

## Social-Economic Factors and Secondary School Dropout among Girls in Mariani Ward, Tharaka-Nithi County, Kenya

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### ABSTRACT

*This study investigated the high dropout rates among girls in secondary schools in Mariani Ward, a critical issue observed in many developing regions. The specific objectives of the study were to assess how household income, parental education, and family structure influence girls' dropout rates. The study was grounded in the Relative Deprivation theory and utilized a descriptive survey design, involving a sample of 385 respondents selected from a larger population of 10,202 through cluster sampling method to ensure representation of various groups within the population. Within the target population, five clusters or sub-locations were identified based on their diverse characteristics. The sample included female dropouts as well as key informants such as head teachers, household heads, and local leaders. Data collection was achieved through questionnaires and interviews, and quantitative analysis was performed using SPSS version 25. The study employed inferential statistical methods, including correlation analysis, chi-square tests, and binomial logistic regression, to assess the impact of socio-economic factors on dropout rates. The results revealed significant positive correlations between dropout rates and household income (0.684), parental education status (0.547), and family structure (0.761). Binomial logistic regression analysis further confirmed the substantial influence of these factors on dropout rates. In addition to these factors, the study also indicated the presence of other unidentified variables affecting dropout rates. This highlights the necessity for further research to explore these additional influences. Based on these findings, the study recommends implementing targeted interventions to address the identified socio-economic challenges. These recommendations include developing financial support programs for low-income families, enhancing parental education and involvement, and fostering supportive family environments. Such measures are essential for reducing dropout rates and promoting sustained educational participation among girls in Mariani Ward. The study provides actionable insights for educators, policymakers, and stakeholders to effectively improve girls' access to education and support their academic persistence.*

**Keywords:** Educational Attainment, Girls' School Dropout, Household Income, Parental Education, Socio-economic Determinants, Family Structure

### 1. INTRODUCTION

Education is a fundamental human right and a cornerstone of socioeconomic development, serving as a catalyst for individual empowerment and societal progress (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2021). In this pursuit of knowledge and enlightenment, girls' education, in particular, holds a unique promise. It not only equips young women with the tools to shape their own destinies but also contributes significantly to the prosperity of communities and nations at large (United Nations Children's Fund [UNICEF], 2021). In the global pursuit of gender equality and inclusive development, ensuring that girls have equitable access to education is paramount (UN Women, 2021).

Governments worldwide have made significant commitments to prioritize girls' education. Recent developments in global education policy, such as UNESCO (2020)'s 'Her Education, Our Future' initiative, have brought the value of girls' education into sharp focus. High-level political forums, including the Global Partnership for Education (GPE) and United Nations Women conferences, have been instrumental in advocating gender equality in education (UN Women, 2022). Investments in girls' education have surged, supported by international partnerships, government policies, and private sector initiatives like the 'Girl Rising' campaign and the Malala Fund, which focus on improving access to education for girls in developing countries (Malala Fund, 2021). "Consequently, high-level political forums such as the Global Education Summit and the United Nations General Assembly have been instrumental in advocating for gender equality in education. These forums have led to significant commitments, including the Global Partnership for Education's pledge to prioritize girls' education.

As a result, investments in girls' education have surged, often supported by initiatives from corporations like Nike's 'Girl Effect' and the 'Educate Girls' campaign, which focus on empowering girls through access to education (Global Education Summit, 2021). Notable examples include the UK-based "Department for International Development's Girls Challenge," where a substantial portion of overseas development assistance (ODA) in 2020 was allocated to promote gender equality (UNICEF, 2021). This shift towards greater investment in gender equality coincided with a decrease in ODA targeting general education, underscoring the global priority of girls' education.

Both developed and developing countries accord a high priority to education, recognizing the substantial difference in productivity between educated and uneducated individuals. Education equips individuals with essential skills for personal and societal development, allowing them to lead healthier lives, provide for their families, and contribute to their nations' economic development. It is widely acknowledged that education is a cornerstone of development at all levels (UNICEF, 2021; Abu-Saad, 2016). In Africa, many sub-Saharan countries have undertaken efforts to provide free primary education. Initiatives like the reintroduction of Free Primary Education (FPE) in Nigeria and the elimination of school fees for public secondary schools in Tanzania have been implemented to enhance access to education. However, despite these efforts, challenges persist. For instance, while FPE in Nigeria was reintroduced to increase access to education, a substantial number of school-age children still remain out of school (Ajayi, 2008; UNICEF, 2021). Tanzania's elimination of school fees for public secondary schools led to increased enrollment, but it also witnessed a rise in secondary school dropouts, indicating a need for further research to understand this phenomenon better (Strid et al., 2021; Kakuba et al., 2021).

The importance of educating girls cannot be overstated. Educating girls is not only a matter of personal empowerment but also a critical driver of societal development. Women's education is particularly vital because it has far-reaching effects, extending to the next generation. Mothers play an essential role in their children's education, and their own level of education greatly impacts the academic achievements and overall educational outcomes of their children. Consequently, there is a substantial difference between children raised by educated and uneducated mothers (Ho et al., 2020; Strid et al., 2021; Aikman & Rao, 2012). Sustainable Development Goal 4 (SDG 4), is a global initiative set by the United Nations to ensure that by 2030, every individual has access to inclusive and equitable quality education. This goal emphasizes the promotion of lifelong learning opportunities, enhancement of educational access and quality, and the advancement of gender equality within educational environments. In Kenya, SDG 4 has been pivotal in shaping the nation's educational policies and aligning them with broader developmental objectives (United Nations, 2015; Ministry of Education, Kenya [MoE], 2020).

Kenya Vision 2030 is a strategic national development framework designed to transform Kenya into a middle-income country by 2030 (World Bank, 2021). Within this vision, education is highlighted as a crucial component for driving social and economic progress. The framework underscores education as a key driver of socio-economic development and emphasizes its role in enhancing the country's human capital (Government of Kenya [GoK], 2007; World Bank, 2021). The vision places a strong emphasis on delivering quality education that equips individuals with the essential skills and knowledge necessary for driving innovation, entrepreneurship, and sustainable development (Brissett & Mitter, 2017). It is committed to improving access to education, enhancing educational quality, and aligning educational programs with the evolving requirements of the labor market.

In the realm of education, both SDG4 and Kenya Vision 2030 share common objectives. They underscore the importance of ensuring equitable access to education and providing high-quality learning opportunities. Kenya has made substantial progress toward these goals through initiatives such as Free Primary Education and Free Day Secondary Education, which have significantly increased enrollment rates (Nazar et al., 2018). Furthermore, efforts have been directed at enhancing the quality of education through curriculum reforms and comprehensive teacher training programs, thereby aligning education with the contemporary needs of the workforce.

Both SDG4 and Kenya Vision 2030 also place a strong emphasis on addressing gender disparities in education. Their mutual objective is to ensure that both girls and boys have equal access to education, thereby promoting gender equality and empowering women. Various endeavors have been undertaken to dismantle barriers that hinder girls' education, including cultural norms, early marriages, and inadequate facilities. Initiatives like the Elimu ni Jibu program in Kenya have been instrumental in enhancing girls' access to education and reducing gender disparities (Gichuhi et al., 2022).

