

**DETERMINANTS OF LITERACY LEVELS AMONG SOMALI WOMEN, A CASE
STUDY OF IJARA SUB-COUNTY, GARISSA COUNTY, KENYA**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
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ARTS IN DEVELOPMENT STUDIES OF
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JULY, 2025

DECLARATION AND APPROVAL

DECLARATION AND APPROVAL

Declaration

This thesis/project is my original work and has never been presented for any academic award in any institution.

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DEDICATION

I dedicate this project to my husband Abdirahman Kamil and for without his support, encouragement and motivation, this project would not have been possible.



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First and foremost, thanksgiving, glory, and honor to the Almighty God for blessing me with the much-needed resources, knowledge, and wisdom that enabled me to complete this study. I would also like to acknowledge the Mount Kenya University at large for the support and assistance provided by the staff in facilitating the research and data collection necessary for this proposal. I extend my heartfelt thanks to my immediate supervisor Dr. Charles Mogote for his guidance, support, and invaluable insights throughout the process of developing this proposal. I would also like to acknowledge my colleagues Abdullahi Mohamed Abdi and Carol Rotich, my friends Halan Noor Khalif and Ibrahim Yussuf and my family members Mohamed Hussein, Mohamud Hussein Sofia Hussein and Zeinab Kamil who have provided me with their encouragement, support, and made the study a successful one. I thank you all, may God reward you abundantly.

ABSTRACT

The lack of literacy skills among Somali women in Ijara Sub-County has adverse effects on their ability to access employment opportunities, participate in the formal labor market, and contribute to the local economy. Furthermore, low literacy levels limit their capacity to engage in decision-making processes and advocate for their rights, perpetuating gender inequalities within the community. This research aimed to investigate the determinants of literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya. The study focused on understanding the factors that contributed to the literacy rates among Somali women in Ijara Sub-County, with the objective of identifying barriers and potential strategies for improving literacy outcomes. The specific objectives of the study were to assess how the nomadic lifestyle affected literacy levels among Somali women in Ijara Sub-County, to examine the effects of the HIV and AIDS pandemic on the literacy levels of Somali women in Ijara Sub-County, to investigate the influence of early marriages on the literacy levels of Somali women in Ijara Sub-County, and to assess how gender roles determined the literacy levels of Somali women in Ijara Sub-County. The study adopted Feminist Theory and the Socio-Ecological Model (SEM), with Feminist Theory serving as the anchor theory of the study. The research design adopted was a cross-sectional design to collect data at a specific point in time from a population of interest. The study was conducted in Ijara Sub-County, which is located in Garissa County, Kenya. The target population for this study consisted of 64,339 females residing in Ijara Sub-County, Garissa County. The study used the Cochran and Snedecor formula to calculate the appropriate sample size. The sample size of the study was 128 respondents, which included Somali women, female learners, local women leaders, and school head teachers in Ijara Sub-County. The Multiple Linear Regression Analysis indicates a moderate negative correlation ($R = -0.626$) between literacy levels and predictors nomadic lifestyle, HIV

and AIDS, early marriages, and gender roles responsibilities, with these factors collectively explaining approximately 39.2% of the variance in literacy levels among Somali women in Ijara Sub-county, highlighting the significant impact of socio-cultural and health-related challenges on educational outcomes. These results underscored the necessity for targeted interventions that addressed these specific challenges to enhance literacy levels in the community, ultimately empowering Somali women and fostering their educational advancement. By focusing on these determinants, stakeholders could work towards meaningful improvements in literacy outcomes for Somali women in Ijara Sub-County. The study recommended that to improve literacy levels among Somali women in Ijara Sub-County, it was essential to develop and implement targeted interventions that specifically addressed the identified determinants: Gender Roles and Responsibility, the HIV and AIDS Pandemic, Nomadic Lifestyle, and Early Marriages. This could include creating community-based educational programs that challenged traditional gender norms, provided health education related to HIV/AIDS, and offered flexible learning options that accommodated the nomadic lifestyle.

