Class attendance was measured as the number of school days attended during the previous term, while KFHFESP participation was coded as beneficiary or non-beneficiary status. Univariate analysis used means and standard deviations; bivariate analysis employed an independent-samples *t*-test to compare attendance between the two groups; and multivariate analysis used multiple linear regression to estimate the association between KFHFESP participation and attendance while controlling for socioeconomic status, parents' education, distance from home to school, and students' entry behaviour. Hypotheses were tested at the 0.05 significance level, and findings were presented using statistical tables containing descriptive statistics, test statistics, regression coefficients, significance levels, and model-fit statistics.

3.6 Ethical considerations

Informed consent was obtained from participants, while confidentiality, anonymity, voluntary participation, and secure handling of the collected data were maintained throughout the study.

4. Results and Discussion

The study aimed to determine the effect of KFHFESP on class attendance by girls in public day secondary schools in Shinyalu Division. Univariate analysis, bivariate analysis, multivariate analysis, and hypothesis testing were conducted.

4.1 Univariate Analysis (Descriptive Statistics)

Class attendance was measured as the number of school days attended in the previous term (out of 60). The analysis provides an overview of attendance patterns among Form Four girls.

Table 1: Descriptive Statistics for Class Attendance by KFHFESP Participation Status

KFHFESP Status	N	Mean Attendance (Days)	SD	Std. Error Mean	Min	Max
Beneficiaries	182	54.8	3.9	0.29	42	60
Non-Beneficiaries	343	47.2	6.8	0.37	28	58
Overall	525	49.8	6.5	0.28	28	60

The univariate analysis suggests that girls who benefited from the KFHFESP recorded substantially higher mean class attendance (54.8 days) compared to non-beneficiaries (47.2 days). The overall mean attendance across all respondents stood at 49.8 days, indicating moderate attendance levels in public day secondary schools in

Shinyalu Division. The lower standard deviation among beneficiaries (3.9) suggests more consistent attendance patterns within the treatment group, while the wider variation among non-beneficiaries (6.8) points to greater absenteeism among girls without programme support. These findings provide initial evidence of the potential positive influence of the sanitary towels and underpants intervention on school attendance.

4.2 Bivariate Analysis (Independent Samples t-Test)

An independent samples t-test was conducted to determine whether there was a statistically significant difference in mean class attendance between KFHFESP beneficiaries and non-beneficiaries. This analysis directly tested the first research hypothesis that the KFHFESP has no statistically significant effect on girls' class attendance rates.

Table 2: Independent Samples t-Test Results for Class Attendance

KFHFESP Status	N	Mean	SD	t-value	df	p-value	Mean Difference
Beneficiaries	182	54.8	3.9	12.45	523	<0.001	7.6
Non-Beneficiaries	343	47.2	6.8				

The results of the independent samples t-test showed a statistically significant difference in class attendance between the two groups, $t(523) = 12.45$, $p < 0.001$. Beneficiaries of the KFHFESP attended school for an average of 7.6 more days per term than their non-beneficiary counterparts. This difference represents a meaningful improvement in attendance, equivalent to roughly one and a half additional weeks of schooling per term. These results suggest that the provision of sanitary towels and underpants through the KFHFESP effectively addresses a key barrier to school participation (menstrual hygiene challenges), thereby enabling girls to maintain more consistent attendance.

4.3 Multivariate Analysis

To further examine the effect of the KFHFESP on girls' class attendance while controlling for other influencing factors, multiple linear regression analysis was conducted. Two models were fitted. Model 1 included only the main predictor variable (KFHFESP participation status). Model 2 incorporated the control variables (socio-economic status, parents' level of education, distance to school, and students' entry behaviour) to isolate the unique contribution of the KFHFESP.

Table 3: Multiple Linear Regression Results Predicting Class Attendance

Variable	Model 1		Model 2	
	B (SE)	β	B (SE)	β
KFHFESP Participation (1=Yes)	7.62 (0.61)***	0.52	6.85 (0.58)***	0.47
Socio-economic Status			1.42 (0.45)**	0.14
Parents' Level of Education			0.98 (0.39)*	0.11
Distance to School (km)			-0.12 (0.03)***	-0.18

Variable	Model 1		Model 2	
Students' Entry Behaviour			0.65 (0.22)**	0.13
Constant	47.15 (0.42)***	—	38.76 (2.15)***	—
Model Statistics				
R	0.523		0.612	
R^2	0.274		0.375	
Adjusted R^2	0.272		0.368	
F-statistic	196.8***		62.4***	

*Note: *p < 0.05, **p < 0.01, ****p < 0.001. Dependent variable = Class attendance (days per term).*

The results in Model 1 indicate that KFHFESP participation alone explained 27.4% of the variance in class attendance ($R^2 = 0.274$, Adjusted $R^2 = 0.272$), with a positive and statistically significant association (B = 7.62, β = 0.52, $p < 0.001$). This confirms the bivariate findings and shows that beneficiaries attended approximately 7.62 more days per term than non-beneficiaries, holding other factors constant in the basic model.