Despite the global and national efforts to advance girls' education, including initiatives and policies aimed at reducing gender disparities in schooling, the dropout rate among girls in secondary schools in Kenya remains significantly higher than that of boys (Forum for African Women Educationalists [FAWE], 2022). This issue is particularly pronounced in Tharaka-Nithi County, where local data reveal that girls are disproportionately affected by dropout rates, reflecting a gap between national educational objectives and regional realities (Tharaka-Nithi County Government [TCG], 2023). This disparity highlights that while national strategies focus on increasing school

enrollment, additional localized interventions are needed to address specific barriers faced by girls in Tharaka-Nithi County and ensure their continued participation and success in education.

The high dropout rates among girls in secondary schools in Kenya are particularly concerning given the Kenyan Constitution's emphasis on the right to education and its mandate for equal access. The Constitution highlights the importance of education as a fundamental right and includes provisions for free primary education to enhance accessibility (GOK, 2010). Despite these legal frameworks and initiatives aimed at increasing educational opportunities, such as Free Primary Education (FPE) programs, the persistent high dropout rates suggest that these measures have not fully addressed the underlying barriers that contribute to school attrition, especially among girls in more marginalized regions like Tharaka-Nithi County (Wanjiku, 2021). This indicates a need for more targeted strategies that align constitutional provisions with local educational challenges to effectively reduce dropout rates and promote sustained educational attainment. Various programs and initiatives, such as Free Primary Education (FPE) and Secondary School Expansion (SSE), have been introduced to boost enrollment and transition from primary to secondary school.

The aim of the government offering FPE and SSE is to ensure that children across the country have an opportunity to develop themselves through education and contribute positively to the building of the Kenyan Economy (Muyaka, 2018). The Kenyan Ministry of Education (MoE, 2020) shows an increase in the number of secondary schools from 8,958 in 2007 to 10,567 in 2020, which offers a government's effort to improve the learning facilities in Kenya. The government has also increased the number of teachers by 18,700 in 2019 to manage the government ambitions of ensuring a 100% transition from primary school to secondary school. In the 2019/2020 fiscal year, the allocation for bursaries in Nairobi County was increased from KSh 1 million to KSh 4.5 million per ward (MoE, 2020). This substantial rise in bursary funding is a strategic effort by the Kenyan government to address financial barriers that hinder students' ability to transition from primary to secondary education. By enhancing financial support through bursaries, the government aims to alleviate economic constraints that might otherwise prevent students from continuing their education, thereby contributing to the overarching goal of achieving a 100% transition rate from primary to secondary school (GoK, 2020).

The County Government of Tharaka-Nithi is actively working towards enhancing educational sustainability through several measures. Notably, in the 2019/2020 financial year, the county allocated KSh 30 million to its bursary program to support students financially (Tharaka-Nithi County Government, 2023). Additionally, the county recognizes top-performing schools with awards, which aims to foster a competitive and supportive educational environment. Despite these initiatives, the dropout rates in secondary schools within Tharaka-Nithi remain concerningly high compared to national averages (Kenya National Bureau of Statistics, 2020). This issue is particularly pronounced for girls in Mariani Ward, where dropout rates are significantly elevated, reflecting a critical area of concern within the county's broader educational challenges (Tharaka-Nithi County Government, 2020). The research specifically addressed this gap by examining the unique socio-economic factors affecting girls in Mariani Ward and how these factors contribute to the higher dropout rates, thereby providing targeted insights for policy improvements and support mechanisms.

### 1.1 Statement of the Problem

Worldwide, 129 million girls of school going age are out of school, 75% of them are at secondary level (World Bank, 2021). Girls in conflict affected countries are even more at risk, they are twice as likely to drop out of school compared to those in peaceful countries. Only 49% of countries have achieved gender equality in education and only 24% have achieved it at secondary level. Poverty, gender based violence and early marriages are some of the key drivers of this problem. Ngesu et al. (2020) also found that low income families prioritize boys education over girls. Lack of safety and hygiene in schools also prevents girls from continuing with education. In Kenya, the national secondary school dropout rate was 16.8% (MoE, 2020) but this varies across counties, with higher dropout rates in poor counties. Data from Mariani Ward in Tharaka-Nithi County shows that girls in secondary school have averaged 23.26% dropout rate over the last 5 years, higher than the 21.46% for boys. This shows how girls are more vulnerable to dropping out of school which limits their future opportunities including higher education and employment. Poverty, early marriage and lack of sanitation facilities in schools are some of the factors contributing to these dropout rates (UNICEF, 2020).

There is a lot of research on girl's education globally and nationally but limited on the specific factors that contribute to higher dropout rates among girls for instance in Mariani Ward, Tharaka-Nithi County. Existing studies focus on general trends and don't delve deep enough into localized socio-economic factors that affect girls education in specific areas. This study seeks to fill this gap by looking at how household income, parental education and family structure contribute to dropout rates among girls in Mariani Ward. By doing so the study will provide insights into targeted interventions that can reduce dropout rates and promote gender equality in education within the local context

## 1.2 Research Objectives

The specific objectives of the research were as follows;

- i. To analyse the influence of household-level of income on the girls' drop-out rates from secondary school in Mariani Ward.
- ii. To analyse the influence of parental education status on girls' drop-out rates from secondary school in Mariani Ward.
- iii. To analyse the influence of family structure on girls' dropout rates from secondary schools in Mariani Ward.

## 11. LITERATURE REVIEW

### 2.1 Theoretical Review

#### 2.1.1 Relative Deprivation Theory

The Relative Deprivation Theory is a sociological concept that elucidates the feelings of discontent and frustration experienced by individuals or groups who perceive themselves as worse off compared to others in their social context. Developed through contributions from various scholars, including Stouffer (1949), this theory posits that individuals compare their circumstances with those of others and experience a sense of deprivation when they perceive disparities. In the context of the study investigating the influence of household-level income on girls' dropout rates in Mariani Ward, the Relative Deprivation Theory serves as a foundational framework to understand how perceptions of inequality affect educational decisions.

Research has supported the idea that gender inequality within the education system contributes significantly to girls dropping out of school. For example, studies conducted in Ghana (Acheampong & Arku, 2019) and Pakistan (Khan & Zafar, 2020) found that girls who perceived gender inequality and discrimination in education were more likely to leave school compared to their male counterparts. These findings underscore the role of perceived relative deprivation in influencing girls' decisions to discontinue their education, particularly when they believe they are not receiving equal opportunities for learning compared to their male peers or that their education is undervalued.

Effective interventions addressing relative deprivation can lead to improved educational outcomes for girls. Programs promoting gender equality and equal educational opportunities can reduce the perception of deprivation among girls, motivating them to remain in school. However, while the Relative Deprivation Theory provides valuable insights into the psychological aspects of perceived inequality, it also reveals limitations in addressing broader structural and systemic factors influencing dropout rates. Economic disparities and gender-based discrimination may be affected by larger structural issues, such as government policies, educational infrastructure, and cultural norms, which the theory does not fully capture. Thus, while the Relative Deprivation Theory reveals personal attitudes towards perceived inequality, it may not provide a comprehensive understanding of the systemic challenges that contribute to girls' dropout rates in Mariani Ward. The theory, therefore, serves as a critical lens through which to analyze the multifaceted factors affecting girls' education, while also necessitating an exploration of structural factors to fully grasp the complex landscape of educational inequality.

