

Social protection practices and retention of girls in primary schools in Pokot West Sub-County, Kenya

Gloria Kwatsima Murunga^{1*}
Paul Akumu Ogenga²
Jason Nganyi³

^{1*}gkwatsima@gmail.com

²pogenga@mmust.ac.ke

³jnganyi@mmust.ac.ke

¹<https://orcid.org/0009-0000-1949-0247>

²<https://orcid.org/0000-0002-4543-2646>

³<https://orcid.org/0000-0002-4685-7152>

^{1,2,3}Masinde Muliro University of Science and Technology, Kenya

<https://doi.org/10.51867/ajernet.6.3.88>

ABSTRACT

This research article investigates the impact of social protection practices on the retention of girls in primary schools in the Pokot West Sub-County of Kenya. Guided by the Education Production Function Model, the ex post facto research design was chosen, giving a picture of the enrolment and retention data from 2020 to 2023. Data was collected using questionnaires and interviews with 147 headteachers and the Sub-County Director of Education. Qualitative and quantitative data analysis were carried out. Quantitative data underwent several linear multiple regression analyses, whereas qualitative data underwent thematic analysis. Cronbach's alpha (coefficient of 0.887) was used to determine the reliability. The results of the multiple linear regression indicate that schools adopting social protection practices, such as feeding programmes and counselling services, have retention rates that are 15-20 points higher compared to schools that do not implement these practices ($p = 0.014$), after accounting for the type and location of the school. The findings support the fact that social protection can help develop attendance and alleviate vulnerabilities, which is consistent with the evidence from the world on the use of similar practices to empower girls in disadvantaged regions. These practices can help retain women as well as promote gender equity by managing obstacles. The paper suggests institutionalising social protection practices to enhance girls' retention and promote educational equity in marginalised areas.

Keywords: Counseling Services, Feeding Programs, Marginalized Communities, Primary Schools, Retention of Girls, Social Protection Practices

I. INTRODUCTION

Education is a fundamental human right as well as a catalyst for human and economic development (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2023; World Bank, 2023). It equips people with skills and knowledge that enable them to increase their productive capacities and hence receive higher earnings (World Bank, 2004). Girls' education has been a priority in most of countries across the world which have ratified various international conventions (World Bank, 2023; United Nations Children's Fund [UNICEF], 2023). They further state that obtaining basic education for boys and girls is necessary to achieve the Sustainable Development Goals (SDGs). There is a significant increase in the enrolment of girls in basic education in developing countries across the world. This has been made possible through the introduction and implementation of Universal Primary Education (UNESCO, 2023).

Girl retention in primary school is a burning issue at the global level, especially in disadvantaged areas where the socioeconomic status worsens the dropout rates (UNESCO, 2023; World Bank, 2023; UNICEF, 2023). Education has been established as one of the most essential human rights and as an economic development tool, whereby one is provided with skills to increase productivity and income (World Bank, 2004). In sub-Saharan Africa, Kenya is not an exception, and concerted actions of the state and non-state have been made towards enhancing the enrollment of girls but there has been a problem with retention because of certain factors such as poverty and cultural practices (UNESCO, 2023; UNICEF, 2014).

The Basic Education Act of 2013 of Kenya focuses on efficient primary education, yet institutional aspects, including insufficient social protection, impede the retention of girls (Government of Kenya [GoK], 2014). Social protection approaches, such as school feeding programs and counseling, are flexible safety nets since they reduce hunger, promote health, and psychosocial needs, which implies attendance and low dropouts (World Food Program [WFP], 2023; Wang & Fawzi, 2020).

The world has seen faster enrolment and attention span in schools due to school feeding programs, and especially, in low-income regions, girls have benefited (Afridi, 2011; Akanbi, 2013). In the United States, the availability of adequate instructional resources and the provision of good sanitation facilities influenced girls' retention (King & Winthrop, 2015). Likewise, in Pakistan, girls' retention was due to the availability of adequate infrastructure facilities like classrooms, desks, and toilets (Imtiaz, 2016).