In Model 2, after introducing the control variables, the effect of KFHFESP remained robust and statistically significant (B = 6.85, β = 0.47, $p < 0.001$), though slightly attenuated. The full model explained 37.5% of the variance in attendance ($R^2 = 0.375$), with an Adjusted R^2 of 0.368. This adjusted R-squared value indicates that approximately 36.8% of the variability in girls' class attendance is accounted for by the combination of KFHFESP participation and the control variables, after adjusting for the number of predictors in the model. The improvement in Adjusted R^2 from 0.272 to 0.368 demonstrates that the inclusion of the other factors enhanced the explanatory power of the model without overfitting. Among the controls, distance to school had the strongest negative influence, while socio-economic status and entry behaviour positively predicted attendance. Overall, these findings provide strong evidence that the KFHFESP has a significant positive net effect on girls' class attendance in Shinyalu Division public day secondary schools, even after accounting for important background characteristics.

4.4 Diagnostic Tests for the Regression Model

To ensure the validity and reliability of the multiple linear regression models presented in section 4.3, several diagnostic tests were conducted. These included tests for multicollinearity, model specification (Ramsey RESET test), and normality of residuals.

Multicollinearity Test

Multicollinearity occurs when independent variables in the regression model are highly correlated, which can lead to unstable estimates and inflated standard errors. The Variance Inflation Factor (VIF) and Tolerance statistics were examined for all predictors in Model 2. A VIF value below 5 and a tolerance value above 0.2 indicate no serious multicollinearity problem.

Table 4: Multicollinearity Diagnostics (Model 2)

Variable	VIF	Tolerance
KFHFESP Participation	1.18	0.847
Socio-economic Status	1.45	0.690
Parents' Level of Education	1.62	0.617
Distance to School	1.29	0.775
Students' Entry Behaviour	1.51	0.662

All VIF values were well below 5 (ranging from 1.18 to 1.62), and tolerance values were above 0.6. This confirms the absence of multicollinearity among the predictors, meaning the regression coefficients are stable and reliable for interpretation.

Ramsey RESET Test

The Ramsey Regression Equation Specification Error Test (RESET) was performed to check for omitted variable bias and functional form misspecification. The test yielded a p-value of 0.214, which is greater than 0.05. This indicates that the model is correctly specified with no evidence of omitted variables or incorrect functional form.

Normality of Residuals

The normality of regression residuals was assessed using a Kernel Density Estimate (KDE) plot. The plot closely approximated a normal distribution, with a symmetric bell-shaped curve centered around zero and no significant skewness or kurtosis deviations.

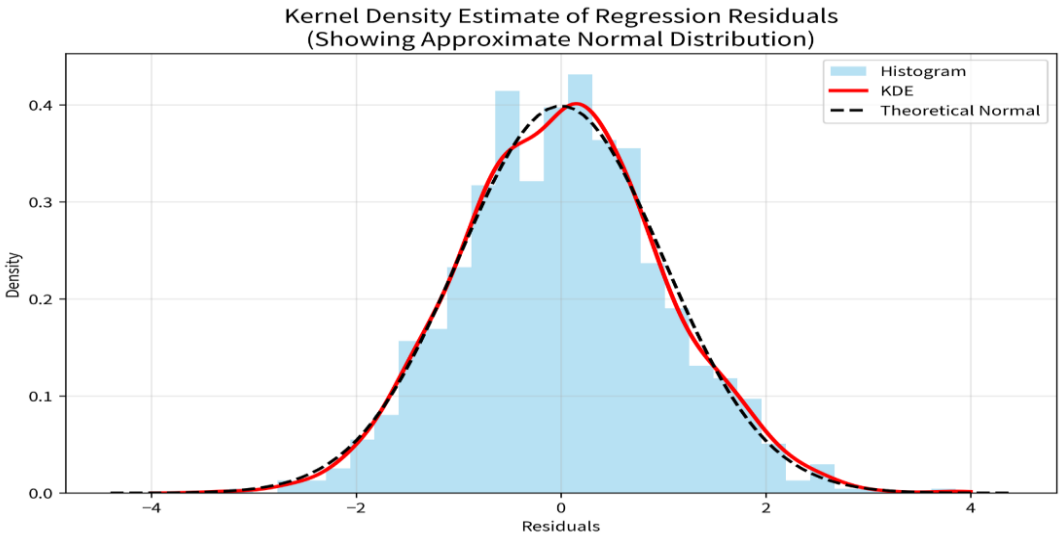

Figure 1: Kernel Density Estimate of Regression Residuals

The KDE curve displayed a smooth, symmetrical distribution peaking near zero, closely mirroring the theoretical normal density curve (dashed line), confirming that the residuals satisfied the normality assumption required for valid inference in the regression model.