### 2.2 Empirical Review

#### 2.2.1 Household Level of Income

The level of household income significantly influences students' access to education, as it incurs potential costs, both direct and indirect (Mduma et al., 2019). Direct costs encompass expenses like school fees and students' basic needs, while indirect costs include expenditures on uniforms, books, transportation, and the opportunity cost of having students in school. Household income is a crucial factor in determining when children begin school, how regularly they attend, and when they complete or drop out of their education (Injendi & Jephthar, 2020).

Smith et al. (2022) conducted an Australian study to investigate the association between home income and secondary school dropout rates among girls. The study used both quantitative data from national education databases and qualitative interviews with school counsellors, parents, and students. Key findings revealed a substantial link between lower home income and greater dropout rates among girls. Financial constraints, such as the inability to pay school fees and extracurricular activities, were highlighted as significant hurdles. Furthermore, the study discovered that lower-income households frequently had reduced parental involvement due to financial stress and inadequate resources, which linked to greater dropout rates. The study also found that schools in low-income communities had fewer resources, aggravating the educational obstacles these pupils faced. Smith et al., (2022) findings inform the current study by emphasising the importance of home income in impacting girls' educational performance, which is consistent with the socioeconomic difficulties reported in Mariani Ward. However, the Australian setting may not fully reflect the socioeconomic and cultural characteristics of a developing region such as Kenya. The current study

tackles this issue by focussing on Tharaka-Nithi County's specific socioeconomic characteristics and investigating other hurdles such as insufficient educational facilities and cultural views. By combining a greater range of local perspectives and accounting for contextual variables, the current study gives a more nuanced understanding of the factors influencing girls' dropout rates in Mariani Ward, as well as specific recommendations for targeted interventions.

From an African perspective, Ketija (2018) conducted a study on the socio-economic factors determining children's dropout rates in Tanzania. The research compared dropout rates in three primary schools in Babati Town Council, Tanzania. The findings indicated that dropout rates were higher in primary schools situated in less privileged areas. Ketija (2018) explained that children from less privileged areas often come from low-income families. These families struggle to cover the latent costs associated with education, leading their children to drop out of school. Some parents are unable to provide for their families, compelling their children to leave school and engage in income-generating activities to support the family. However, this study is limited by its focus on primary schools and the assumption that both girls and boys are equally affected by poverty. The rates of girls' dropout are higher than those of boys, warranting further investigation into this phenomenon. The research sought to fill these gaps by exploring the socio-economic determinants of girls' dropout rates from secondary schools in Mariani Ward, Kenya.

In Kenya, Muthoki (2015) examined the household-based factors influencing girls' dropout rates from mixed-day secondary schools in Kibwezi Sub-County, Makueni County. The research involved a survey of 228 girls and nine teachers, purposively selected from 14 mixed-day secondary schools in Kibwezi Sub-County. The findings revealed that girls from low-income households were more likely to drop out of secondary schools. These families struggled to cover school fees and other indirect educational costs, leading to girls leaving school. Additionally, Muthoki (2015) argued that parents from low-income families prioritized immediate material gains from marrying off their daughters over the potential benefits of educating them. Consequently, low-income families often married off their daughters at a young age, compelling them to discontinue their secondary education.

### **2.2.2 Household Education Status**

Patel et al. (2018) provide a detailed analysis of the impact of household education status on girls' dropout rates in India. Their study reveals a significant correlation between parental education levels and girls' retention in school, particularly emphasizing the influence of maternal education. Girls from households where mothers lack formal education face notable challenges, including diminished encouragement and support, lower academic expectations, and occasionally direct resistance to their education. The study underscores that educated mothers are more likely to actively support their daughters' educational pursuits, thereby creating a supportive environment that helps reduce dropout rates. This highlights the crucial role of investing in maternal education as a means to improve girls' educational outcomes.

Despite its valuable insights, Patel et al.(2018)'s study primarily focuses on the role of maternal education without thoroughly examining how other socio-economic factors, such as household income or family structure, might interact with parental education to affect dropout rates. Additionally, the study does not explore how different educational interventions might specifically impact girls' retention. The present study addresses these gaps by incorporating a wider range of socio-economic variables, including household income and family dynamics, alongside parental education. By using a comprehensive approach that includes both quantitative and qualitative data, this research provides a more nuanced understanding of how various factors interplay to influence girls' dropout rates. This broader perspective enables the formulation of more targeted interventions that address multiple dimensions of the problem, including enhancing parental support and improving overall socio-economic conditions to promote girls' continued education.

In the Kenyan, Muyaka (2018) examined parent-related factors influencing girls' retention rates. It emphasized the significant role of a mother's education level in retaining girls in secondary schools. The study incorporated data from 351 respondents, including five principals, 16 teachers, and 330 students. Notably, approximately 50.9% of the students indicated that their parents' highest level of education was primary school, suggesting a lack of educational role models at home. Many students voiced complaints about the absence of academic guidance from their parents, which resulted in negative attitudes and low morale. Among principals and teachers, 90% agreed that most parents were not actively involved in their children's education, leading to high dropout rates due to insufficient follow-up. However, this research is limited by its utilization of three sets of data, raising concerns about how the research variables were controlled across these different sample populations.

### **2.2.3 Family Structure**

There is a considerable bulk of literature that establishes a strong link between family structure and girls' school dropout rates (Chenge et al., 2017; Park et al., 2018). Many of these studies underline the impact of family

responsibilities on girls' dropout decisions. For instance, Chenge et al. (2017) highlight that in rural areas and households where one or both parents are absent due to work or other factors, girls often take on responsibilities at home and, consequently, are more likely to drop out of school. Moreover, Park et al. (2018) research indicates that girls who have working mothers may need to assume additional household responsibilities, which can hinder their ability to continue their education. These findings align with those of Fatima et al. (2021) in Pakistan, emphasizing that girls often shoulder more domestic chores, which can disrupt their learning process and lead to school dropout.

Vázquez-Nava et al. (2019) conducted a study in Mexico focusing on high school dropouts and identified a significant association between family structure and dropout rates. Their research, which involved 765 adolescents who had discontinued their education, revealed that about 64% came from non-intact families. These family structures were linked to delinquent behavior in school, contributing to low academic performance and increased risk of expulsion. Notably, among female participants, early pregnancies, often resulting from delinquent behaviors and inadequate parental guidance, were a significant factor in school dropout. While this study provides valuable insights into the impact of family structure on dropout rates, its focus on a single location and assumptions about uniform effects across genders indicate the need for further research to confirm the generalizability of these findings. The present study addresses these gaps by exploring the socioeconomic determinants of girls' dropout rates in Mariani Ward, Kenya.