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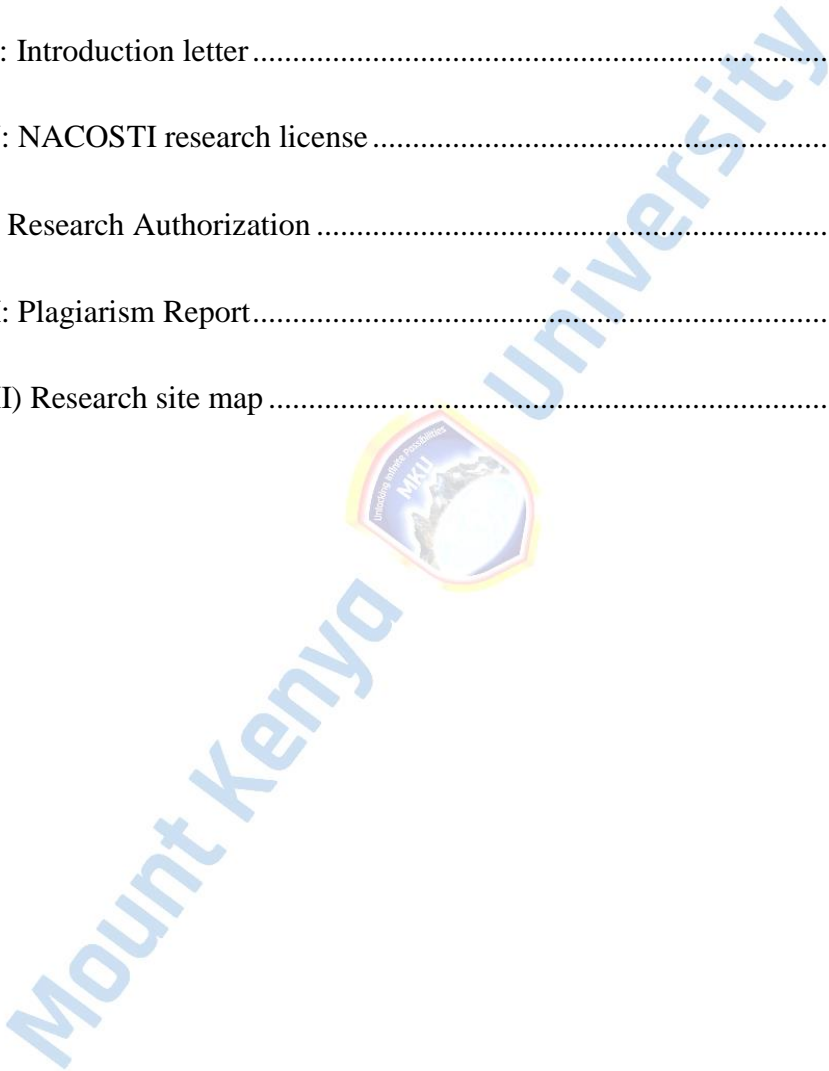
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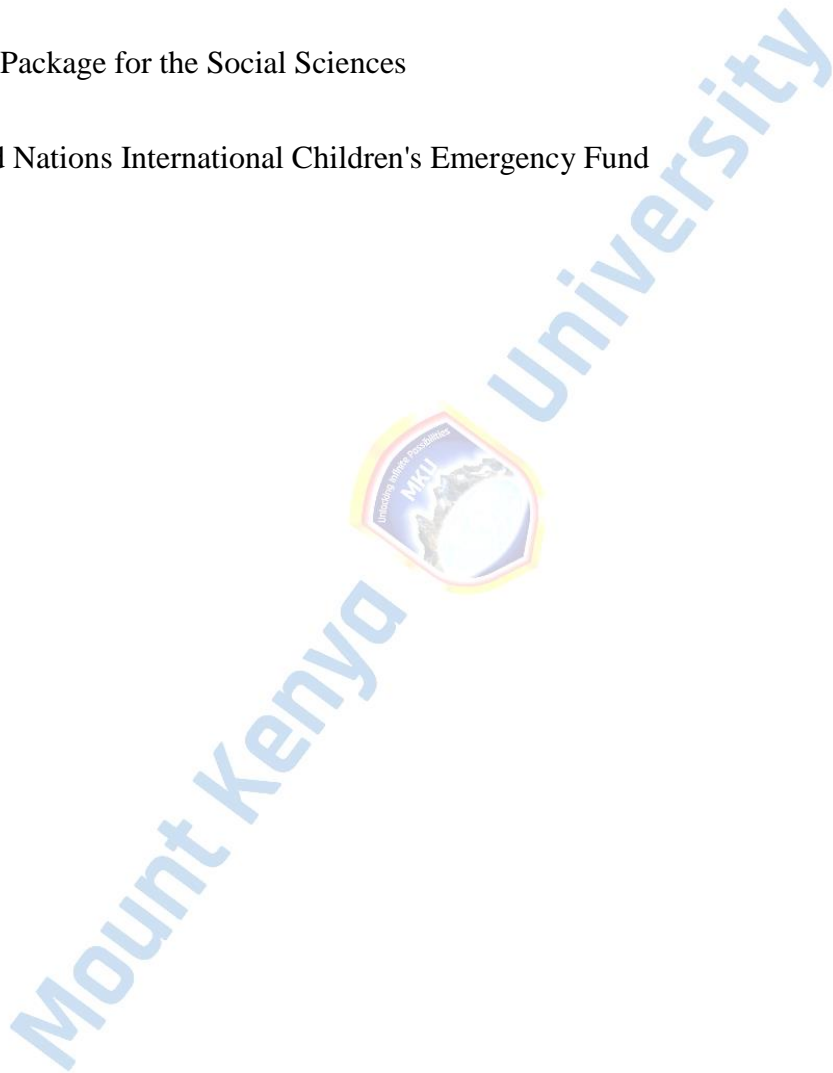
LIST OF ABBREVIATIONS AND ACRONYMS