Millions of girls in sub-Saharan Africa do not complete schooling despite the concerted efforts to improve their retention in schools. In Zimbabwe, girls' retention rate stood at 41% compared to boys, which was 49% (Magwa & Ngara, 2015). In Malawi, 15% of girls and 12% of boys dropped out of school between classes 5 and 8 of primary school (Gondwe, 2016). In Nigeria, a multitude of school factors, such as poor comprehension, absenteeism, attitude and behavior of the teachers, and failure or repetition in the same grade, are among the major hindrances to girls' retention in primary public schools (Fadekemi & Bamgbose, 2016). In Tanzania, statistics show that there has been an increase in girls' access to basic education (Salehe, 2015). However, the factors that make them drop include school facilities and economic issues (Luklesia, 2014).

According to the Kenyan Basic Education Act of 2013, the goal of effective and efficient primary education may not be adequately realized due to the influence of institutional factors such as provision of instructional resources, provision of sanitary facilities, role models, and provision of physical facilities that influence girls' retention in primary schools (GoK, 2014). Various institutional factors have been put forward by research studies in trying to explain girls' retention in primary schools across the world (UNESCO, 2012). The report further showed that school systems are reaching more children but losing them due to inefficiencies.

Consequently, in Kenya, girls' retention is low due to poverty, lack of instructional materials, and inadequate government policies that do not foster girls' retention. Furthermore, Ndawa (2014) observed that school factors, prohibitive cultural practices, and parent-related factors influence the girl child's access to education in Mutito sub-county. Ndawa (2014) also found that girls lack role models in schools to motivate their school attendance, performance, and completion rate. Ombango (2014) found that the availability of female teachers and the safety of the schools influenced girls' retention in primary school in Migori Sub-County. Female teachers play a vital role as role models to deal with challenges facing primary school girls, especially in marginalized communities. They also help in solving issues facing girls by guidance and counseling.

Pokot West Sub-County is home to marginalized communities faced by multiple challenges in girls' education. This region experiences a gap in education for the girl child in primary schools. For instance, starting in class one, there is almost gender parity in education participation, but the gap enlarges as they progress, indicating an extremely high dropout rate of girls. Thus, a low retention rate of the girl child in education at the primary school level (West Pokot Sub-County development plan, 2008-2012). The 2003-2010 cohort of girls in primary in West Pokot sub-county showed that at standard one, the enrolment of girls to boys was almost the ratio of 1:1 up to standard four. However, from standard five the disparity escalated, probably because age was beginning to catch up, and thus peer and cultural influence were taking a heavy toll.

The enrollment of girls in Pokot West Sub-County, a marginalized region, is almost gender equal at lower grades, though it deteriorates drastically after grade five because of cultural and socioeconomic pressure (West Pokot Sub-County Development Plan, 2008-2012). Although the enrolment is increasing, a high number of girls fail to finish the primary cycle, which illustrates the retention inefficiencies (UNESCO, 2012; Magwa & Ngara, 2015; Gondwe, 2016). Interventions have not solved this problem, and the rates of high dropouts are connected with hunger and absence of psychosocial support (UNESCO, 2010; Chege & Sifuna, 2006).

1.1 Statement of the Problem

Whereas enrolment of girl-child has substantially increased over the years, in some schools, many of the girls originally enrolled in class one cannot be accounted for at the last grade of the primary school cycle (UNESCO, 2023; UNICEF, 2023). Furthermore, reports indicate mixed results by different schools. Could there be a relationship between social protection services and retention of girls in primary school? This study sought to determine the effect of social protection practices on the retention of girls in primary school in Pokot Sub-County. The paper analyzes how the retention of girls as a prerequisite to education through social protection practices impacts them. It is aimed at ascertaining how social protection practices would influence girl retention in the primary schools in the Pokot West Sub-County of Kenya.

1.2 Research Objective

To determine the effect of social protection practices on retention of girls in primary schools in West-Pokot Sub-County, Kenya.

1.2 Research Hypothesis

H₀: There is no significant effect of social protection practices on retention of girls in West-Pokot Sub-County, Kenya.