From an African perspective, Ketija's (2018) study on school dropout in Tanzania emphasized the essential role of family structure in school dropout. A comparison of dropout rates among three primary schools in Bahati Town Council, Tanzania, showed that the school with the highest number of students from incomplete families also had the highest dropout rates. This indicates that family structure might significantly influence school dropout rates. Similarly, Afia et al. (2019) identified parenting practices during children's adolescence as a significant factor contributing to school dropout in Uganda. Their research demonstrated that children from households marked by family violence, alcoholism, and divorces were more likely to drop out of school. However, both studies were limited to primary schools and assumed uniform dropout rates across genders, highlighting the need for further research to confirm such generalizations. The research sought to address these limitations by investigating girls' dropout rates in Mariani Ward, Kenya.

In Kenya, According to Mackatiani et al. (2022), family size has been linked to dropout rates from secondary schools. The study by Mackatiani et al. (2022) further found that girls from larger families (comprising more than five members) were at a higher risk of dropping out of school. A similar trend was observed by Nzina and Mulwa (2019) in Makuu Sub-County, Makueni County, Kenya, who discovered that girls from larger families had higher dropout rates. Although these studies included a significant number of respondents, the complexity of data analysis and potential research biases related to the extensive data samples raise questions. Furthermore, these studies assumed that dropout rates were consistent across all genders, which contradicts the higher dropout rates often observed among girls. The research sought to bridge these gaps by investigating the socioeconomic determinants of girls' dropout rates from secondary schools in Mariani Ward, Tharaka-Nithi County, Kenya.

### III. METHODOLOGY

#### 3.1 Research Design

Research design encompasses the framework and structure used to plan and conduct research activities (Robson, 2002). It's an integral part of research as it entails the strategy, the conceptual framework, identification of the subject of study, and the methodologies employed for data collection and analysis. The research design specifically chosen for this study was descriptive survey design, a method used to collect data to depict a population, a particular phenomenon, or a situation. Investigating social and economic factors that influence decision-making is best suited for this design as it facilitates gathering detailed information regarding the socio-economic influencers of school dropout rates among secondary school girls.

To explore the knowledge, attitudes, and practices related to the education of girl children in Tharaka Nthi County, Kenya, a descriptive research design was employed. This design was complemented by qualitative data collection methods, including Key Informant Interviews (KIIs). While a descriptive research design typically involves quantitative approaches, integrating qualitative tools such as KIIs provided a deeper, insider's perspective on the community's experiences and perceptions.

#### 3.2 Study Site

This study was conducted in Tharaka Nithi County, one of Kenya's newly devolved counties (see Appendix 1). Situated in the former Eastern Province, Tharaka Nithi is one of the country's 47 counties. It is predominantly inhabited by the Chuka, Mwimbi, Mathambi, and Tharaka communities, who form part of the larger Ameru ethnic

group. The county spans an area of 2,609 square kilometers and has a population of approximately 393,177 people. The county headquarters are located in Kathwana, a central and accessible location chosen through consensus among delegates from the three constituencies: Maara, Tharaka, and Chuka/Igamba-Ngombe. The region's economy is primarily driven by tea and coffee farming, subsistence agriculture, dairy farming, and livestock rearing. Tharaka Nithi shares its borders with Isiolo, Meru, Embu, and Kitui Counties, positioning it strategically for both agricultural and economic activities. The county comprises 15 wards spread across the three constituencies, including Mukothima, Chiakariga, Nkondi, Marimanti, and Gatunga.

Tharaka Nithi County was selected for this study due to the high rates of school dropouts among girls, a significant concern in the region. Reports indicate that girls face unique socio-economic challenges that hinder their ability to complete secondary education. This study seeks to investigate the factors contributing to these dropout rates, as understanding the local context is essential for developing targeted interventions. By focusing on this area, the study aims to shed light on the socio-economic barriers to education and propose solutions tailored to the specific needs of the girls in Tharaka Nithi County.

### 3.3 Target Population and Sampling Techniques

The unit of analysis was households (females dropouts) in the County. According to the Department of Social Service of Tharaka-Nithi County, there are 10,202 households in the county (Tharaka-Nithi County Integrated Development Plan, 2018-2022). According to the Integrated County Development Plan of Tharaka-Nithi, Mariani has approximately 8,387 females adults, whereas males account for approximately 5,049 adults. From the target population of 10,202 households (females dropouts), the sample size of 385 respondents was calculated using Taro (1967) formula as follows.

A cluster sampling method was employed to ensure representation of various groups within the population. Within the target population, five clusters or sub-locations were identified based on their diverse characteristics. This method, based on probability, is chosen due to the dispersed nature of the population across different villages. The process to secure an accurate sample involves several steps. Initially, clusters were defined with the assistance of local leaders such as chiefs and village elders. These clusters represent sub-locations comprising villages sharing similar traits, each led by a village elder within the entire ward. The specific number of villages required to achieve a representative sample of 385 households were randomly determined, considering the cluster sizes and their internal variations. To select respondents within these villages, a simple random sampling technique were used. This method ensures every individual within the larger population has an equal chance of being chosen, effectively eliminating biases in the selection process.

### 3.4 Data Analysis and Presentation

This study's data collection involved Questionnaires and key informants as specific tools tailored to gather insights. The Statistical Package for the Social Sciences (SPSS version 25.0) was used for data analysis, particularly focusing on descriptive and inferential analysis. Quantitative data underwent coding, cleaning, and analysis using SPSS. Descriptive statistical analysis involved calculating frequencies, percentages, and their tabulation. Inferential statistical analysis utilized correlation analysis, chi-square tests, and binomial logistic regression to determine the impact of socio-economic determinants on the dropout rate of female high school students. Binomial regression, specifically suited for a binary dependent variable (dropout - **yes** or **no**). The results were presented using graphs, frequencies, percentages, and tables for the quantitative data.

## IV. FINDINGS & DISCUSSIONS

### 4.1 Descriptive Statistics

#### 4.1.1 Household-Level of Income

The study assessed the influence household-level of income on girls' dropout rates from secondary schools in Mariani Ward. Four Items captured the idea of household-level of income and the participants rated their responses on a scale of 1 to 5. In this scale 1- Strongly Disagree; 2- Disagree; 3-Neutral; 4-Agree; 5- Strongly agree respectively. The results are shown in Table 1



**Table 1**  
*Household Level of Income*

Statement	5	4	3	2	1
Household income significantly affects girls' dropout rates from secondary schools	44%	41%	4%	8%	3%
financial constraints faced by girls in your community is a barrier to their continued education.	46%	34%	15%	3%	2%
Financial support programs help in reducing girls' dropout rates due to financial challenges	38%	34%	9%	10%	9%
Reducing income disparities within the community can help reduce girls' school dropout rates	41%	32%	12%	9%	6%

The results of this study in Table 1 clearly indicate a strong relationship between household income levels and the dropout rates of girls in secondary schools within Mariani Ward. This finding resonates with existing literature, which consistently underscores the impact of economic factors on educational outcomes for girls. For instance, research by Farah and Upadhyay (2017) identified economic constraints as a significant barrier to girls' education, a conclusion mirrored in our study where 85% of respondents acknowledged that household income plays a crucial role in influencing dropout rates. The data revealing that around 80% of participants see financial difficulties as a hindrance to girls' education reinforces insights from studies by O'Higgins (2016) and Mhando (2020). These studies highlight that families under financial strain often prioritize immediate economic needs over educational commitments, which can lead to girls being withdrawn from school. One community leader's comment about the high opportunity costs of sending girls to school aligns with findings by Klasen (2019), emphasizing how economic pressures can shape educational choices in many developing countries.

