

RESEARCH

Open Access



The state of girl child education in Uganda and the path forward

Nashir Ngoobi^{1*} , Shilpa Leenah Chokufa² and Farah Khan^{3,4}

*Correspondence:

Nashir Ngoobi
nashirngb@gmail.com

¹School of Business and Social Sciences, Albukhary International University, Alor Setar, Malaysia

²School of Education and Human Sciences, Albukhary International University, Alor Setar, Malaysia

³Institute of Education & Research (IER), Women University Mardan, Mardan, Pakistan

⁴International Research Fellow, INTI International University, Nilai, Malaysia

Abstract

This study discusses the barriers to education of girl children in Uganda between 2000 and 2024 with particular attention to gender inequality in the number of children enrolled, retained, and completed. Girls are particularly disadvantaged by the policies such as Universal Primary Education (UPE) and Universal Secondary Education (USE) due to such factors as early marriage, teen pregnancy, economic difficulties and violence based on gender. This study draws synthesis of the quantitative trends and qualitative findings of past studies on the same using secondary data provided by various organizations like the World Bank, UNESCO, and UNICEF. Secondary data indicates that the enrollment rates have been improved, but only 27% of girls undertake upper secondary education, and only 4% attend tertiary education. Such inequalities underline a necessity of specific interventions to eliminate the socio-cultural and economic determinants of reduced access to education among girls. This study provides the significance of meeting the United Nations Sustainable Development Goal (SDG) 4 (Quality Education) and SDG 5 (Gender Equality) through the fostering of gender-sensitive educational policies and programs. Strategies to overcome structural and cultural barriers include increased funding, vocational training, and community-based awareness. The study makes an impact on the global debate about gender equality in education with practical implications on policymakers and international agencies to enhance educational performance of girls in Uganda.

Keywords Girl Child Education, Gender disparities, Educational policy, Early marriage, SDGs, Uganda

1 Introduction

It is a well-known fact that education is one of the most important human rights and a primary stimulus of socio-economic development [27]. Nonetheless, profound gender-related inequality in education is observed in most of the developing countries, such as Uganda. Despite a great number of national and international efforts aimed at raising the access to education, girls in Uganda still must cope with significant barriers that impede their school attendance and graduation rates. The education system in Uganda has undergone changes over the years through some policy programs that have tried to improve access and quality of education: Universal Primary Education (UPE),



© The Author(s) 2026, corrected publication 2026. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

introduced in 1997, and Universal Secondary Education (USE) in 2007 [2, 10]. Such efforts have increased school enrollment, yet the gender gap in learning is still not eliminated, especially in the rural regions, where socio-economic and cultural dynamics have shown a disproportionate impact on girls to pursue their education [29].

Girls' education cannot be overstated [43]. Girl education brings about better health experience, economic independence and gender equality, which subsequently bring about the development of the nation [21]. Studies indicate that when girls receive education, their earnings increase, child mortality falls, and their participation in decision-making improves [41]. Girls in Uganda have their challenges despite the above advantages, such as early marriage, teen pregnancy, financial constraints, gender-based violence (GBV), and cultural requirements to restrict their education access [45]. Despite progress in enrollment, Uganda still faces major challenges in retaining girls in school and supporting them to complete secondary education. According to the World Bank [45], girls in only 27% of situations continue schooling up to the upper secondary and less than 4 percent of girls are enrolled in tertiary education. According to UNICEF [42] and recent national statistics, around 24% of girls aged 15–19 are pregnant or have had a child, and 43% of women aged 25–49 were married before age 18. These high rates of child marriage and adolescent pregnancy are significant impediments to girls' education. These figures underscore the need for strategic programs that address both institutional and societal obstacles hindering girls' education in Uganda. Overcoming these barriers is essential to improving social progress, economic growth, and gender equality.

The adverse economic and social effects of gender inequality in education are significant to the economic development and society in Uganda. Women education also boosts their labor force, postpones marriage, boosts family health, alleviates poverty, and aids the development objectives of a country [16, 17, 19, 33]. Nevertheless, the current policies have not tackled the actual causes of school dropout in girls sufficiently, since the rate of dropouts has been relatively high in female pupils. Increased education for girls does not only serve them on a personal basis but also economic development at large. World Bank [45] says that the earnings girls are likely to earn in the future can be enhanced by 10 percent to 20 percent in every year of education. Besides, a combination of better child health and the political involvement is also a direct result of female educational progress that leads to the decline of the fertility rates.

Gender differences in education are still present in Uganda and especially in rural regions where the families lack finances and the schools are also in poor conditions. The gender gap is made worse by the societal norms that still emphasize the education of boys more than that of girls [41]. With the decreased number of women joining professional jobs, gender disparity in the labour force and income is here to stay. Girls are the ones to be educated to help interrupt this cycle: through higher education, women are more likely to postpone marriage, make healthier family choices and access healthcare services more efficiently. Nevertheless, teenage pregnancy (30%), and child marriage (33%) remain the obstacles to the educational achievements of girls [42]. Gender-based educational inequalities persist in the UPE and USE regions, even with the aims of mitigating UPE related to education, girls are still lower than those of boys in retention and completion, especially in the rural regions. Gender-based violence and early marriage, among other socio-cultural factors, coupled with hidden costs, poor facilities, and low educational achievement among girls, persist. To obtain gender equality in the

educational sphere, specific responses to these issues are necessary to overcome these obstacles, which involve governmental, international, and local organizations, like UNICEF and UNESCO.

Uganda is still bound to Sustainable Development Goals (SDGs) and African Union Agenda 2063, which aims at good education (SDG 4) and equal representation between genders (SDG 5). The attainment of these objectives would need a better policy implementation, more funds, and more programs in the community to overcome cultural barriers. Although significant literature has been written regarding the barriers such as infrastructural limitations, early marriage, and finances, further research should be conducted to understand the existing success of interventions and the effect on the economy [6, 12, 15–17, 19].

This study explores the situation of girl child education in Uganda, the challenges that are apparent in the area, the effects of the policies, and ways in which sustainable changes can be achieved through data-driven solutions. The research will give an evidence-based report of the factors and possibilities of improving the education of girls in Uganda especially those in rural communities where the differences are most enhanced. The paper is organized in a way that Sect. 2 is a literature review; Sect. 3 includes the research design and methodology; Sect. 4 explains the findings; and finally, Sect. 5 is a summary of the research study and policy and practice recommendations.

2 Review of literature

2.1 Theoretical literature: the economic impact of educating girls

It is well known that education is one of the major sources of societal and economic development. Human Capital Theory assumes that a person is more productive when investing in their education and this, in its turn, contributes to the prosperity of communities and economies [39]. In the case of girl child education, the theory can be used to imply that educating girls can be multiplied: the education of girls can not only positively impact girls but also lead to wider gains in society like increased family income, improved health status, and economic independence. Women who have education tend to join the workforce, have postponed marriage and invested in the education of their children and hence the cycle of poverty is broken [7].

The World Bank [45] underlines that the benefits of investing in the education of girls are higher income, better health of children, and a more active participation in the processes of decision-making. Nevertheless, it is a statement which is supported by UNESCO [41] but which lacks adequate coverage of various studies. This assertion would be strengthened by a wider survey of various research in the various areas since the differences in the cultural, socio-economic and educational backgrounds might have different impact on such results.

However, Human Capital Theory assumes relatively efficient and formal labour markets in which educational investment is rewarded through higher earnings. In Uganda's predominantly informal and patriarchal economy, these assumptions are only partially met. Gendered labour market segmentation, unpaid care work, and discriminatory norms may weaken or delay the expected returns to girls' education. A purely human-capital lens can therefore underestimate the structural and normative constraints that shape girls' educational trajectories.

To address these limitations, this study also draws on Gender and Development (GAD) and Social Norms perspectives. GAD highlights how power relations and patriarchy shape access to resources and decision-making within households and communities, helping to explain why investments in boys' education may be prioritized even when girls' schooling yields high social returns. Social Norms Theory further clarifies how collectively held expectations around early marriage, fertility, and appropriate gender roles can sustain high dropout rates despite formal policy commitments to gender equality. Taking together, these perspectives complement Human Capital Theory by foregrounding the ways in which patriarchy can distort anticipated returns to education and constrain girls' choices.