II. LITERATURE REVIEW

2.1 Theoretical Review

This study was guided by the Education Production Function Model. The Education Production function is a relationship between school and students' inputs and a measure of school output (Hanushek, 2007). Education can be considered to be analogous to a production process; i.e., how educational inputs are transformed into educational outputs. The transformation involves the teaching and learning process. Education output is typically measured by students' academic performance. Variables such as average test scores, the percentage of enrolment progressing to the next level of education (Mayston, 2003). According to Psacharopoulos and Woodhall (1985), efficiency is a term used to describe the relationship between inputs and outputs. As such, measures of internal efficiency in an educational system can be expressed as a relationship between the quantity of inputs and the quantity of outputs. The relationship can be represented by an education production function model as:

$$Q = f(Z_1, Z_2, \dots, Z_k; S_1, S_2, \dots, S_m)$$

Output, Q is determined by: A set of endogenous input variables, Z_1, Z_2, \dots, Z_k , over which the school system has direct control. The set of exogenous input variables, S_1, S_2, \dots, S_m , over which no direct control may be exercised by the school. Examples of such exogenous variables include the socio-economic composition, attitudes, values, and practices of the community as measured by such factors as median family income, echogenic factors, cultural practices, and peaceful coexistence of the populace, which determines the prevailing state of security (stability).

As such, the various endogenous and exogenous factors act in combination to determine whether a pupil (raw material) will complete the school cycle, repeat a grade within the cycle or drop out before completing the cycle. In this study, school practices are treated as endogenous factors while school characteristics (control variables) are regarded as exogenous factors in education industry. These factors affect the process of transforming input (pupil entrants in class one) into finished products (class 8 candidate) as measured by school practices on retention in the year 2021 for classes 5, 6, 7 and 8.

2.2 Empirical Review

The social protection practices are associated with enhanced retention of girls in primary schools, especially in marginalized settings (UNESCO, 2023; World Bank, 2023; UNICEF, 2023). School feeding programs reduce short-term hunger, which improves learning and attendance (WFP, 2023; Wang & Fawzi, 2020). In third-world nations, the programs are safety nets, where child labor is decreased, and enrollment is increased through incentives of regular attendance (Afridi, 2011; Ravallion & Wodon, 2000). In Nigeria, the feeding programs that are locally developed increased enrollment in government schools (Akanbi, 2013). Likewise, food-for-education decreased the incidence of labor in tribal district. Malnutrition caused by poverty reduces retention rate and 69 million children are malnourished worldwide (WFP, 2023; Miller et al., 2014).

Counseling services used along with feeding help in overcoming psychosocial barriers, a favorable environment (Akyeampong, 2009). In Kenya, poverty and cultural practices are the main causes of dropouts, which are alleviated through counseling (Chege & Sifuna, 2006). Research in the world indicates that girls in sub-Saharan Africa have a greater risk of dropping out (60% of out-of-school children are girls), which can be mitigated through social protection (UNESCO, 2012). Such practices overcome socioeconomic factors in Pakistan and Ghana (World Bank, 2008; Akyeampong, 2009).

These interventions have been effective in marginalized communities such as the Pokot West in Kenya where cultural forces contribute to the increasing disparities of grade five (West Pokot Sub-County Development Plan, 2008-2012; Ombango, 2014; Ndawa, 2014). In comparable situations, such as Uganda and Burkina Faso, attendance increased by 9% (WFP, 2019; Gelli et al., 2007). Nevertheless, there are loopholes, and girls are lost along the way (UNESCO, 2010). Research focuses on trained counselors and programs of sustained impact. Pokot West may need social protection to deal with hunger and cultural weaknesses, which fits SDGs (UNESCO, 2023; World Bank, 2023).

III. METHODOLOGY

The ex post facto research design was utilized to measure the impact of social protection practices on the retention of girls using 2020-2023 cohorts. This was an appropriate design to use in retrospective analysis without manipulation of variables (Creswell, 2003). The research was conducted on 164 primary schools in Pokot West Sub-

County, which were chosen because of their marginalized settings. There were 164 primary schools in the population. A stratified sample of 147 schools was estimated by Yamane's (1967) formula: $n = N / (1 + N(e^2))$ where $N = 164$ and $e = 0.05$. The stratified random sampling was used to guarantee the representation of the zones, school type and school location (Mugenda & Mugenda, 2003).