Additionally, the finding that 72% of respondents believe financial support programs can effectively lower dropout rates echoes the recommendations of Akintunde and Olatunde (2021). Their research advocates for targeted financial assistance as a vital strategy to alleviate economic barriers impacting girls' educational journeys. These insights suggest that enhancing financial support initiatives could significantly improve educational access and retention for girls, especially in communities facing resource constraints. The agreement among respondents regarding the need to tackle income disparities to mitigate dropout rates is consistent with the work of Kabeer (2016). Kabeer emphasizes that addressing economic inequality is crucial in promoting educational opportunities for marginalized populations. By implementing comprehensive social programs aimed at reducing income disparities, community stakeholders can create a more equitable educational environment, benefiting all girls.

Moreover, qualitative insights gathered from key informant discussions provide a richer context for understanding the challenges faced by families in Mariani Ward. These discussions reveal how socio-economic status intricately influences educational engagement, further supporting the argument that economic factors are pivotal in shaping girls' educational experiences (Levine & Aisenberg, 2022).

**4.1.2 Parental Education Status**

The study assessed the influence of parental education status on girls' dropout rates from secondary schools in Mariani Ward. Four Items captured the idea of parental education status and the participants rated their responses on a scale of 1 to 5. In this scale 1- Strongly Disagree; 2- Disagree; 3-Neutral; 4-Agree; 5- Strongly agree respectively. The results are shown in Table 2.

**Table 2**  
*Parental Education Status and Dropout Rates*

Statement	5	4	3	2	1
Parental education levels are significant on girls' dropout rates from secondary schools.	40%	38%	7%	10%	5%
Parental involvement is vital in the academic lives of girls to prevent dropout.	38%	41 %	9%	8%	4%
Supportive educational environment at home influence girls' educational persistence	36%	30%	9%	17%	8%
Parental attitudes toward education affect girls' decisions to continue or discontinue their schooling	32%	40%	9%	7%	12%

From Table 2 above, the study's results demonstrate that parental education status significantly influences girls' dropout rates from secondary schools in Mariani Ward. This finding aligns with previous studies emphasizing the role of parents' educational background in shaping children's academic outcomes. In this study, over 78% of respondents agreed that parental education levels impact girls' decisions to stay in school, echoing similar conclusions





in research by Oketch and Ngware (2019), which suggested that parents with higher education tend to value schooling more, fostering an environment that promotes education and reduces dropout rates. Further, 79% of respondents recognized parental involvement as critical in preventing dropout, highlighting the essential role of parental engagement in their children’s education. This finding aligns with studies by Desforges and Abouchaar (2018), who noted that active parental involvement in academic activities significantly enhances student retention. When parents are engaged in their children’s education through attending school meetings, helping with homework, or providing guidance the likelihood of academic persistence increases. This suggests that initiatives aimed at fostering more parental involvement could be effective strategies for curbing dropout rates among girls in Mariani Ward.

Additionally, 66% of respondents agreed that a supportive educational environment at home plays a key role in maintaining girls' persistence in school. This finding mirrors research by Pianta et al. (2019), which shows that children from homes that offer emotional and academic support are more likely to remain in school despite challenges. A positive home environment helps children focus on their studies and offers encouragement when they face obstacles. Thus, interventions aimed at creating more supportive home environments by addressing economic and social challenges could help reduce the dropout rates for girls. The study also revealed that 72% of respondents believed parental attitudes toward education affect girls' decisions about continuing schooling. This finding supports studies by Ngigi and Macharia (2017), which argue that parental perceptions of education shape how children view school and its importance. Parents who prioritize education and foster positive attitudes are more likely to encourage their daughters to persist in their studies. Conversely, if parents do not value education, it can lead to disengagement and eventual dropout. Changing negative perceptions through community awareness programs could, therefore, play a pivotal role in reducing dropout rates.

Qualitative findings from key informants also support the quantitative data. One respondent noted that parents with higher education levels tend to prioritize their children's education and provide resources such as a conducive learning environment at home. This observation is consistent with the work of Nyaga (2016), who found that educated parents often offer academic and emotional support that enhances school attendance and performance. Educated parents also tend to have better economic means to support their children, further reinforcing their commitment to their daughters’ schooling. Another key informant highlighted that educated parents are typically more involved in their children’s homework and academic activities, which strengthens their daughters’ performance in school. This finding agrees with the study by Mingaine (2016), which showed that parental involvement particularly from parents with a higher education background contributes positively to children’s school performance, attendance, and completion rates.

**4.1.3 Family structure**

The study assessed the influence of family structure on girls’ dropout rates from secondary schools in Mariani Ward. Four Items captured the idea of family structure and the participants rated their responses on a scale of 1 to 5. In this scale 1- Strongly Disagree; 2- Disagree; 3-Neutral; 4-Agree; 5- Strongly agree respectively. The results are shown in Table 3 below.

**Table3**  
*Family structure and Dropout Rates*

Statement	5	4	3	2	1
Family unity and cohesion play vital role in preventing girls from dropping out of school.	40%	32%	8%	8%	12%
Parental support and guidance is vital in girls' educational persistence.	41%	31%	15%	7%	6%
I believe that a girl's family structure impacts her decision to continue or discontinue her education	30%	34%	10%	12%	16%
Parental monitoring is influential in preventing school dropout among girls	41%	32%	8%	14%	5%

From Table 3 above, 72% of respondents agreed that family unity and cohesion play a crucial role in preventing girls from dropping out of school. This finding mirrors the conclusions drawn by previous studies, such as that of Kimu and Njoka (2017), which assert that a stable and united family offers emotional and psychological support that enables children to remain focused on their education. A cohesive family environment fosters a sense of belonging and security, which is particularly important for girls, who may be more vulnerable to social and economic pressures. In this context, initiatives aimed at strengthening family bonds through counseling or social support systems could help create the stable home environment necessary to keep girls in school. The study further demonstrated that 72% of respondents recognized the vital role of parental support and guidance in ensuring girls persist in their education. This is consistent with research by Nyaga and Wambugu (2018), who found that parents who are actively

involved in their children's education contribute to improved academic performance and retention. When parents provide both moral support and practical help, such as assistance with schoolwork or encouragement in times of difficulty, children are more likely to remain engaged in their studies. The findings suggest that barriers hindering parental involvement, such as lack of time due to work obligations or financial challenges, should be addressed. Programs that raise awareness about the importance of parental involvement and provide parents with tools and resources to engage with their children's education could significantly reduce dropout rates.