Beyond human capital and gender frameworks, Capability approaches, most notably those developed by Sen and Nussbaum, emphasize the expansion of individuals' capabilities and freedoms rather than only their earnings. Applied to Uganda, this lens shifts attention from schooling to income towards girls' substantive freedoms to avoid early marriage, participate in public life, and exercise bodily autonomy. Similarly, work on gender socialization in education (e.g., Stromquist) underscores how curricula, teacher expectations, and hidden school practices reproduce gendered aspirations, which may partly explain why increased access has not translated into equal outcomes.

2.2 Key barriers to girl child education: a data-driven analysis

2.2.1 *Economic constraints: household income vs. school enrollment rates*

The financial impediments have also been the greatest challenge in Uganda, as young girls are denied an opportunity to receive education. Although there are measures in the country, like the Universal Primary Education (UPE) and Universal Secondary Education (USE), the families with low incomes still must pay the hidden costs, including uniforms, transportation, and unofficial fees. According to the report by the World Bank [45], household income is directly correlated with the enrollment rates, and many families cannot focus on the education of girls because of the poor budgets. According to a study by the World Bank [45], by 2030, the eradication of child marriage in Uganda would create up to 3 billion dollars every year by increasing the education among the girls. Although such projections are handy, empirical data based on various studies, such as those studies that are region specific, may give a clearer understanding of the delicate economic effects of educating girls in various regions of Uganda.

2.2.2 *Social and cultural factors: child marriage rates vs. school dropout rates*

Another major obstacle to education of girls in Uganda is the fact that child marriage and early pregnant still exist. According to the estimates by the World Bank [45], 33% of girls get married before their 18th birthday, and 30% of girls give birth in their teens. Such cultural habits have a disproportionate impact on the girls resulting in school dropouts and cutting short educational systems. In research done by Ochen et al. [28], Northern Uganda values early marriage and education as a way of attracting bride price and therefore, in their respective countries, girls are regarded as useful assets leading to poor academic achievements and increased rates of school dropouts. Early marriage and school dropouts are, however, not a simple case. It is necessary to note that marriage in most instances might be an after-effect of school dropout other than the cause.

2.2.3 Infrastructure challenges: availability of schools vs. enrollment data

Shortage of proper educational infrastructure, especially in the rural regions, is a major challenge to girl child education. The unavailability of schools, distances, and inadequate facilities are more disproportionate to girls, increasing the level of dropouts. According to the World Bank [45] and UNICEF [42], although the enrollment rates have been high in Uganda, girls have lower retention and completion rates in comparison to boys, particularly in rural areas. Research in parts of the world such as Northern and Eastern Uganda, including that by Azam et al. [5] and Ochen et al. [28], suggests that these disparities are partly due to poor infrastructure, which is compounded by socio-cultural factors.

2.2.4 Government and NGO interventions

International organizations such as UNESCO and UNICEF have offered their assistance to the government in their attempts to solve the problem of gender disparities in education. Although policies such as UPE and USE have increased the rate of enrollment, it has not been adequate to solve the problem of the underlying barriers to retention and completion, particularly among girls [14]. Organizations such as BRAC support some programs that have been partially successful in boosting retention, but these interventions tend to be local and cannot be scaled [45]. According to Nashir et al. [25], the efficiency of these programs must be evaluated with more stringent longitudinal research done to ascertain the long-term effects of the programs on the educational achievement of girls in many parts of Uganda.

2.3 Empirical literature: case studies and data analysis

2.3.1 Education enrollment and dropout trends

Admission of female students has been increasing with the time, yet the number of school dropouts is so alarming. The available data on the issue, provided by UNESCO [41], shows that the enrollment level of girls in primary school has risen to 54% but the rate of secondary school graduation is only 27%. Such dropout rate is more common in the rural regions where the girls experience more socio-economic and cultural difficulties. According to the Uganda Bureau of Statistics (2024), the disparities in regions are also quite high: Acholi, Northern Uganda, has only 7% enrollment rate, and Kampala has 52%. This trend shows the necessity of having region-specific policies to respond to the specific challenges of the region. The local policies and community programs should be analyzed deeper and how they have either favored educational development among girls in these areas or slowed down the process must be analyzed.

These patterns echo findings from Bindeeba et al. [9], who also report higher dropout among rural and economically vulnerable girls, but contrast with studies that emphasize school-level factors such as teacher attitudes or school safety as primary drivers of attrition. The divergence suggests that economic and school-level explanations are intertwined rather than competing in many contexts, poverty amplifies the impact of unsafe or low-quality school environments.

2.3.2 Impact of economic factors on education

The connection between income level of a household and school enrolment is not new to literature. Families that have limited resources tend to educate boys first before girls

particularly in the poor areas. According to Bindeeba et al. [9], girls in rural Uganda have higher chances of dropping out of school because of financial reasons. This is an economic fact which is especially clear in such places as Northern Uganda where families tend to prefer to make economic contributions in the now rather than in the future, investment in education of girls.

2.3.3 Effectiveness of government and NGO interventions

The evaluation of such policies as UPE and USE have been mixed. As much as these initiatives have boosted enrollment, the disparity between boys' enrollment and those of girls in terms of retention is still wide. Research by UNICEF [42], the World Bank [45] and other organizations has indicated that these policies have not been able to adequately deal with the underlying causes of female disadvantage in education. The NGO programs as it operated through BRAC have demonstrated potential in enhancing educational retention, however, the difficulty is how to expand the programs to cover every part of Uganda.

2.4 Gaps in literature and conclusion

Although much has been written about the obstacles facing the education of girls in Uganda, it would be desirable to have more area-oriented research, especially in the eastern, northern, and south-western parts. Most of the research is conducted on the national level, which does not always reflect the complexity of the issues girls in these regions have to endure. More empirical studies are required to investigate the differences in education attainment among girls in various regional settings and the ability of the interventions to work in alternative local settings. To sum up, though such policies as UPE and USE have achieved progress in terms of enrollment rates, there are still lots of issues related to keeping girls in school and finishing their education. The causes of these challenges are complex and consist of economic, social, cultural and infrastructural obstacles. These problems need specific interventions, which must be context specific, region specific, and include all stakeholders such as the government, the NGOs, and the communities.

Overall, existing studies tend to examine single barriers, such as poverty, early marriage, or infrastructure, in isolation. Few combine economic, socio-cultural, and institutional dimensions within a single analytical framework, and even fewer link these barriers to the design and implementation of specific policies such as UPE and USE. This review therefore adopts a more integrative lens, juxtaposing national-level trends with regional case studies to identify where prevailing theories and interventions fail to fully account for persistent gender gaps.

3 Methodology

3.1 Research design

This study uses the secondary approach of data synthesis drawing on both quantitative and qualitative evidence from published and publicly available sources with the aim of assessing the datasets and literature to comprehend the challenges and opportunities in education of girls' education in Uganda. The research does not entail primary data gathering and all the results will be on secondary data wherein the authors utilize government reports, data of international organizations (e.g., UNESCO, UNICEF, World

Bank), and past research studies that have been carried out. The combination of these secondary data sources provides an overall picture of trends and obstacles to girls' education in Uganda over the period 2000–2024. The study adopts a triangulation logic, comparing quantitative indicators with qualitative findings to strengthen the validity of interpretations.

A quantitative approach is employed in the study to analyze the enrollment, retention, and completion rates to follow the trends, whereas the qualitative approach incorporates the available interviews and case studies in literature. The sources of data involved in this study are publicly available sources, including the Uganda Bureau of statistics (UBOS), UNESCO, UNICEF, and World Bank.

3.2 Document selection criteria

To make sure of the topicality and the quality of the sources that were included during this synthesis, the following criteria were used to select the documents:

3.2.1 Inclusion criteria

- Articles published by peer-reviewed journals, official governmental reports, and publications of credible international organizations like UNESCO, UNICEF, and the World Bank.
- Reports that indicate the number of girls attending and not attending secondary schools in Uganda in 2000–2024 in relation to enrollment, dropout, and completion rates.
- The case studies and qualitative studies which give detailed information on the socio-cultural and economic obstacles to the education of girls in different areas of Uganda.

3.2.2 Exclusion criteria

- Articles that lack information that is specific to Uganda or its areas.
- Non-peer reviewed and non-reputable sources.
- No documents older than 2000 or which do not contain any relevant or updated data.

3.2.3 Search strategy and cutoff points

- A thorough search of the academic databases of Google Scholar and JSTOR and PubMed was performed. Search keywords were based on girl child education Uganda, secondary education trend Uganda, socio-cultural barriers to education Uganda and UNICEF education reports Uganda.
- Only the studies and reports published within the past 24 years (2000–2024) have been considered to make use of current and recent data.