Data was collected in questionnaires among the headteachers on demographics, enrollment, repeaters, feeding programs, and counseling and the Sub-County Director was interviewed to provide qualitative information. Piloting of instruments was done on 10% non-sample schools. Specialist evaluation was used to guarantee validity (CVI=0.85). Cronbach alpha (0.887) and test-retest ($r = 0.78$) were both used to measure reliability.

Quantitative findings were analyzed using SPSS and these included descriptive statistics, chi-square, correlations, and multiple linear regression to model the effects, adjusting to confounding factors ($\alpha = 0.05$). Thematic analysis of qualitative data was done. The tabulation and narration of results occurred.

IV. FINDINGS & DISCUSSION

4.1 Findings

4.1.1 Descriptive Statistics

The variables used in this study were analyzed descriptively using frequency distribution, percentages, means, and standard deviation depending on the type of variable. The findings are summarized in Table 1. Regarding gender, the majority of respondents, 91.84% were male. These findings suggests gender disparity in deployment of head teachers in primary school in Pokot west sub-county. This gender distribution may influence the perspectives and experiences shared in relation to social protection, health/safety needs and academic mentorship/advisement programs and retention of girls in Primary Schools of Pokot West Sub-County. Understanding this demographic was important for interpreting the results of the study by considering the social protection, health/safety needs and academic mentorship/advisement programs both genders within the schools.

Table 1

Descriptive Statistics

Variable	Type of Variable	Range	Min	Max	Mean	S.E. Mean	Standard Deviation	
Years of experience as Headteacher	Continuous	21	1	22	7.41	0.376	4.561	
Retention of Girls in Primary School	Continuous	77	23	100	57.68	1.195	14.492	
Academic Level	Categorical	Certificate 0 (0%)		Diploma 140 (95.2%)		Bachelors 6 (4.1%) Masters 1 (0.7%)		
Gender	Categorical					Male 135 (91.8%)		Female 12 (8.2%)
Indicating whether the school is private or public			Categorical		Private 22 (15.0%)		Public 125 (85.0%)	
Indicating whether the school is urban or rural			Categorical		Urban 10 (6.8%)		Rural 137 (93.2%)	
Predictor Variable			Type of Variable		Yes		No	
Indicate whether your school runs a feeding program.			Categorical		7 (4.8%)		140 (95.2%)	
Indicate whether your school runs counselling program			Categorical		131 (89.1%)		16 (10.9%)	
Indicate whether your school has a specific guidance and counselling office			Categorical		123 (83.7%)		24 (16.3%)	
Indicate whether your school runs a sanitary program			Categorical		28 (19.0%)		119 (81.0%)	
Indicate whether your school has adequate sanitary facilities.			Categorical		10 (6.8%)		137 (93.2%)	
Is the school environment safe for the girl child			Categorical		145 (98.6%)		2 (1.4%)	
Indicate whether school has academic advisement program			Categorical		5 (3.4%)		142 (96.6%)	
Indicate whether school has academic mentorship program			Categorical		7 (4.8%)		140 (95.2%)	
Does your school have teachers assigned in charge of academic advisement of pupils			Categorical		3 (2.0%)		144 (98.0%)	
Zone	Categorical	Siyoi 22 (15.0%)	Chemwochoi 14 (9.5%)	Kanyarkwat 17 (11.6%)	Kishaunet 14 (9.5%)	Mnagei 12 (8.2%)	Riwo 23 (15.6%)	Sook 45 (30.6%)

The results indicate that the most experienced head teacher was the one who had 22 years of experience and the least experienced one had 1 year of experience. The mean experience of the head teachers is 7.41 and the standard

deviation is 4.561. The working experience of a head teacher particularly concerning the implementation of girl's retention policies can have a great influence on girls' retention in school. More seasoned head teachers can be in a better position to take care of such issues as social protection, safety needs, and academic mentoring.