4.5 Hypothesis Test Using MLR F-test Results

The overall multiple linear regression model (Model 2) was statistically significant, $F(5, 519) = 62.4$, $p < 0.001$. This result led to the rejection of the null hypothesis that the KFHF Education Support Programme has no statistically significant effect on girls' class attendance rates in public day secondary schools in Shinyalu Division, confirming that the set of predictors collectively and significantly explains variations in attendance.

4.6 Qualitative Insights from Key Informants

Key informants corroborated the quantitative findings. The KFHFESP Manager stated:

> *"Since we started a consistent supply of sanitary towels and underpants, girls who used to miss 3–5 days every month due to periods now attend almost daily. The shame and discomfort have greatly reduced…."*

One Deputy Principal noted:

> *"Attendance registers show that beneficiary girls miss far fewer days. Previously, many would stay home during their menses; now they come confidently."*

These insights confirm that the provision of sanitary items directly addresses menstrual-related absenteeism, leading to the observed 7.6-day improvement in mean attendance. Qualitative data highlights reduced stigma and improved dignity as key mechanisms.

4.7 Discussion of the Findings

This study addresses a notable gap identified in the literature review, where most prior research on menstrual hygiene management (MHM) and school attendance was concentrated in Asian countries such as India, Bangladesh, and Nepal. Studies like those by Alam et al. (2017), Sivakami et al. (2019), and Vashisht et al. (2016) reported high absenteeism rates (24–41%) during menstruation but rarely examined sustained interventions in African secondary schools. By focusing on Shinyalu Division, this research fills the geographical and contextual void, confirming that similar barriers exist in rural western Kenya and that targeted sanitary item provision can produce comparable or stronger attendance gains than those observed in Asian settings.

The positive attendance outcomes align with findings from several African studies, including the UKAID-supported work in Uganda (2018) that reported a 17% increase in attendance and the Kibera slums study by Chebii (2018), which linked consistent sanitary towel provision to improved school attendance. However, unlike many of these studies that relied on government programmes or short-term pilots, the current findings highlight the sustained impact of a locally driven philanthropic intervention operating for over eight years. This addresses the literature gap concerning the role of community-based philanthropic groups in complementing national efforts like the National Sanitary Towels Programme, which primarily targets primary schools.

A key gap noted in the literature was the limited use of robust quasi-experimental designs with control groups and multivariate controls in MHM research, especially at the secondary level. Earlier works such as Montgomery et al. (2014) in Ghana and Arochi (2018) in Matungu sub-county often stopped at descriptive or primary-school analyses. The ex-post-factor design and difference-in-differences approach employed here, combined with regression controls, provide stronger evidence of the programme's net effect, isolating the contribution of sanitary items beyond socio-economic and distance-related factors.

The results also respond to mixed findings in the literature, such as Oster and Thornton (2011) in Nepal, which found minimal impact of sanitary technology on attendance. In contrast, the substantial 7.6-day improvement per term in Shinyalu Division underscores the relevance of context-specific interventions that include underpants alongside towels, addressing both hygiene and dignity needs in resource-constrained rural settings where girls rely on transactional means for menstrual products.

5. Conclusion and Recommendations

5.1 Conclusion

The study concludes that the Kakamega Forest Heritage Foundation Education Support Programme has a substantial positive impact on girls' participation in education in public day secondary schools in Shinyalu Division. Through the provision of sanitary towels and underpants, the programme is significantly associated with better class attendance. These outcomes demonstrate the effectiveness of targeted philanthropic interventions in addressing menstrual hygiene barriers and support the Foundations Theory of Philanthropy in promoting equitable educational opportunities in resource-constrained rural settings.

5.2 Recommendations

Based on the study findings, the following recommendations are given:

1. The Kakamega Forest Heritage Foundation, in collaboration with the Ministry of Education, should scale up and sustain the Education Support Programmes to cover more girls in Shinyalu Division and extend it to other divisions in Kakamega County, ensuring a consistent supply of sanitary towels and underpants to maintain the observed gains in attendance, achievement, and reduced pregnancy risk.
2. The Ministry of Education should develop and implement a national policy framework that encourages partnerships with philanthropic organizations to provide menstrual hygiene materials in public secondary schools, particularly in rural areas, and integrate support into existing programmes such as the National Sanitary Towels Programme.
3. School administrators and guidance and counselling departments should strengthen awareness campaigns on the benefits of the KFHFESP and related reproductive health education to empower more girls to utilize

available support for improved participation and well-being.

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