The study also found that 64% of respondents agreed that family structure affects a girl's decision to stay in school or drop out. This is consistent with the literature reviewed, particularly in studies like that of Omondi and Maina (2019), which highlight the additional difficulties faced by girls from non-traditional family setups, such as single-parent households. The economic strain often experienced in single-parent families limits the resources available for education, and the absence of one parent often results in reduced supervision and support. These factors combine to create an environment in which the likelihood of girls dropping out increases. These findings point to the need for targeted interventions that support girls from non-traditional family structures, possibly through financial assistance or mentorship programs that offer guidance and encouragement. Parental monitoring was also identified as a significant factor in preventing dropout, with 74% of respondents agreeing that parental oversight influences school retention. This finding is consistent with the research of Mwangi (2020), who found that active parental involvement, such as monitoring school attendance and academic progress, helps to deter dropouts. When parents are more involved in their children's academic lives, they are better positioned to notice early signs of disengagement or academic struggles, which allows for timely interventions. Strengthening the parent-school relationship and encouraging more active parental participation can have a significant impact on improving school retention rates for girls.

The qualitative data from key informant interviews confirmed these findings, particularly in relation to the challenges faced by girls from single-parent households. A school head teacher mentioned that girls from such families often experience higher dropout rates due to financial constraints and the lack of adequate parental supervision. This aligns with the literature that identifies single-parent families as particularly vulnerable to economic hardships and a lack of sufficient time or resources to fully support their children's education (Ndirangu & Kirimi, 2021). Single parents, who are often juggling work and household responsibilities, may find it challenging to provide the academic support that children need to stay in school. The combination of qualitative and quantitative data underscores the importance of family structure in influencing dropout rates. Girls from single-parent households, in particular, face unique challenges that make it difficult for them to remain in school. These findings suggest that targeted interventions, such as financial assistance, increased parental engagement initiatives, and community support programs, could help reduce the dropout rates among girls from these families.

#### **4.1.4 Dropout Rates**

The findings reveal that 72% of respondents believe that socio-economic factors significantly influence girls' dropout rates from secondary schools, while 28% disagreed. This emphasizes a strong recognition of the impact of socio-economic challenges on education. The majority view that socio-economic factors affect dropout rates aligns with previous studies that show how financial instability plays a major role in determining educational outcomes for girls. For instance, research by Mburugu and Matoke (2019) highlights how low-income households struggle to cover education-related costs like school fees, uniforms, and learning materials, making girls from such families more likely to drop out. Similarly, Kipkoech and Kyalo (2016) indicate that poverty-stricken families tend to withdraw girls from school earlier, sometimes prioritizing boys' education when resources are scarce. The high percentage in favor of this view suggests that economic hardships are a major reason for the high dropout rates observed in Mariani Ward.

## **4.2 Inferential Studies**

### **4.2.1 Parameter Estimates on the Influence of Social-Economic Determinants on Girls' Drop-Out Rates**

This section employs binomial logistic regression to assess the influence of socio-economic determinants on girls' dropout rates, a binary outcome categorized as "yes" (dropout) or "no" (no dropout). Binomial logistic regression is appropriate here due to the binary nature of the dependent variable, allowing for the modeling of the probability of dropout based on various predictor variables. The model estimates the odds of dropout associated with changes in predictors such as household-level income, parental education status, and family structure. Table 4 summarizes these parameter estimates, offering insights into how each socio-economic factor affects the likelihood of girls dropping out of school and highlighting areas for potential intervention.

**Table 4**

*Model Parameter Estimates on the Influence of Social-Economic Determinants on Girls' Drop-Out Rates*

	<b>B</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
Household-level of income	1.657	1	.015	5.244
Parental education status	1.451	1	.011	4.267
Family structure	1.221	1	.024	3.391
Constant	1.121	1	.001	3.068

From the parameter estimates summarized in Table 4, several key insights into the factors influencing girls' dropout rates from secondary school in Mariani Ward emerge. Firstly, the coefficient for household-level income is 1.657, with a p-value of 0.015. This result indicates that a one-unit increase in household income is associated with a 5.244 times higher likelihood of girls dropping out of school. The positive and statistically significant coefficient reflects a strong association between lower household income and higher dropout rates. This finding underscores the critical role of economic constraints in educational persistence, suggesting that financial hardships significantly contribute to the increased dropout rates observed among girls.

In addition, the coefficient for parental education status is 1.451, with a p-value of 0.011. This suggests that a one-unit increase in parental education status correlates with a 4.267 times higher likelihood of girls dropping out of secondary school. The result highlights the substantial influence of parental education on dropout rates. Higher levels of parental education are typically associated with better academic support and encouragement. Conversely, lower parental education may limit parents' ability to provide such support, thereby increasing dropout rates among their children.

Furthermore, the coefficient for family structure is 1.221, with a p-value of 0.024. This implies that girls from certain family structures face a 3.391 times higher likelihood of dropping out of school. The positive and statistically significant coefficient indicates that variations in family structure, such as single-parent families or complex family arrangements, have a notable impact on dropout rates. Family dynamics significantly affect educational stability and support, contributing to higher dropout rates.

Lastly, the constant term has a coefficient of 1.121 with a p-value of 0.001. This result suggests that additional, unexamined factors beyond the socio-economic determinants analyzed also influence dropout rates. The positive coefficient (1.121) indicates that these other factors have a 3.068 times higher likelihood of affecting dropout rates. Identifying and understanding these additional factors will be crucial for developing comprehensive strategies to improve school retention and better support girls' educational outcomes.

The probability of the agreeing that the three social economic determinants have a positive influence on girls' drop-out rates from secondary school with reference to disagreeing is given by the binomial logistic regression model.

$$\text{Log} \frac{(P)}{(1-P)} = 1.121 + 1.221(\text{Family Structure}) + 1.657(\text{Household Income Level}) + 1.451(\text{Parental Education Status}) + \epsilon$$

The findings from the binomial logistic regression analysis provide significant insights into the impact of socio-economic factors on girls' dropout rates from secondary school in Mariani Ward, Tharaka-Nithi County, Kenya. The analysis reveals that lower household income, lower parental education status, and certain family structures are all positively associated with an increased likelihood of girls dropping out of school. Specifically, each of these factors significantly contributes to higher dropout rates, with the coefficients indicating that lower household income is associated with a 5.244 times higher likelihood, lower parental education status with a 4.267 times higher likelihood, and certain family structures with a 3.391 times higher likelihood of dropout.

These findings are consistent with previous research highlighting the crucial role of socio-economic factors in educational outcomes. For instance, studies have shown that financial constraints and limited educational support from parents often result in higher dropout rates (Muthoki, 2015; Anlimachie, & Avoada, 2020). In the present study, qualitative data further supports these results, with direct quotes from interviews indicating that financial difficulties and inadequate parental support are significant contributors to school dropout. One respondent mentioned, "*The lack of financial support from my parents made it impossible for me to continue my education,*" while another stated, "*My parents' low educational background meant they couldn't help me with my schoolwork.*"

Overall, binomial logistic regression analysis (Parameter Estimates) provides a detailed understanding of how socio-economic factors affect girls' dropout rates from secondary school in Mariani Ward. It confirms that lower household income, lower parental education, and certain family structures are strongly linked to higher dropout rates, aligning with previous research. However, this study uniquely quantifies the impact of each factor, notably finding household income to have the most significant effect, with a 5.244 times higher likelihood of dropout. These insights highlight the urgent need for targeted financial support, improved parental engagement, and tailored family services. Additionally, the study emphasizes the importance of exploring further unexamined factors to develop effective,

context-specific strategies for reducing dropout rates so as to inform comprehensive strategies for promoting girls' educational persistence in Mariani Ward.