3.3 Data collection

No primary data was gathered since the study involves the analysis of secondary data. Rather, the research summarizes the data in the following sources:

3.3.1 Quantitative data

- The opening and enrollment and retention based on the official datasets, i. e. Uganda Bureau of Statistics (UBOS), UNESCO, and the World Bank (2000–2024).
- Regional statistics on secondary education enrollment, dropout rate and completion rate of girls in certain regions (e.g., Northern Uganda, Eastern Uganda, South-Western Uganda and Central Uganda).
- National reports and surveys, like the UNICEF Education Reports, and the national household survey, Uganda National Household Survey (UNHS) are considered key data sets.

3.3.2 Qualitative data

- Information on the past case studies and interviews which were carried out in peer-reviewed articles and reports. These studies have given qualitative data which informs about the barriers that girls must access education such as early marriage, violence against girls and financial reasons.
- Qualitative sources of special note are from Nabugoomu [24] on school dropouts and Maureen et al. [20] on the effects of gender-based violence in Rukungiri, and Ochen et al. [28] on the education barriers in Northern Uganda.

3.4 Data analysis

In this research, the data analysis will include two major strategies:

3.4.1 Quantitative data analysis

- The data on enrollment, retention and completion rates of girls in Uganda and its regions were summarized using descriptive statistics. It involves the calculation of averages, percentages and trends with time (2000–2024).
- A comparative analysis was used to determine the differences in the education attainment among girls across regions. To show the difference in access to education, the completion rate of girls in Northern Uganda (7%), was compared to Kampala (52%).
- An appendix of data is given, which provides information about the sources, the year, and the definition of the variables used.
- Where possible, time-series data (e.g., UBOS and World Bank indicators) were examined to identify trends in enrollment, completion, and dropout between 2000 and 2024. Simple trend lines were constructed to visualize trajectories over time, and regional comparisons were made using percentages and gross enrolment ratios. Although the analysis is primarily descriptive, we interpreted consistent trends across multiple sources as evidence of robust patterns rather than isolated data points.

3.4.2 Qualitative data analysis

- The qualitative data on the available literature was synthesized using thematic analysis. The main themes revealed are socio-cultural barriers (e.g., child marriage, gender-based violence), economic barriers (e.g., financial constraints, lack of resources), and infrastructural barriers (e.g., distance to schools, poor facilities).

- Previous interviews and case studies (as the case of Maureen et al. [20]) were analyzed with the help of qualitative methods to determine the reasons behind the educational dropout rates among girls in various regions.
- Qualitative data were analyzed using a thematic synthesis approach. First, relevant findings from each study were extracted into a matrix (study, region, population, key barriers). Second, inductive coding was used to group similar barriers (e.g., early marriage, GBV, financial constraints, infrastructure) into broader themes. Finally, we examined convergence and divergence across studies and regions; themes reported consistently across independent sources were treated as 'high-confidence' findings, while isolated or context-specific findings were flagged as tentative. This process allowed us to triangulate quantitative trends with qualitative explanations.

Regional comparisons are also involved in the analysis to analyze the differences in barriers in Northern, Eastern, South-Western, and Central Uganda. As an example, the problem of girls in Northern Uganda is addressed in the framework of the cultural values that advocate early marriage over education, which was found in Ochen et al. [28].

3.5 Ethical considerations

Since this research is based on the analysis of secondary data only, no issues of the primary data collection apply. All the datasets employed in this paper are publicly available and have been gathered and published by credible institutions like World Bank, UNESCO and UNICEF. Besides, any qualitative data mentioned in the literature review and analysis is adequately referenced to the authors and publications.

3.6 Limitations

Although the current study is a synthesis of the information contained in a very large number of secondary materials, the limitations of the secondary data analysis deserve to be mentioned. These include:

- Data availability: The data might not be entirely representative of all regions in Uganda especially in remote regions
- Data consistency: It is possible to have inconsistency in the data provided by various organizations, particularly when comparing data across time or space.
- Absence of primary data: The study does not involve new primary data that would have given more information on the lived experiences of girls in Uganda.

4 Findings

In this segment, the secondary sources will show findings of the data collected by the researchers based on the national and regional statistics on girl child education in Uganda. It deals with the major obstacles and patterns in enrollment, retention, completion rates, and gender differences, which conform to the study objectives that were initially stated in the introduction. The results have been presented in quantitative trends and qualitative analysis using the secondary data sources namely UNICEF, UNESCO, the World Bank, UBOS and past research findings.

4.1 Quantitative data analysis

4.1.1 Secondary school completion rates

The completion rates of the girls in the secondary schools in Uganda have also been low with significant differences being experienced in the rural and urban regions. As shown in the statistics provided by the World Bank [45], the percentage of girls that attend upper secondary education in the country, as stated above, covers vast disparities across regions. As an illustration, the completion rate is 52% in Kampala with only 7% in Northern Uganda [42] (Fig. 1).

4.1.2 Dropout rates and causes

The rate of school drops out of girls is disproportionately high especially in the rural and poor areas. According to the Uganda National Household Survey (UNHS) conducted by UBOS [38], 53.8% of girls who leave school report financial reasons such as fees and other education-related costs. Teenage pregnancy and early marriage are another significant cause of school dropouts. According to UNICEF [42], teenage pregnancy is the reason why 30 percent of school dropout cases among girls are caused, and 33 percent are caused by child marriage. These are highly associated with gender-based violence (GBV) and social-cultural practices (Fig. 2).

4.1.3 Tertiary education enrollment

Girls are also severely under-represented in tertiary education. The World Bank [45] estimates that only around 4% of girls are enrolled in tertiary education, compared to a national gross enrolment ratio of approximately 6–7% [41]. The difference underscores the persistent problem of accessing higher education by girls especially in the rural regions. This low enrolment rate is heightened by economic factors and cultural demands that girls should get married after their secondary education (Fig. 3).

Regional Comparison of Secondary Completion Rates among girls (2000–2024)

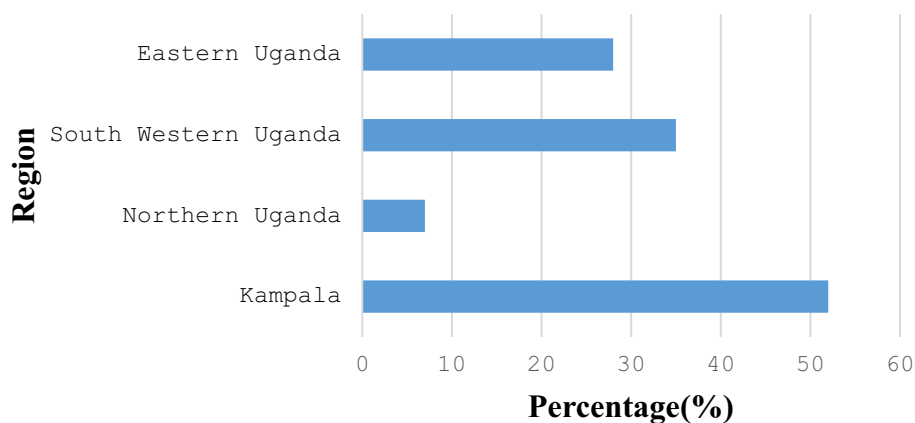


Fig. 1 Regional Comparison of Secondary Completion Rates among girls (2000–2024). Data points: Kampala 52%, Northern Uganda 7%, South-Western Uganda 35%, Eastern Uganda 28%. Note: Fig. 1 shows the regional comparison of secondary completion rates among girls (2000–2024) in Kampala, Northern Uganda, South-Western Uganda and Eastern Uganda. Data compiled from UNICEF [42], UBOS (2024), World Bank [45], and UNESCO [41]. Description: A bar chart of the secondary completion rates of girls in Kampala, Northern Uganda, South-Western Uganda, and Eastern Uganda

School Dropout Causes among Girls (2000–2024)