AIDS - acquired immunodeficiency syndrome

HIV - Human Immunodeficiency Virus

SPSS- Statistical Package for the Social Sciences

UNICEF - United Nations International Children's Emergency Fund



CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Literacy is often heralded as the most important practical tool for achieving a brighter future. It serves as a gateway to education, employment, and empowerment, enabling individuals to navigate the complexities of modern life. However, despite being classified as a basic human right, education remains unachieved for many women globally, particularly in marginalized and nomadic communities. These groups face significant challenges in accessing education, which directly impacts their literacy levels (Adeyemi & Adeyemi, 2020). At a global level, literacy levels are critical indicators of social, economic, and cultural development (UNESCO, 2023). Literacy is not merely the ability to read and write; it encompasses broader skills such as comprehension, critical thinking, and the capacity to use information effectively (Adeyemi & Adeyemi, 2020). The United Nations recognizes literacy as a fundamental human right and an essential component of achieving the Sustainable Development Goals (SDGs) (UNESCO, 2023). These goals aim to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Despite global efforts to improve literacy rates, disparities persist, particularly among women in marginalized and conflict-affected regions (UNESCO, 2023). According to UNESCO, approximately 67 million children worldwide do not attend school, and 387 million adults are illiterate (UNESCO, 2023). This situation is particularly dire in countries like Afghanistan, which has one of the lowest literacy rates in the world, especially among women (UNESCO, 2023). Decades of conflict and political instability have severely disrupted the education system, resulting in limited access to quality education and literacy programs, particularly in rural and remote areas

(UNESCO, 2023). The low literacy rates in such contexts hinder economic development and employment opportunities, perpetuating cycles of poverty (UNESCO, 2023).

The implications of low literacy rates extend beyond individual capabilities; they significantly impact broader economic and social development (UNESCO, 2023). Women with low literacy levels often find it challenging to secure stable employment, which perpetuates cycles of poverty and limits their ability to contribute to their families and communities (Adeyemi & Adeyemi, 2020). This economic disadvantage can hinder overall community development and exacerbate existing inequalities (UNESCO, 2023). Moreover, literacy is intrinsically linked to health outcomes. Individuals with higher literacy levels are more likely to access healthcare services, understand health information, and make informed decisions about their health (World Health Organization, 2018). This connection underscores the importance of literacy in promoting not only individual well-being but also public health (World Health Organization, 2018).

Marginalized and nomadic communities often face unique cultural and economic barriers that hinder their access to education (UNICEF, 2021). Cultural norms may prioritize domestic responsibilities for women, discouraging families from investing in girls' education (Chandra, 2020). Additionally, economic constraints can limit educational opportunities, as families may prioritize immediate economic needs over long-term educational investments (UNESCO, 2023). The costs associated with schooling—such as fees, uniforms, and materials—can be prohibitive, particularly in impoverished communities (World Bank, 2020). Furthermore, geographical barriers can complicate access to education. In many rural areas, schools may be located far from where families live, making regular attendance difficult (UNICEF, 2021). The lack of transportation options and safe routes to school further exacerbates this issue, leading to lower enrollment and retention rates among female students (Chandra, 2020).