## V. CONCLUSIONS & RECOMMENDATIONS

### 5.1 Conclusions

In conclusion, the research study conducted among female school dropouts in Mariani Ward sheds light on various socio-economic factors influencing educational outcomes in the community. The study concludes that lower household-level income significantly increases the likelihood of girls dropping out of school in Mariani Ward. The analysis reveals that financial constraints are a critical barrier to educational persistence, underscoring the need for targeted economic support programs to alleviate the financial burdens faced by families.

Secondly, the findings indicate that lower parental education status is strongly associated with higher dropout rates among girls. Families with less educated parents, particularly mothers, often provide less academic support and encouragement, which negatively impacts girls' educational outcomes. This highlights the need for initiatives that enhance parental education and engagement in their children's schooling.

The third conclusion is that variations in family structure, such as single-parent households or complex family dynamics, contribute significantly to dropout rates. Girls from such family structures face greater challenges that affect their educational stability and support. The findings emphasize the necessity for tailored support services addressing the specific needs of different family structures.

Lastly, the present study identifies additional unexamined factors that also affect dropout rates, suggesting that the socio-economic determinants are more complex than initially considered. The study calls for further research to explore these factors in depth to develop more comprehensive strategies for reducing dropout rates.

Overall, the study highlights the multifaceted nature of socio-economic determinants affecting girls' dropout rates and underscores the need for targeted interventions addressing economic, educational, and familial factors to improve educational outcomes in Mariani Ward.

### 5.2 Recommendations

Based on the findings of the research study, several recommendations can be made to address the socio-economic factors contributing to girls' dropout rates in Mariani Ward. Firstly, targeted financial support programs should be implemented to alleviate the economic barriers faced by families, particularly those with lower household incomes. This could include scholarships, stipends, or subsidies to cover school fees, textbooks, uniforms, and other educational expenses. Additionally, income-generating activities or vocational training programs could be provided to parents to improve their economic stability and ability to support their daughters' education financially.

Secondly, initiatives aimed at enhancing parental involvement and support should be prioritized to create a conducive home environment for girls' education. This could involve workshops or seminars for parents on the importance of education, effective parenting strategies, and how to support their daughters academically and emotionally. School-based parent-teacher associations (PTAs) could also be strengthened to facilitate communication and collaboration between parents, teachers, and school administrators in addressing issues related to dropout prevention.

Furthermore, community-based interventions should be developed to promote family cohesion, positive parental attitudes towards education, and supportive social networks. This could include community outreach programs, mentorship initiatives, and awareness campaigns to change societal norms and perceptions regarding girls' education. Religious and traditional leaders could also play a vital role in advocating for girls' education and challenging harmful practices such as early marriage or gender-based discrimination. By fostering a supportive community environment that values and prioritizes girls' education, dropout rates can be reduced, and girls can be empowered to pursue their educational aspirations and contribute to the socio-economic development of Mariani Ward.

## REFERENCES

- Abu-Saad, I. (2016). Access to higher education and its socio-economic impact among minority communities: The case of Arab women in Israel. *International Journal of Educational Development*, 47, 89–97.
- Acheampong, A., & Arku, G. (2019). Gender inequality in education: Evidence from Ghana. *Journal of Educational Research and Practice*, 9(1), 75-90.
- Afia, S., Abaho, E., & Oketch, J. (2019). Parenting practices and school dropout among adolescents in Uganda. *Education and Urban Society*, 51(7), 1-20.

- Aikman, S., & Rao, N. (2012). Gender equality and girls' education: Investigating frameworks, disjunctures and meanings of quality education. *Theory and Research in Education*, 10(3), 211–228.
- Ajayi, J. F. (2008). The challenges of education in Nigeria. *African Studies Review*, 9(1), 25–40.
- Akintunde, S., & Olatunde, E. (2021). Financial assistance as a strategy for promoting girls' education: A case study. *International Journal of Educational Development*, 81, 102276.
- Anlimachie, M., & Avoada, E. (2020). Impact of socio-economic factors on school dropout rates among secondary school girls in Africa: Evidence from empirical studies. *Journal of African Education*, 12(3), 45-58.
- Brissett, N., & Mitter, R. (2017). For function or transformation? The role of education in post-conflict reconstruction. *Globalisation, Societies and Education*, 15(2), 227–241.
- Chenge, F., Muthoni, M., & Nyang'au, I. (2017). The impact of family structure on school dropout rates among girls in rural areas. *International Journal of Educational Development*, 57, 134-142.
- Desforges, C., & Abouchaar, A. (2018). The impact of parental involvement, parental support, and family education on pupil achievement and adjustment: A literature review. London: *Department for Education and Skills*.
- Farah, A., & Upadhyay, A. (2017). Economic constraints and educational attainment: A focus on girls. *Journal of Educational Research*, 110(3), 1-11.
- Fatima, F., Anwar, M., & Bano, S. (2021). Domestic responsibilities and girls' education: An analysis from Pakistan. *Gender and Education*, 33(6), 1-20.
- FAWE. (2022). Gender-responsive pedagogies: Addressing gender-based violence in schools. Forum for African Women Educationalists.
- Gichuhi, W., Omondi, A., & Mwangi, E. (2022). The role of education in achieving sustainable development goals: A focus on SDG 4 in Kenya. *International Journal of Education and Research*, 10(4), 123-137.
- Global Education Summit. (2021). A global response to the education crisis. *Global Partnership for Education*.
- GoK. (2007). *Kenya Vision 2030: A competitive and prosperous nation*. Nairobi: Government Printer.
- GoK. (2010). The Constitution of Kenya. National Council for Law Reporting.
- GoK. (2020). *Education sector progress report*. Ministry of Education.
- Ho, J. Y., Estrada, R., & Mendez, L. A. (2020). Parental education and children's educational outcomes: Evidence from a developing country. *International Journal of Educational Research*, 103, 101614.
- Injendi, E., & Jephthar, M. (2020). The role of household income in education access among secondary school students in Kenya. *African Educational Research Journal*, 8(1), 21-28.
- Kabeer, N. (2016). Gender, poverty, and inequality: The role of social protection. *Development Pathways. Educational Inequities Journal*, 5(3), 113-125.
- Kakuba, G., Kira, M., & Ntanga, D. (2021). Secondary education reforms in sub-Saharan Africa: Tanzania's experience. *African Journal of Educational Studies*, 11(2), 67-84.
- Kenya National Bureau of Statistics. (2020). *Statistical abstract 2020*. Kenya National Bureau of Statistics.
- Ketija, M. (2018). Socio-economic factors determining children dropout rates in Babati Town Council, Tanzania. *African Journal of Educational Studies in Mathematics and Sciences*, 14(1), 1-12.
- Khan, A., & Zafar, M. (2020). Gender inequality in education: A study of the challenges faced by girls in Pakistan. *Journal of Education and Educational Development*, 7(2), 29-44.
- Kimu, M., & Njoka, J. (2017). The role of family stability in educational persistence: A case study of secondary school girls. *Educational Research International*, 5(2), 23-34.
- Kipkoech, D., & Kyalo, M. (2016). The effects of economic instability on educational attainment among girls: Case studies from Kenya. *Journal of Education in Africa*, 14(2), 78-92.
- Klasen, S. (2019). Economic growth and gender inequality: Implications for policy. *World Development*, 115, 1-12.
- Levine, D. I., & Aisenberg, J. (2022). The impact of socio-economic status on educational engagement. *Journal of Family and Economic Issues*, 43(1), 20-35.
- Mackatiani, C., Mackatiani, N. I., & Owino, M. A. (2022). Transition in education: Perspectives on girls' drop-out rates in secondary schools in Kenya. *International Journal of Educational Research and Development*, 10(2), 45-58.
- Malala Fund. (2021). *The global education crisis: 2021 annual report*. Malala Fund.
- Mburugu, P., & Matoke, S. (2019). Economic barriers to education: Understanding dropout rates among girls in rural Kenya. *Journal of Educational Policy and Development*, 9(1), 112-130.
- Mduma, J., Mhando, R., & Ng'wandu, S. (2019). The influence of household income on school dropout rates in Tanzania. *International Journal of Educational Development*, 68, 1-9.
- Mhando, A. (2020). The impact of financial barriers on girls' education: Evidence from rural Tanzania. *International Journal of Educational Research*, 105, 101668.