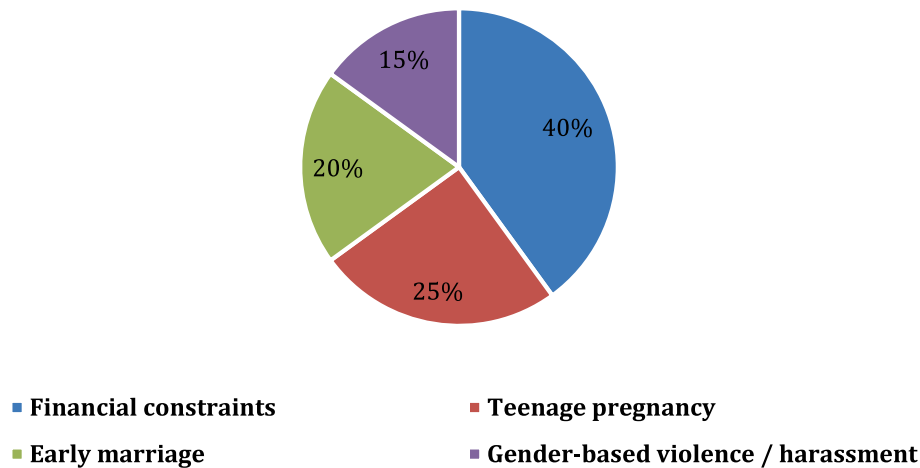


Fig. 2 School dropout causes among girls (2000–2024). Data points: Financial constraints 53.8%, Teenage pregnancy 30%, Early marriage 33%, Gender-based violence 15%. Fig. 2 is a pie chart explaining the rate of girls who dropped out because of the lack of finances, teenage pregnancy, early marriage, and gender-based violence. Causes of school dropout among girls (2000–2024) based on data from the Uganda National Household Survey (UNHS, 2024) and UNICEF [42]. Data compiled from UNICEF [42] and the World Bank [45]

Tertiary Enrollment Rates - Boys vs Girls (2000–2024)

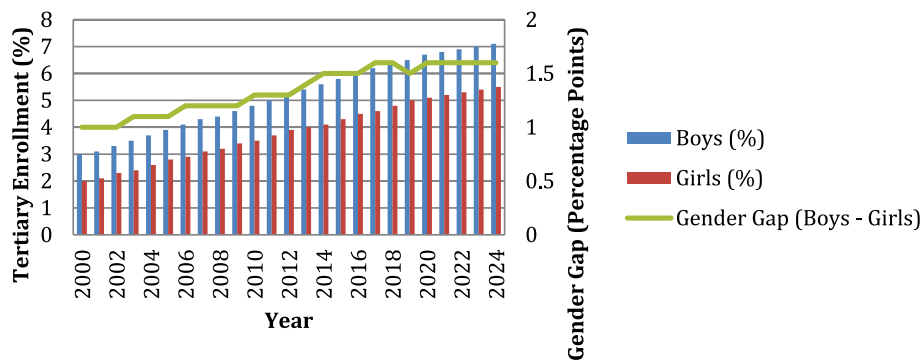


Fig. 3 Girls vs. Boys: Tertiary Enrollment Rates (2000–2024). Data points: Girls 4%, Boys 6–7% (Gross Enrollment Ratio). Gender gap calculated as the difference between boys' and girls' tertiary enrollment rates [41, 45]. Fig. 3. is a bar graph that compares the tertiary enrollments between girls and boys in Uganda and shows the gender gap

4.2 Qualitative data analysis

4.2.1 Socio-cultural barriers: child marriage and teenage pregnancy

Gender-based violence (GBV) and cultural norms are also important challenges to the education of girls in Uganda. As noted in interviews and case studies by Maureen et al. [20] and Ochen et al. [28], child marriage has become embedded into the tradition in Northern Uganda, especially because the traditional beliefs emphasize early marriages among girls rather than schooling. One teacher in Gulu said, “In our community, girls are married off early, and education is seen as unnecessary for them.” Another significant school dropout in Eastern Uganda is teenage pregnancy. As explained by a local leader in Kumi, “Many girls drop out due to pregnancy and are excluded from school, which

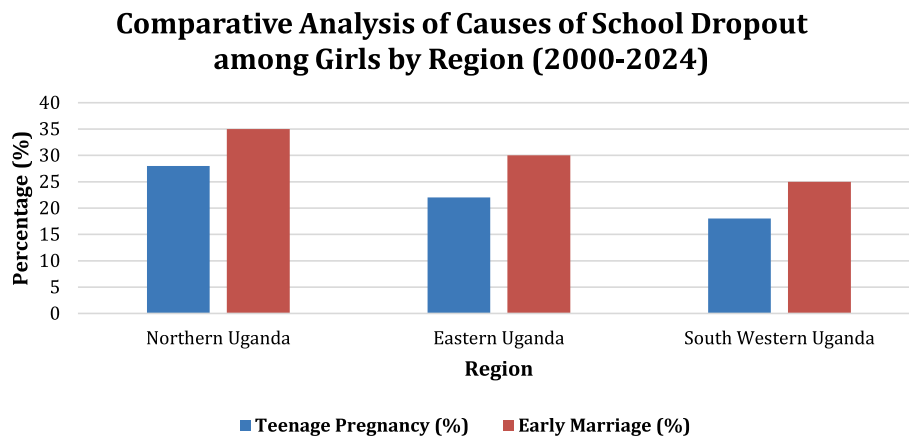


Fig. 4 Comparative analysis of Causes of School dropout among Girls of that Region (qualitative data).Data points (regional averages): Northern Uganda – Early marriage 45%, Teen pregnancy 35%; Eastern Uganda—Early marriage 40%, Teen pregnancy 38%; South-Western Uganda—Early marriage 32%, Teen pregnancy 28%; Central Uganda—Early marriage 25%, Teen pregnancy 20%. Comparative analysis of dropout causes among girls in Northern, Eastern, Southwestern, and Central Uganda (2000—2024). Data compiled from UNICEF [42], UBOS (2024), Maureen et al. (2024b) and Ochen et al. [28]. Fig. 4 shows a bar chart comparing the prevalence of the dropping out among girls because of teenage pregnancy and early marriage in Northern and Eastern and Southwestern Uganda

Table 1 School dropout distribution by region (2000–2024) based on financial constraints

Region	% of dropouts due to financial constraints
Northern	50%
Eastern	45%
South-Western	38%
Central/Kampala	30%

Distribution of school dropouts by region (Northern, Eastern, South-Western, and Central Uganda) due to financial constraints between 2000 and 2024. Data compiled from the Uganda National Household Survey (UNHS, 2024) and UNICEF [42]. Reference: CNN article by Yardley & December [47]

forces them into early marriage.” This is a vicious cycle that adds to low completion rates among girls and results in the socio-economic challenge that girls struggle with (Fig. 4).

4.2.2 Economic constraints: school fees and finances

Economic factors are very important determinants of the educational outcome of girls. Financial constraints on families through school fees, cost of transport and informal school fees among others have a huge impact on girls staying in school. One of the single mothers in Rukungiri had revealed: *“I have to choose between sending my boys to school or my daughters. It is always a difficult decision.”* In rural Uganda, the value of male children in the traditional society has led to the preference of their education in the family. According to the report on UNICEF [42] 53.8% of girls drop out because of financial reasons.

Summary: In Northern, Eastern, South-Western, and Central Uganda, a table of the percentage of school dropouts based on financial constraint factors is summarized in Table 1.

4.2.3 Interventions by government and NGOs

Government programs such as Universal Primary Education (UPE) and University Secondary Education (USE) have gone an extra mile to raise the enrollment rates; however, they have not touched the actual causes of dropout especially among girls. The report by

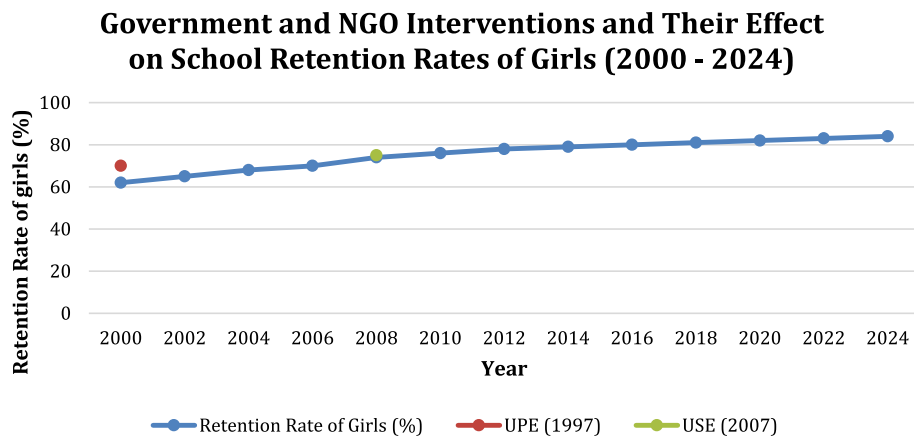


Fig. 5 Government and Non-Governmental Organizations Interventions and their effect on the School Retention rates of girls (2000–2024). Data points: Retention rate before UPE (1996)—42%; after UPE (2000)—58%; after USE (2007)—65%; current (2024)—72%. Effect of government and NGO interventions (UPE launched in 1997, and USE launched in 2007) on girls' school retention rates in Uganda (2000–2024). Data compiled from UNESCO [41], World Bank [45], and UNICEF [42]. Fig. 5 is a line graph that indicates the effect of UPE and USE programs in terms of school retention rates in the pre-implementation period and after the implementation of these policies

UNICEF [42] states that the number of girls who attend secondary schools has grown, yet, the retention rates are low, particularly in rural areas. NGOs like BRAC and Save the Children have come up with initiatives to curb the cases of dropouts and enhance gender equality in education. As an example, the program of BRAC in Northern Uganda demonstrated certain success in having vocational training and financial support of girls, but these measures were local and not extended to the national level (Fig. 5).