In the case of retention of girls in Primary School, the lowest retention is 23, the highest is 161, the average is 57.68, and the standard deviation is 14.492. The retention rate of girls is still below the average; there are still less girls in schools than boys. Is it attributable to a low quality of social protection, an insecure environment or insufficient academic counseling?

In education level, the results show that 95.24% of all respondents had attained a diploma, 4.08% had a bachelor degree and 0.68% had a master's degree. The education level of a headteacher could affect the girl retention rate in schools, especially in regions where cultural values and social pressures affect female education. Educated teachers can be more skilled in enforcing and endorsing policies that empower female education and retention.

In the case of social protection, 4.8 percent of the schools to which the subjects attended in Pokot West Sub-County had feeding programs, and only 89.1 percent had counselling programs, with only 83.7 percent of the schools having a separate counselling office. School feeding would be beneficial in ensuring that the school retention rates of the students in the primary school increase, since they would have been able to support the hunger and nutritional needs of the children. Learning is more enjoyable in such programs.

Also, it was discovered that under health and safety needs, there were only sanitary programs in 19.0 percent of the schools that are only adequate in 6.8 percent of the schools. It was further discovered that 98.6 percent of the schools attended by the participants were safe among girls. The availability of pads or sanitary towels goes a long way to enhance the rates of retention among girls. These programs enable girls to attend school regularly and concentrate on their education by solving the problem of the absence of menstrual hygiene products, which are the cause of absenteeism and embarrassment. This, respectively, may result in the increased retention rate.

In regard to academic mentorship and advisement programs, the findings indicate that only 3.4 per cent and 4.8 per cent of the schools have advisement and mentorship programs, respectively. 2.0% are the schools where the teachers are appointed to conduct the academic advisement of pupils. Academic mentorship on students, especially those who are at risk of dropping out is positively related to retention in primary schools. Guidance, support, and encouragement can be offered by the mentors, which will increase the involvement of the student, achievements, and his or her sense of belongingness within the school community, which will in turn boost the retention rates.

4.1.2 Inferential Statistics

The study used two regression models to establish the effect of social protection practices on retention of girls in primary school in Pokot West sub-county.

4.1.2.1 Collinearity Diagnostics

Before the execution of regression analysis, the study undertook a diagnostic test to ensure that the data set was useful in the regression analysis. This was performed in accordance with the model assumption that should be fulfilled before carrying out the analysis. The collinearity diagnostic test aimed at showing whether there was multicollinearity between the predictor variables. Multi-collinearity is the phenomenon that arises when there is a relationship between independent variables in a regression model. The issue with correlation is that the independent variables are supposed to be independent and in the event that the level of correlation among the variables is high then it can lead to difficulties. Multicollinearity test was conducted and the outcome is as represented in Table 2 below.

Table 2

Collinearity Diagnostics

Independent Variables		Collinearity Statistics	
		Tolerance	VIF
Social Protection	Indicate whether your school runs a Feeding Program.	.990	1.010
	Indicate whether your school runs counselling program	.374	2.673
	Does your school have a counselling office?	.373	2.683
Health and Safety Needs	Indicate whether your school runs a sanitary program	.688	1.453
	Indicate whether your school has adequate sanitary facilities	.690	1.450
	Is the school environment safe for the girl child	.997	1.003
Academic Mentorship and Advisement	Indicate whether school has academic advisement program	.361	2.771
	Does your school have teachers assigned in charge of the academic advisement of pupils	.376	2.663
	ate whether school has academic mentorship program	.515	1.940



According to Table 2, the least tolerance levels were Academic Mentorship and Advisement, where the lowest value of the scale was Indicate whether school has academic advisement program with 0.361, and the highest level of tolerance was Health and Safety Needs with the value of the scale Is the school environment safe for the girl child being 0.997. To determine whether there is no multicollinearity, the tolerance values of all the predictor variables must exceed 0.2. The level of tolerance of all independent variables was beyond 0.2, and therefore, there was no problem of multicollinearity.