- Mingaine, L. (2016). Influence of parental involvement on students' academic achievement in public secondary schools, Kenya. *TIJ's Research Journal of Social Science & Management (RJSSM)*.
- MoE. (2020). Education sector plan 2018–2022. Government Printer.
- Muthoki, C. (2015). Factors influencing girls' dropout rates from mixed-day secondary schools in Kibwezi Sub-County, Makueni County, Kenya. *Education Research International*, 2015, 1-10.
- Muyaka, A. (2018). Parent-related factors influencing girls' retention rates in secondary schools in Kenya. *Educational Studies*, 44(3), 268-280.
- Mwangi, N. (2020). The role of parental monitoring in reducing school dropout rates. *Kenya Journal of Child Development*, 7(4), 55-65.
- Nazar, A., Njuguna, W., & Maina, M. (2018). Challenges facing the implementation of Free Day Secondary Education in Kenya: A case study of Kiambu County. *International Journal of Educational Research*, 6(3), 55-66.
- Ndirangu, G., & Kirimi, P. (2021). Socio-economic challenges facing single-parent families in Kenya and their impact on children's education. *International Journal of Family Studies*, 15(1), 67-84.
- Ngesu, L., Kimutai, C., & Chebet, K. (2020). Socioeconomic determinants of girls' school dropout: A case study of selected regions in Kenya. *Journal of Education and Social Policy*, 7(2), 44–53.
- Ngigi, C., & Macharia, M. (2017). Parental perceptions of education in rural Kenyan communities. *African Educational Review*, 13(3), 184-202.
- Nyaga, K., & Wambugu, R. (2018). Parental involvement and academic retention: Insights from Kenyan secondary schools. *Education Review East Africa*, 6(3), 89-105.
- Nyaga, T. (2016). The role of parental support in educational persistence in low-income households. *African Journal of Education and Social Sciences*, 12(2), 88-97.
- Nzina, A., & Mulwa, F. (2019). Family size and its impact on girls' dropout rates in secondary schools: Evidence from Makuu Sub-County, Makueni County, Kenya. *African Journal of Educational Studies in Mathematics and Sciences*, 15, 109-116.
- O'Higgins, N. (2016). Economic pressures and school dropouts: Policy implications. *Education Economics*, 21(4), 567-586.
- Oketch, M., & Ngware, M. (2019). Parental education levels and academic retention rates. *Journal of Educational Research in East Africa*, 7(2), 101-115.
- Omondi, L., & Maina, A. (2019). Non-traditional family setups and educational outcomes: Challenges for single-parent households. *African Journal of Educational Research and Policy*, 11(2), 101-119.
- Patel, V., Adhikari, S., & Mehta, R. (2018). Household education status and girls' dropout rates in India: The significance of maternal education. *Journal of Social Issues*, 74(1), 119-137.
- Pianta, R. C., Barnett, W. S., & Sheridan, S. M. (2019). *Positive home environments and educational persistence: A cross-national analysis*. Cambridge: Harvard University Press.
- Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers* (2nd ed.). Oxford: Blackwell Publishers.
- Smith, L., Jones, R., & Thompson, K. (2022). The impact of household income on secondary school dropout rates among girls in Australia: A mixed-methods approach. *Australian Journal of Educational Research*, 66(3), 389–407.
- Stouffer, S. A. (1949). *The American Soldier: Adjustment during Army Life*. Princeton University Press.
- Strid, K., De Oliveira, R. R., & Loto, M. (2020). Socio-economic factors influencing educational access: Insights from Brazil and Peru. *Latin American Journal of Educational Research*, 11(4), 35-54.
- Taro, Y. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.
- Tharaka-Nithi County Government [TCG]. (2023). *Education sector report 2023: Addressing school dropout and educational challenges for girls in Tharaka-Nithi County*. Tharaka-Nithi County Government.
- Tharaka-Nithi County Government. (2018). *Tharaka-Nithi County Integrated Development Plan 2018-2022*. Tharaka-Nithi County Government.
- UN Women. (2021). *Gender equality: The time is now*. UN Women.
- UN Women. (2022). *Global commitments on girls' education*. UN Women.
- UNESCO. (2015). *Global Monitoring Report 2015: Education for All 2000–2015: Achievements and Challenges*. United Nations Educational, Scientific and Cultural Organization.
- UNESCO. (2020). *Her education, our future: Global advocacy for girls' education*. United Nations Educational, Scientific and Cultural Organization.
- UNESCO. (2021). *Global education monitoring report 2021: Education and COVID-19*. UNESCO.



- UNICEF. (2020). *Impact of school sanitation and hygiene on girls' education in Kenya*. United Nations Children's Fund.
- UNICEF. (2021). *The state of the world's children 2021: On my mind – promoting, protecting and caring for children's mental health*. United Nations Children's Fund.
- Vázquez-Nava, F., Morales-Romero, J., & Vázquez-Rodríguez, C. (2019). Family structure and high school dropout: A study of adolescents in Mexico. *Journal of Latin American Studies in Education*, 11(4), 275–290.
- Wanjiku, J. (2021). Factors influencing dropout rates among girls in rural Kenya: A case study of Tharaka-Nithi County. *Journal of African Education Studies*, 12(3), 215-230.
- World Bank. (2021). *World development report 2021: Learning to realize education's promise*. Washington, DC: World Bank Publications.