4.3 Limitations of the study

This study is based on secondary data analysis, and there are inherent limitations in using publicly available datasets. The key limitations include:

- Heterogeneity of data sources: the study draws data from different sources, including UNESCO, UNICEF, and government reports. Each source may use different definitions, methodologies, and data collection techniques, which could lead to inconsistencies in reported statistics.
- Geographic limitations: data from rural Uganda is often limited, particularly from Northern Uganda, where infrastructure is minimal, and access to education is severely restricted. As such, the data presented may not fully capture the lived experiences of girls in these regions.
- Lack of primary data: this study relies entirely on secondary data and cannot capture real-time or current qualitative insights from girls, teachers, and parents in Uganda. Interviews and case studies from recent years would offer more nuanced and contextually specific findings.

4.4 Discussion and synthesis of findings

The results of this research will be a detailed synthesis of the current information on the obstacles to the schooling of girls in Uganda, the further elaboration of the well-known trends on this issue by the international agencies, including UNICEF, UNESCO, and the World Bank. Analysis provides the major issues facing secondary and tertiary education of girls, and especially regional inequity, socio-cultural challenges, and economic

limitations. This debate critically summarizes such findings, paying emphasis on its policy, practical, and future intervention implications on the education sector in Uganda.

4.4.1 Regional disparities in secondary school completion rates

The disparity in the secondary school attainment among girls in the region as shown in the data indicates the overall problem of unequal access to education between the rural and urban regions. Its national completion rate of as stated earlier is alarming though masking great differences with the urban centers such as Kampala recording 52% compared to rural areas, particularly the Northern part of Uganda at just 7%. These differences indicate the unbalanced allocation of education, infrastructure, and socio-cultural perception of education to girls. It is recognized that regional differences in the completion rates need local interventions. In Kampala the problems could be more likely to be associated with the socio-cultural aspects like gender prejudice and the quality of education, and in Northern Uganda, there are the structural aspects of poor infrastructure, inadequate access to education and the ingrained cultural practices including early marriage and gender-based violence (GBV) which contribute to dropout by creating unsafe school environments and triggering early marriage or pregnancy. Thus, although there has been an increase in the rate of enrollment due to national policies such as the Universal Primary Education (UPE) and the Universal Secondary Education (USE) these programs have not been used uniformly in regions. The results underline the need to design interventions in accordance with specific issues of a specific area, so that the policies would consider socio-economic and cultural contexts of the rural and marginalized population.

4.4.2 Dropout rates and socio-cultural barriers

Girls in Uganda have a disproportionate rate of dropout and the socio-cultural factors influencing this condition include teenage pregnancy and early marriages. The observation that 30% of girls are dropping out because of teenage pregnancy and 33% because of child marriage are consistent with the available literature on the socio-cultural determinants that deprive girls in Uganda a chance to receive an education. The studies of the region and case studies in the study have shown that in some parts especially North and Eastern Uganda, girls are mostly married off very young and education is not accorded much attention and instead traditional gender roles are given which accord girls their priority as wives and mothers. These results highlight the need to deal with the underlying causes of early marriages and teenage pregnancy. Whereas the increase in enrollment rates has taken place to some extent following the government and NGO efforts to achieve this, there has not been adequate progress on the cultural practices that have cultivated these negative cultures. The educational policies should not just encourage enrollment, but also retention and completion. Interventions are not supposed to just educate the girls but also collaborate with the communities to change the view of educating girls. Gender equality programs, sensitizing the community about the importance of educating girls, and discussing with the community leaders on detrimental cultural traditions can be used to create an enabling environment where the girls can remain in school and finish their schooling.

4.4.3 Economic barriers: financial constraints

As indicated by UNHS conducted by UBOS [38], financial limitations continue to face girls' education in Uganda where 53.8% of girls dropped out because of their school fees and other implicit costs. This is a vital problem, especially in the rural communities where families incur more financial difficulties and are usually compelled to make difficult decisions when it comes to the children to be taken to school. Boys are given preference over girls in the education sector in most families, yet another factor that contributes to the disparities in the educational achievements of boys and girls. Financial strain of education such as school fees, transport and unofficial fees still plays on the capability of girls to remain in school, although the government has been trying to bring in primary and secondary school education as a free one. The results indicate that these policies, as much as they have seen the enrolment rates rise, have never fully dealt with the hidden costs of education, which is a major obstacle to many families. Scholarships, financial aid schemes and school fees subsidies, especially to girls in low-income families, may be a vital way of overcoming these hindrances. Also, the community-based support systems (like the local fundraiser to educate girls) may be considered as the way to reduce the financial pressure on the family.

4.4.4 Tertiary education enrollment

Girls are also under-represented in tertiary education with only 4% of girls enrolled in tertiary education as opposed to a national average of 6–7%. This disparity is indicative of the larger systemic problems that restrict access to higher education by girls such as economics, cultural requirements as well as gendered education. Although government initiatives such as UPE and USE have made more girls attain education up to primary and secondary levels, the initiatives have not been applied to make girls get the same access to tertiary education. The poor tertiary enrolment rate among girls is quite worrying considering that higher education has become increasingly significant towards getting a long-term economic prospect. The results indicate that there should be policies that proactively promote the involvement of girls in tertiary education by offering them scholarships, recruitment programs, and vocational training exercises. Vocational education, especially, might present the other road that the girls may take, giving them skills that would be directly used in the labor market and increasing their financial autonomy. In addition, to enhance access to higher education among girls, it is necessary to deal with the cultural requirement that girls must marry once they are out of secondary school.

4.4.5 Government and NGO interventions

Governmental policies such as UPE and USE have gone a long way to raise the enrolment among boys and girls. Nonetheless, these policies have not done very well in curbing the structural problems that help in increasing the number of girls dropping out of schools particularly in rural areas. The results indicate that enrollment is growing, but retention is a problem among girls, which implies that more specific and contextual measures are required. Some of the NGOs like BRAC and Save the children have initiated programs that assist girls in education, particularly in the rural regions. These are vocational training programs, financial assistance programs and even gender sensitive education programs which although they have some successes have been limited in

scope and reach. The paper highlights the importance of increased cooperation between the government, NGOs and the local communities in designing and implementing the scalable interventions that target multi-faceted obstacles that girls are confronted with in school. It may involve combined interventions involving educational support and economic empowerment as well as community-based advocacy to transform culture to accept education among girls.

4.4.6 *Synthesis of findings*

The analysis of the findings of this study supports the conclusions of the earlier investigations and such institutions as UNICEF and UNESCO and proves that girls in Uganda have a very high number of barriers to receiving and finishing their education that are overlapping. These obstacles are economic, socio-cultural and structural and stakeholders should deal with them using a multifaceted approach. The results indicate that although some gains have been realized regarding enrolment, there are still a lot of challenges, especially with regards to retention and completion. The study is relevant to the existing body of knowledge since it focuses on the significance of localized interventions that consider regional and cultural variations. It also emphasizes the importance of integration and using educational activities together with more global socio-economic empowerment methods with girls and their families. It is only by a combination of such a strategy that Uganda can expect to record any meaningful gains about the educational outcomes of girls and the gender gap in education. Although substantial gains have been realized in enrolling girls in Uganda, stakeholders still have a lot to do to deal with the causal factors of school dropout especially in rural and non-privileged areas. The results of this study highlight the importance of the intervention that would be specific in terms of addressing both the economic and socio-cultural hindering factors for girls to remain in school and finish their education. Through the ongoing attempts to add to the activities of governmental programs and non-governmental organizations, Uganda could take a step in the right direction and be able to provide gender equality in education and empower girls to fulfill their potential. Taken together, these findings show that while Human Capital Theory explains the long-term value of educating girls, it is the interaction of social norms, gendered power relations, and capability constraints that better accounts for the barriers documented in this study.