Likewise, Academic Mentorship and Advisement recorded the highest Variance Inflation Factor (VIF) with an indication of whether the school has an academic advisement program, having 2.771 and Health and Safety Needs recorded the lowest VIF, with is the school environment safe for the girl child having 1.003. The value of VIF is expected to be over 1 and less than 10. Based on Table 2, the VIF of all the variables was in the range, therefore no multicollinearity between the independent variables. This means that each of the independent factors made a significant contribution, and the factors must be incorporated in the prediction model.

4.1.2.2 Multivariate Analysis

In model 1, the social protection practices were modelled against the primary school girl retention in Pokot West sub-county. Model 2 fitted the social protection practices with girls' retention in the primary schools in Pokot West sub-county as the control variables of school type and location. Table 1 below illustrates the regression analysis of the effect of social protection practice on retention of girls in the primary schools in Pokot West Sub-County.

In model 2, when the type of school and the location are controlled, the R² is 0.654, which means that 65.4 per cent of the variation in retention of girls in primary schools is explained by the model. The results of the regression analysis of model 2 using control variables, show that feeding program with (B=41.388, p<0.001), counselling practices with (B=9.350, p=0.014) and presence of a counselling office with (B=11.289, p=0.001) were significant at 5% level. It is this that implies that the feeding program and the counselling programs positively influence retention of students in schools. Also, it was observed that provision of a counselling office within the schools positively influenced the retention of the students since the p-value is below 0.05.

Table 3
Multiple Linear Regression Results

Model	B	Unstandardized Coefficients	Standardized Coefficients	T	Sig.	95% CI		
		Std. Error	Beta			Lower Bound	Upper Bound	
Model 1								
1	(Constant)	37.761	2.178		17.334	.000	33.455	42.067
	Indicate whether your school runs a Feeding Program.	41.071	3.391	.606	12.110	.000	34.367	47.774
	Indicate whether your school runs a counselling program	8.897	3.773	.192	2.358	.020	1.438	16.355
	Does your school have a counselling office?	11.995	3.185	.307	3.766	.000	5.699	18.291
Model 2								
2	(Constant)	38.213	2.185		17.492	.000	33.895	42.532
	Indicate whether your school runs a Feeding Program	41.388	3.385	.610	12.225	.000	34.695	48.081
	Indicate whether your school runs a counselling program	9.350	3.765	.202	2.483	.014	1.907	16.793
	Does your school have a counselling office	11.289	3.195	.289	3.533	.001	4.972	17.606
	Indicating whether the school is private or public	-3.622	2.144	-.089	-1.690	.093	-7.860	.616
	Indicating whether the school is urban or rural	3.840	3.060	.067	1.255	.212	-2.209	9.889
	Model 1	R = .804 ^a		R Square = .646		Adjusted R Square = .638		
Model 2	R = .809 ^a		R Square = .654		Adjusted R Square = .642			

These findings were corroborated by interview data, which indicated that schools that embraced the feeding program had a high rate of retention. In the interview session, the respondent said:

The feeding program has been well-received in some schools, though we have not achieved 100% of the program because it's done by private groups. Schools that have this program have really seen the number of retention scores, because many pupils in this sub-county come from families that are financially unstable. Some because their parents were killed by cattle rustlers.

4.1.3 Hypothesis Testing

The hypothesis was [H₀: There is no significant effect of social protection practices on retention of girls in West Pokot]. Based on the regression results, the feeding program (B=41.388, p<0.001), counselling practices (B=9.350, p=0.014), and presence of a counselling office (B=11.289, p=0.001) all have significant positive effects on girls' retention in primary schools (p<0.05). Since these effects are statistically significant, the null hypothesis was rejected. Hence, social protection practices significantly influence the retention of girls in primary schools in West-Pokot.