The synthesis of findings indicates that despite significant policy gains, gender disparities persist across regions. The following discussion integrates these findings with broader literature as this study has found out that even though the education sector in Uganda has improved a lot, there are still very high levels of gender gaps in school completion, retention and the number of girls enrolling in tertiary institutions. The regional pattern analysis between 2000 and 2024 provides that despite the relatively high secondary completion rates in the Central region (Kampala), girls in the Northern, Eastern, and South-Western areas of Uganda still have significantly worse results [42], UBOS, [38]). This is in line with Bindeeba et al. [9] and Ochen et al. [28] who point out that disparities in education access in the region are exacerbated by variations in post-conflict recovery, poverty, and the local cultural norms. The persistence of early marriage and teenage pregnancy reflects limitations of Human Capital Theory in the Ugandan context, as Social Norms Theory better explains how community expectations and patriarchal pressures override the anticipated economic returns of continued schooling.

Socioeconomic situations are a superior factor that determines the level of education among girls. The results provided by the Uganda National Household Survey (UNHS) conducted by UBOS [38] and World Bank [45] reveal that the first reason of school dropout is financial constraints, especially in rural and low-income families. This will corroborate [4] who found out household poverty and lack of affordability of school fees are reliable predictors of female school dropout throughout Uganda. These challenges remain to be persistent, which implies that despite the positive effects of the Universal Primary Education (UPE) and Universal Secondary Education (USE) programs, governments and households have not fully covered hidden costs like scholastic materials, uniforms, and sanitation needs (MoES, [22]). The researchers also established that teenage pregnancy and early marriage still frustrate the educational advancement of girls, especially in Northern and Eastern Uganda. Lack of socio-cultural practices and restricted reproductive health education being identified as one of the causes of school dropouts among adolescent girls (Maureen et al., [20]; [42]), this issue poses a serious challenge to the education sector. Child marriage in Northern Uganda is widespread [28], whereas in the Central region, child marriage is not a major issue, hence the dropout rate is nearly twice as high. This local disparity evidences the interplay of the gender-related norms with the economic vulnerability and supports Ainsworth (1996) in stating that education and gender roles are closely tied with the socioeconomic status and fertility rates. The findings on GBV align more closely with Gender and Development (GAD) perspectives, which highlight how unequal power relations within households and schools restrict girls' agency and contribute to school withdrawal despite formal educational opportunities.

As the tertiary enrollment analysis (Fig. 3) shows, there is a gradual yet constant growth in girls' enrolment between 2% in the year 2000 to approximately 5.5% in the year 2024 which is compared to the growth of boys between 3 and 7%. The fact that this improvement is a national advancement is true but the existing gender disparity in higher education implies that there are structural inequalities in the transition between secondary and tertiary education [41]. Kakuba et al. [14] also made similar observations and explained the nature of these disparities by limited access to funding, cultural stereotypes towards female education, and the necessity to commit them to childbearing roles. The findings also shed light on the advantageous impact that governmental and non-governmental interventions have on the retention rates. Implementation of UPE (1997) and USE (2007) programs has resulted in slight changes in the school participation, especially in urban districts [41, 45]. Nevertheless, Bindeeba et al. [9] and World Vision [46] mention that these interventions are usually restricted due to unequal distribution of implementation, focus on gender-sensitive support mechanisms. The role that NGOs and community-based organizations have been playing in filling these gaps has been significant especially in enhancing menstrual hygiene management, counseling, and mentorship programs (Saleem et al., [31], Poharel & Chaudhary, [30]). The weak transition of girls into formal employment supports critiques of Human Capital Theory, suggesting that labour market segmentation and unpaid care burdens, emphasized by GAD and Capability approaches, limit the practical returns to girls' educational attainment.

Overall, the evidence can indicate that educational inequality in Uganda is a complex issue that is caused by a complex of economic, social, and cultural reasons. Although the

enrollment and completion rates have increased in the country, there are still regional disparities, teen pregnancy, and financial hardship as major obstacles towards equal access. The solution to this gap must be holistic in nature where economic empowerment of the households, gender responsiveness and community involvement are incorporated. The growth of the government-NGO collaboration and increasing specific interventions in vulnerable areas can also contribute to the development of the country according to the Sustainable Development Goal 4 (Quality Education) and Goal 5 (Gender Equality). The tendency of households to prioritise boys' education, as seen in qualitative data, reinforces Social Norms Theory, which explains how deeply embedded beliefs about gender roles shape educational investments regardless of the economic benefits posited by Human Capital Theory.

5 Policy recommendations

The policy recommendations below are aimed at resolving the main challenges to the education of girls in Uganda, depending on the results of this study. These recommendations aim at actions that are both realistic and specific to Uganda that can be done both in short and long term to ensure that the education outcomes of girls, especially in rural and marginalized areas, is improved. Each recommendation also has the proposed lead implementers, estimated cost, as well as indicators to be used to measure progress. Cost estimates are indicative and based on scaling typical unit costs from existing government and NGO programs (e.g., per-student capitation grants and community sensitization campaigns), rather than detailed budget modelling.

5.1 Increase financial support for girls' education

Given that 53.8% of girls who leave school cite financial constraints as the primary reason (UNHS, 2024), targeted financial support is critical as this provides selected financial aid to support girls with middle- and low-income families, which is inclusive of school fees, transport, and other unnoticed education expenses. Some of the solutions suggested including the introduction of a national scholarship program on girls especially in rural and conflict-prone areas, the introduction of a fee-free school program to low-income girls and provision of a small amount to offset other expenses such as school textbooks. These measures will be carried out by the Ministry of Education and Sports (MoES), Uganda National Council on Higher Education (UNCHE) and local government education departments, and the cost of the measures is estimated at about UGX 50 billion per year. Such indicators are the number of scholarships given out, the rate of increased enrollment and retention of girls and a decrease in the number of girls dropping out of schools on financial grounds.

5.2 Community-based education and awareness programs

National statistics showing that 24% of girls aged 15–19 are pregnant or parenting, and that 43% of women were married before age 18, confirm that early marriage and teenage pregnancy remain major drivers of school dropout. The use and application of community-based programs will be paramount in transforming the societal thought process towards girls' education especially in child marriage and teenage pregnancy. This can be done with the help of media campaigning, educating the leaders of the community to promote the education of girls and conducting parents and guardians' workshops.

These efforts will be spearheaded by the Ministry of Gender, Labour and Social Development (MGLSD), the Uganda National Bureau of Standards (UNBS) and the civil society groups (CSOs) together with the BRAC and Save the Children and the estimate cost of the activities will be UGX 20 billion annually. Measures of those will involve the number of communities accessed, the decrease in the rate of child marriage and teenage pregnancy, and the increase in the enrollment and retention rates of girls in the target areas.

5.3 Expand vocational training and alternative education opportunities

The evidence indicates that although enrollment has improved, limited career guidance and few pathways to vocational training restrict girls' transitions from school to meaningful employment. Increasing vocational education programs as an alternative to traditional academic education is crucial to girls especially in the under-served regions. This would involve the creation of vocational training centers, collaborating with local companies in the form of internships, mentoring and rewarding schools that incorporate vocational training in the school curriculum. This will be put into practice by MoES, Uganda Investment Authority (UIA), and local businesses with an estimated cost per year being UGX 30 billion. The measure of success will be in the number of vocational centers, enrollment rate of vocational programs and the number of girls who move to employment or entrepreneurship.

5.4 Enhance school safety and address gender-based violence (GBV)

Findings from Rukungiri and Northern Uganda indicate that gender-based violence, harassment, and unsafe school environments frequently lead to withdrawal from school, underscoring the need for stronger protection mechanisms. There is a need to fortify efforts to make schools safer places for girls. They include countrywide teacher training on the need to identify and act in case of GBV and harassment, centralized reporting points, where the girls can report, and gender sensitivity training to the education staff. This initiative is going to be spearheaded by MoES, Uganda Police Force, CSOs, and health and social welfare departments with an estimated cost of UGX 15 billion annually. The results that can be measured are the number of schools that have adopted anti-GBV policies, the reduction of cases of GBV that are reported and the number of girls who will have stayed in school because of enhanced security.

5.5 Scale up government and NGO partnerships to improve girls' education

Study findings show that long distances to school, inadequate sanitation, and overcrowded classrooms continue to undermine attendance and learning outcomes for girls. The government and NGOs should empower their partnerships to scale up effective programs. Some of the measures include establishment of a coordination body at the national level, increasing effective programs led by the NGOs like vocational training and provision of financial assistance, and diversifying the activities to encompass more regions. This will be implemented by MoES, MGLSD, BRAC, Save the Children, and other NGOs with the cost projected to be UGX 40 billion in a year. The indicators will be the number of NGOs undertaking partnerships, how many more girls are benefiting through such programs, and how the retention rates and graduation rates in the rural areas have improved.

5.6 Educate on gender-sensitive pedagogy and curriculum reforms

Qualitative evidence from multiple studies highlights menstrual stigma and inadequate sanitary facilities as significant contributors to absenteeism and dropout among adolescent girls, therefore the gender-responsive pedagogy, classroom inclusivity, and menstrual health management modules should be included in teacher training. Curricula must be reformed to incorporate gender studies, mentorship aspect and life-skills education by the National Curriculum Development Centre (NCDC) and the Ministry of Education and Sports (MoES). There should be continuous professional development workshops conducted every year where teachers should be provided on gender-sensitive instructional techniques. Projected yearly expenditure: UGX 10 billion. Measures of success will be the better scores of gender sensitivity in school audit and adolescent girl retention.

5.7 Improve data collection and monitoring for girls' education

The findings reveal significant data gaps and inconsistencies across national surveys and reports, particularly in tracking girls' progression, regional disparities, and dropout causes, demonstrating the need for stronger data collection and monitoring systems to guide evidence-based interventions. To monitor the progress of education of girls, it is important to improve data collection and monitoring systems. This includes enhancing data collection systems at UBOS and MoES, creation of a national monitoring and evaluation system, and creation of an online system to monitor in real-time. The spearhead of these actions will be MoES, UBOS and local government education offices, with the costs being estimated at UGX 10 billion annually. The availability of the up-to-date disaggregated data, the enhanced monitoring of the dropout rates and intervention efficacy, and the greater utilization of the data to make policy decisions and develop programs will be considered a success.

6 Conclusion

This study discusses the endemic issues of girls' education in Uganda, and how the country has been facing a lot of socio-economic and cultural barriers which prevent girls attending and staying in school and finishing their education. Although significant advances have been made as educational access has been enhanced by such programs as Universal Primary Education (UPE) and Universal Secondary Education (USE), gender disparities are still evident, and in more rural regions, girls are still disproportionately impacted by financial limitations, culture, and gender-based violence (GBV) which contributes to dropout by creating unsafe school environments and triggering early marriage or pregnancy issues on their education.

The results of the current study require a sense of significance of the need to deal with both institutional and societal obstacles to allow girls to study and graduate in their full capacity. Although the enrollment of girls has improved, the retention and completion rates are worrying where only the percentage of girls that finish the upper secondary education, and enrolment in tertiary education is only that stated above. Early marriage, teenage pregnancy, financial challenges, and cultural expectations remain some of the factors that hinder the academic performance of the girls in Uganda. These obstacles restrict the potential of a person but add to the larger social and economic inequities in the nation.

The analysis shows that although the government policies have gone miles in ensuring higher access to education, they have failed to effectively deal with the underlying reasons of gender inequality in education. Monetary and socio-cultural barriers, especially the latent costs and early marriage and teenage pregnancy are also a point of concern that requires specific intervention. Another issue the study brings out is the necessity of greater interlinkage and holiness whereby families are supported financially, awareness programs conducted at community level and more focus given to vocational and technical training to offer girls alternative ways of succeeding.

A significant step to make is to go beyond national enrollment rates and pay attention to the difference by region, especially in rural and marginalized locations. Gender sensitive policy, more funds in education and a greater focus on the necessity of education of girls on the community level are the important steps to overcome the gap in education between males and females. The willingness of Uganda to achieve the requirements of the Sustainable Development Goals (SDGs) especially SDG 4 (Quality Education) and SDG 5 (Gender Equality) should be approached with a more coordinated action that will help in eliminating these barriers and give girls an equal chance to succeed in their academic and career opportunities.

To sum up, this paper confirms that the education of girls is not only a personal problem, but a national one and it can lead to larger social and economic progress. The advantages of educating girls are numerous in nature, with better health conditions, empowerment of the economy, and equality of gender being part of the general development of society. Likewise, such goals cannot be accomplished without tackling the underlying structural obstacles that keep on denying girls access to education and education itself. The suggestions herein presented are a roadmap to policymakers, educators and communities to help them to establish an environment where all girls in Uganda can receive the education they deserve hence being part of long-term development and prosperity of the country.

7 Appendix A

7.1 Data sources and definitions

See Table 2

The data used in this study were compiled entirely from secondary and publicly available sources. Table 2 below summarizes the key datasets and their characteristics.

Table 2 Summary of data sources

Dataset/source	Type	Years covered	Key Indicators	References
Uganda Bureau of Statistics (UBOS)—Statistical Abstracts, 2018–2024	Government dataset	2000–2024	Enrollment, dropout, completion rates	https://www.ubos.org
UNESCO [41] Education and Gender Equality Report	International agency data	2018–2024	Regional enrollment, GER/NER by gender	https://www.unesco.org/en/education
UNICEF [42] Education in Uganda: Challenges and Progress	International agency data	2019 – 2024	Dropout causes, early marriage, GBV	https://www.unicef.org/uganda
World Bank [45] Child Marriage, Early Childbearing and Low Educational Attainment	International agency report	2000–2024	Economic cost of child marriage, education data	https://openknowledge.worldbank.org

Table 2 Summary of data sources

Dataset/source	Type	Years covered	Key Indicators	References
Maureen et al. [20] Impact of Gender-Based Violence on Girl Child Education in Rukungiri District	Peer-reviewed article	2024	Qualitative cases, secondary analysis	INOSR Arts & Humanities 10(1)

Acknowledgements

The authors would like to express their gratitude to Albukhary International University, Alor Setar, Kedah, Malaysia and the Women University Mardan, Khyber Pakhtunkhwa, Pakistan for providing institutional and academic support throughout the preparation of this manuscript.

Author contributions

NN conceptualized the study, led the data analysis, and wrote the initial manuscript draft. SLC contributed to data curation, statistical presentation, and revisions of the literature review. FK supervised the research process, provided critical feedback on methodology, and refined the policy recommendation section. All authors reviewed and approved the final version of the manuscript.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Data availability

The data supporting the findings of this study are entirely based on publicly available secondary sources. Quantitative data on enrollment, retention, and completion rates were obtained from the Uganda Bureau of Statistics (UBOS, 2024), UNESCO [41], UNICEF [42], and the World Bank [45]. Additional qualitative insights were synthesized from peer-reviewed studies, including Nabugoomu [24], Maureen et al. [20] and Ochen et al. [28], which are publicly accessible through academic databases. All datasets and reports used are open-access and can be retrieved from the official websites of the respective organizations or through their digital repositories. No new data was generated or collected for this study.

Declarations

Ethics approval and consent to participate

Not applicable.

Informed consent

Not applicable.