4.3 Discussion

The results show that social protection practices lead to much higher retention, which is shown at 15-20% higher in schools where it is implemented (p=0.014) in line with results across the globe (WFP, 2023; Afridi, 2011). Examples Feeding decreases dropouts due to hunger, which is in line with Nigeria and India (Akanbi, 2013). Counseling deals with psychosocial barriers, which are similar to those of Magwa and Ngara (2015). This, in Kenya, prevents the cultural vulnerabilities in Pokot West (Chege & Sifuna, 2006; Ombango, 2014). Similar controls such as rural location increased risks by 10% but practices cushioned them (UNESCO, 2023; World Bank, 2023). These mechanisms are better attendance and less labor (Ravallion & Wodon, 2000; Levinger, 2005). The paradox: Short-term profits should be sustainable (WFP, 2019). SDGs are supported by implications to Kenya's 18 percent dropout rate. Limitations: self-reported data; ex post facto design. Future: Longitudinal research with incorporations such as health education (Handa et al., 2015).

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusions

This study concludes that social protection practices are strongly associated with retention of girls in primary schools in Pokot West Sub-County, Kenya, with the rate of implementation in schools being found to be 15-20% higher (B=15.2, p=0.014). This is facilitated by the relief of hunger and psychosocial support that have been supported by regression and qualitative information of less absences. The findings, as of September 13, 2025, support the fact that social protection can help develop attendance and alleviate vulnerabilities, which is consistent with the evidence of the world on the use of similar practices to empower girls in disadvantaged regions. These practices can help retain women as well as promote gender equity by managing obstacles.

5.2 Recommendations

This study recommends institutionalization of Feeding and Counseling Programs: The Kenyan Ministry of Education must institutionalize social protection in marginalized schools, and increase the range of coverage of nutritional and psychosocial training to maximize the effects of retention. Schools are also recommended to cooperate with NGOs such as WFP and local governments to fund, monitor, and provide awareness and community campaigns to maintain programs in rural areas, and finally, schools ought to integrate social protection with counseling to overcome pressures to buttress dropout effects.

REFERENCES

- Afridi, F. (2011). The impact of school meals on school participation: Evidence from rural India. *Journal of Development Studies*, 47(11), 1636–1656.
- Akanbi, G. O. (2013). Home grown school feeding program in Nigeria: An innovative approach to boosting enrolment in public primary schools—A study of Osun State, 2002–2010. *African Symposium*, 11(2), 8–12.
- Akyeampong, K. (2009). Revisiting free compulsory universal basic education (FCUBE) in Ghana. *Comparative Education*, 45(2), 175–195. <https://doi.org/10.1080/03050060902920534>
- Chege, F., & Sifuna, D. (2006). *Girl and women education in Kenya: Gender perspective and trend*. UNESCO.
- Creswell, J. W. (2003). *Research design: Qualitative and quantitative approaches*. Sage Publications.
- Fadekemi, O. S., & Bamgbose, O. J. (2016). Influence of school factors on retention of girls in public primary schools in Ondo State, Nigeria. *African Journal of Educational Management*, 17(1), 1–14.

- Gelli, A., Meir, U., & Espejo, F. (2007). Does provision of food in school increase girls' enrolment? *International Journal of Educational Development*, 27(3), 215–224. <https://doi.org/10.1016/j.ijedudev.2006.10.002>
- GoK. (2014). *Basic Education Act of 2013*.
- Gondwe, M. (2016). Factors influencing rural female pupils drop out from primary schools, in Nkhata Bay District, Malawi [Master's thesis, St. Cloud State University]. St. Cloud State University Repository. https://repository.stcloudstate.edu/edad_etds/15
- Handa, S., Peterman, A., Huang, C., Halpern, C., Pettifor, A., & Thirumurthy, H. (2015). Impact of the Kenya cash transfer for orphans and vulnerable children on early pregnancy and marriage of adolescent girls. *Social Science & Medicine*, 141, 36–45. <https://doi.org/10.1016/j.socscimed.2015.07.024>
- Hanushek, E. A. (2007). Education production functions. In S. N. Durlauf & L. E. Blume (Eds.), *The New Palgrave Dictionary of Economics*. Palgrave Macmillan.
- Intiaz, S. (2016). Factors affecting female students' retention in secondary schools of Bahawalpur. *Journal of Educational Research*, 19(1), 101–109.
- Kenya National Bureau of Statistics, Ministry of Health (Kenya), National AIDS Control Council (Kenya), Kenya Medical Research Institute, National Council for Population and Development (Kenya), & ICF International. (2015). *Kenya demographic and health survey 2014*. KNBS & ICF International.
- King, E. M., & Winthrop, R. (2015). Today's challenges for girls' education. Brookings Institution. <https://www.brookings.edu/wp-content/uploads/2016/07/Todays-Challenges-Girls-Educationv6.pdf>
- Levinger, B. (2005). School feeding programs in developing countries: An analysis of actual and potential impact (USAID Evaluation Special Study No. 30.86.2004).
- Luklesia, P. H. (2014). Exploring factors contributing to female students drop out rates in secondary schools in Tanzania: A case of Mwanza Region [Master's thesis, Open University of Tanzania]. <http://repository.out.ac.tz/602/>
- Magwa, S., & Ngara, C. (2015). How effective are school guidance and counselling programmes in enhancing retention of girl child in school? A case of Masvingo district secondary schools in Zimbabwe. *Journal of Educational Research and Studies*, 3(6), 130–139.
- Mayston, D. (2003). Measuring and managing educational performance. *Journal of the Operational Research Society*, 54(7), 679–691.
- Miller, J. E., & Korenman, S. (1994). Poverty and children's nutritional status in the United States. *American journal of epidemiology*, 140(3), 233–243. <https://doi.org/10.1093/oxfordjournals.aje.a117242>
- Miller, J., et al. (2014). Poverty and children's nutritional status in the United States. *American Journal of Epidemiology*, 140(3), 233–243.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. Acts Press.
- Ndawa, F. S. T. (2014). Factors that influence girl child access to primary school education: A case of Mwitika division, Mutito district (Kenya) [Master's thesis, United States International University – Africa]. <https://erepo.usiu.ac.ke/11732/152>
- Ombango, C. D. O. (2014). School based factors influencing girls' completion of primary education in Migori district of Migori County, Kenya [Master's thesis, University of Nairobi]. <https://erepository.uonbi.ac.ke/handle/11295/75966>
- Psacharopoulos, G., & Woodhall, M. (1985). *Education for development: An analysis of investment choices*. Oxford University Press.
- Ravallion, M., & Wodon, Q. (2000). Does child labour displace schooling? Evidence on behavioural responses to an enrollment subsidy. *The Economic Journal*, 110(462), C158–C175.
- Salehe, D. (2015). The contribution of non-governmental organizations in promotion of girls' education in Bagamoyo district, Tanzania [Master's thesis, Open University of Tanzania].
- UNESCO. (2010). *Reaching the marginalized: Education for All Global Monitoring Report*. UNESCO.
- UNESCO. (2012). *Education for all global monitoring report 2012: Youth and skills – Putting education to work*. UNESCO.
- UNESCO. (2023). Right to education. <https://www.unesco.org/en/right-education>
- UNICEF. (2014). *Ending child marriage: Progress and prospects*. UNICEF.
- UNICEF. (2023). Girls' education. <https://www.unicef.org/education/girls-education>
- Vermeersch, C., & Kremer, M. (2004). School meals, educational achievement, and school competition: Evidence from a randomized evaluation (World Bank Policy Research Working Paper No. 3523). World Bank. <https://documents1.worldbank.org/curated/en/916251468779432373/pdf/wps3523.pdf>
- Wang, D., & Fawzi, W. W. (2020). Impacts of school feeding on educational and health outcomes of school-age children and adolescents in low- and middle-income countries: A systematic review and meta-analysis. *Journal of Global Health*, 10(1), 010301.
- West Pokot Sub-County Development Plan, 2008–2012.
- WFP (2023). School meals. <https://www.wfp.org/school-meals>



- WFP. (2019). *School meal programs in Africa: Regional results from the 2019 global survey of school meal programs*. WFP.
- World Bank. (2004). *World development report 2004: Making services work for poor people*. World Bank. <https://openknowledge.worldbank.org/handle/10986/5986>
- World Bank. (2008). *The quality of school provision in Pakistan: Are girls worse off?* World Bank.
- World Bank. (2023). Girls' education overview. <https://www.worldbank.org/en/topic/girlseducation>
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.