Consent to publish

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 29 July 2025 / Accepted: 28 November 2025

Published online: 04 January 2026

7 References

1. Abu BNA, Haseeb M, Azam M. The nexus between education and economic growth in Malaysia: cointegration and Toda-Yamamoto causality approach. *Act Probl Econ.* 2014;12(162):131–41.
2. Ahabwamukama PA, Wambi M, Buluma A. Exploring the role of coordinating centre tutors in implementing early grade reading initiatives in Wakiso District Uganda. *EIKI J Effect Teaching Met.* 2024. <https://doi.org/10.59652/jetm.v2i4.288>.
3. Ainsworth M, Beegle K, Nyamete A. The impact of women's schooling on fertility and contraceptive use: a study of fourteen sub-Saharan African countries. *World Bank Econ Rev.* 1996;10(1):85–122.
4. Ajambo, P.W. (2023, January 5). *Examining inclusive primary education and the girls' right to education in Masinya sub-county, Busia district.* <http://dspace.mak.ac.ug/handle/10570/11421>
5. Azam M, Khan F, Hafeez MH, Abdullah H. Impacts of education and life expectancy on economic growth: some panel data evidence from developing economies. *Pak J Soc Sci.* 2019;39(4):1629–39.
6. Begum N, Tariq M, Jehan N, Khan F. Subjective assessment of women's economic welfare in public sector organizations of Mardan, Northern Pakistan. *Int J Soc Econ.* 2024;51(9):1151–66.
7. Bhosale A. The art of investment: crafting a conceptual framework for human capital investment. *Europ Business Manag.* 2025;11(1):12–9. <https://doi.org/10.11648/jebm.20251101.12>.
8. Bicchieri, C. (2006). *The grammar of society: The nature and dynamics of social norms.* Cambridge University Press.
9. Bindeeba DS, Nakawesi JS, Mukama SC, Mugisa A, Senyimba C, Mulebeke R, et al. Evaluating socio-economic resilience interventions among out-of-school adolescent girls and young women in rural Central Uganda: a quasi-experimental approach. *Int J Soc Welfare.* 2025. <https://doi.org/10.1111/jsw.70003>.
10. Ekaju J. An investigation into the relationship between the 1997 Universal Primary Education (UPE) policy and regional poverty and educational inequalities in Uganda (1997–2007). *Compare J Compar Int Educ.* 2012;42(1):171–2. <https://doi.org/10.1080/03057925.2012.632842>.
11. Explore Statistics - Uganda Bureau of Statistics. (2018, March 26). Uganda Bureau of Statistics. <https://www.ubos.org/explore-re-statistics/0/>

12. Jehan N, Khan F, Sadiqa BA. Girls' struggle for education: an exploratory study from Tehsil Balambat, Khyber Pakhtunkhwa, Pakistan. *J Manag Sci*. 2021;15(4):48–58.
13. Kabeer N. Resources, agency, achievements: reflections on the measurement of women's empowerment. *Dev Change*. 1999;30(3):435–64. <https://doi.org/10.1111/1467-7660.00125>.
14. Kakuba C, Nankinga O, Golaz V. Who leaves school prematurely in Uganda: do predictors vary by place of residence? *Int J Educ Dev*. 2025;114:103238. <https://doi.org/10.1016/j.ijedudev.2025.103238>.
15. Khan F, Noor S, Rehman Z, Rahman G. Does schooling contribute to economic growth? A comparative study in Pakistan and Afghanistan. *Pak J Soc Sci*. 2022;42(3):535–45.
16. Khan F, Uddin I, Don YB, Awan AM. Does women's education play a role in sustainable environment in Pakistan? A quantitative approach. *Environ Devel Sust*. 2024. <https://doi.org/10.1007/s10668-024-05479-4>.
17. Khan F, Zahir S, Rahman HU, Raza A, Noor S. Exploring the role of ICT and education in reducing environmental degradation among Asian countries. *Nat Resour Forum*. 2024. <https://doi.org/10.1111/1477-8947.12548>.
18. Khan MA. Analyzing three zeros (zero poverty, unemployment, and carbon emissions) in Asia and the Pacific region: assessment of sustainable development goals through the STIRPAT model. *Sustain Dev*. 2024;32(5):4782–99.
19. Khan MN, Khanam SJ, Khan MMA, Billah MA, Akter S. Exploring the impact of perceived early marriage on women's education and employment in Bangladesh through a mixed-methods study. *Sci Rep*. 2024. <https://doi.org/10.1038/s41598-024-73137-w>.
20. Maureen N, Earnest A, Muhammad T, Aja L, Tumuhairwe J, Maureen N, et al. Exploring the impact of gender based violence on girl child education in Rukungiri district of Uganda. *Inosr Arts Human*. 2024;10(1):37–47. <https://doi.org/10.59298/inosrah/2024/101.3746>.
21. Luwemba M, Aiseta A. Countering the education bog for the girl-child: Global progress to build on: The Ugandan case. *Islamic Univ J Social Sci*. 2021;1(1):50–70.
22. Ministry of Education and Sports (MoES). (2023). *Education statistical abstract 2023*. Government of Uganda.
23. Moser C. Gender planning and development: Theory, practice and training. Routledge; 1993.
24. Nabugoomu J. School dropout in rural Uganda: stakeholder perceptions on contributing factors and solutions. *Educ J*. 2019;8(5):185. <https://doi.org/10.11648/j.edu.20190805.13>.
25. Nashir N, Hungwe R, Guemou P. Investigating the main drivers of inflation and policy measures for controlling inflation in Sudan. *Global J Human Soc Sci Res*. 2024;4(1):19–39. <https://doi.org/10.59129/gjhssr.v4.i1.2024.33>.
26. Nussbaum, M. C. (2000). *Women and human development: The capabilities approach*. Cambridge University Press.
27. Nwachukwu GO. Human capital development: a driver for educational improvement in Nigeria. *Br J Educ*. 2024;12(6):30–9. <https://doi.org/10.37745/bje.2013/vol12n63039>.
28. Ochen P, Alidri A, Kabwijamu P. Gender dimensions of AGUU (Socially Excluded Youth) in Gulu City, northern Uganda. *Afr J Hist Geogr*. 2025;4(1):23–39. <https://doi.org/10.37284/ajhg.4.1.2662>.
29. Peer, B. (2024). Inequality and Access to Education: Bridging the gap in the 21st century. *socialworksreview.com*. <https://doi.org/10.71145/rjsp.v1i3.27>
30. Polharel S, Chaudhary S. Menstrual hygiene management among school girls. *Nepal Journals Online*. 2025;17(1):60–9. <https://doi.org/10.3126/hpef.v17i1.76539>.
31. Saleem SF, Azam Khan M, Tariq M. Moderating role of government effectiveness and innovation in sustainable economic growth relationship in Middle East & North Africa countries. *Nat Resour Forum*. 2025;49(1):516–40.
32. Sen A. Development as freedom. Oxford University Press; 1999.
33. Suresh NV, Remy V, a. M., & Vijayalakshmi, N. An Empirical Study on Empowering Women through Self Help Groups. *Adv Econ, Bus Manag Res*. 2024. https://doi.org/10.2991/978-94-6463-374-0_83.
34. Stromquist NP. The gender socialization process in schools: a cross-national comparison. *Int J Educ Dev*. 2007;27(5):520–32. <https://doi.org/10.1016/j.ijedudev.2006.10.009>.
35. Stromquist NP. Gender inequality in education: accounting for women's subordination. *Br J Sociol Educ*. 1995;16(4):437–53. <https://doi.org/10.1080/0142569950160403>.
36. Uganda Bureau of Statistics (UBOS). (2018). *Explore statistics*. <https://www.ubos.org/explore-statistics/0/>
37. Uganda Bureau of Statistics (UBOS). (2020). *Statistical abstract 2020*. <https://www.ubos.org>
38. Uganda Bureau of Statistics (UBOS). (2024). *Uganda National Household Survey (UNHS) 2024: Main report*. <https://www.ubos.org>
39. Ullah S, Gul A, Shah SM, Uzair M, Khan K, Ismail M, et al. Impact of female education on the economic growth: a case study of Pakistan. *J Asian Dev Stud*. 2025;14(1):205–17. <https://doi.org/10.62345/jads.2025.14.1.16>.
40. UNESCO. (2018). *Global Education Monitoring Report 2018: Gender review*. UNESCO.
41. UNESCO. (2024). *Education and gender equality in Uganda: Key statistics and policy recommendations*. United Nations Educational, Scientific and Cultural Organization. Retrieved from <https://www.unesco.org/en/education>
42. UNICEF. (2024). *Education in Uganda: Challenges and progress*. United Nations Children's Fund. Retrieved from <https://www.unicef.org/uganda/what-we-do/education>
43. Vincent K, Sophia K, Specioza A. To what extent has girl child education been promoted by the Government of Uganda at secondary school level? *Int J Res Innov Social Sci*. 2022;6(6):593–8.
44. World Bank. (2020). *Education statistics: Uganda dataset*. World Bank Group. <https://data.worldbank.org>
45. World Bank. (2024). *Child marriage, early childbearing, and low educational attainment for girls in Uganda*. World Bank Group. Retrieved from <https://openknowledge.worldbank.org/entities/publication/54f6d0d0-b35c-57b0-a7ff-c448e7109c04>
46. World Vision. (2023). *Breaking barriers: Supporting girl child education in rural Uganda*. World Vision Uganda. <https://www.wvi.org>
47. Yardley, J., & December, A. (2020, December 15). *How poverty drives girls out of school in Uganda*. CNN. <https://edition.cnn.com/>

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.