The international community has recognized the right to education as a fundamental human right, enshrined in various treaties and declarations, including the Universal Declaration of Human Rights (United Nations, 1948). This recognition imposes obligations on states to respect, protect, and fulfill the right to education for all individuals, regardless of their background (Right to Education Project, 2023). However, despite these legal frameworks, millions of individuals, particularly in marginalized communities, continue to be denied their right to education (UNESCO, 2023). International initiatives aimed at improving literacy rates emphasize the importance of inclusive and equitable education. Programs that focus on adult literacy, vocational training, and community-based education have shown promise in addressing the specific needs of women in marginalized communities (UNICEF, 2021). By aligning local educational strategies with global frameworks, stakeholders can enhance the effectiveness of interventions aimed at improving literacy outcomes (World Bank, 2020).

The Horn of Africa has been significantly affected by conflicts, civil wars, and political instability, leading to severe consequences for education systems (UNESCO, 2023). Prolonged conflicts disrupt educational infrastructures, displace populations, and create an environment where schooling becomes unsafe or inaccessible. Women and girls in this region often face greater challenges in accessing education due to a combination of cultural norms, poverty, and security concerns. In many cases, prevailing cultural attitudes prioritize male education over female, which can lead families to invest fewer resources in girls' schooling (Chandra, 2020). Significant efforts have been made by international organizations and governments to promote literacy and educational opportunities for women in the Horn of Africa. Initiatives by entities such as UNICEF, UNESCO, and various non-governmental organizations aim to increase access to education, particularly for marginalized groups. However, progress has been slow due to the multifaceted

barriers that continue to exist. Economic instability often leads to reduced funding for education, while cultural attitudes may continue to prioritize traditional roles for women, further impeding educational access (UNICEF, 2021).

Niger is one of the countries in the Horn of Africa with one of the lowest literacy rates globally. The disparity in literacy rates is particularly pronounced among women, with the literacy rate for women significantly lower than that of men. According to data from UNESCO, the literacy rate for women in Niger is around 29%, compared to approximately 58% for men (UNESCO, 2023). This disparity leads to limited opportunities for women's education and employment, which in turn perpetuates cycles of poverty and gender inequality. Low literacy levels among women contribute to high rates of early marriage, as families may view education as less beneficial for girls, resulting in restricted decision-making power for women (World Bank, 2020). The consequences of low literacy levels among women extend beyond individual capabilities; they significantly impact community and societal development. Women with limited literacy skills are often unable to access vital information, participate in economic activities, or advocate for their rights effectively. This lack of empowerment reinforces existing gender inequalities and limits women's roles in decision-making processes within their communities. The cycle of poverty is perpetuated as women who are less educated tend to have fewer economic opportunities and face greater challenges in health and welfare decision-making (Adeyemi & Adeyemi, 2020).

Somalia, another country in the Horn of Africa, exemplifies the severe impacts of conflict and political instability on education systems. Decades of civil war and unrest have created a fragmented educational landscape, where access to education remains limited, particularly for women and girls. According to UNICEF, the lack of literacy skills prevents Somali women from participating fully in society and accessing economic opportunities (UNICEF, 2021). Many girls

are unable to attend school due to security concerns, cultural practices that prioritize domestic roles, and economic barriers that necessitate their contributions to household income. The literacy rate in sub-Saharan Africa stands at approximately 65%, significantly lower than the global average of 86% (UNESCO, 2023). This discrepancy highlights the critical need for targeted interventions aimed at improving educational access in the region. World Literacy Day 2014 underscored the challenges of accessing schools in developing regions, particularly in sub-Saharan Africa, where a majority of the world's illiterate reside (UNICEF, 2021). The continued focus on improving educational infrastructure, providing resources, and addressing cultural barriers is essential to enhance literacy rates and empower women in these communities.

In recent years, Kenya has made notable strides in improving literacy levels across the nation. According to the Kenya National Bureau of Statistics (KNBS) Census Report 2019, the overall literacy rate for individuals aged 15 years and above was approximately 82.9% (KNBS, 2019). While this figure reflects advancements in education, it also masks significant disparities among different regions and demographic groups, particularly among marginalized communities such as Somali women. Somali women in Kenya face a unique set of challenges that contribute to low literacy rates. Cultural norms within Somali communities often emphasize domestic responsibilities for girls, which limits their opportunities to pursue formal education. Education is frequently viewed as less critical for girls than for boys, leading families to prioritize the education of male children (Kimani et al., 2020). This cultural bias can deter families from enrolling their daughters in school, especially when resources are limited. Additionally, the prevalence of child marriage in some Somali communities significantly disrupts education for young girls. When girls marry at a young age, they are often forced to leave school, which directly impacts their literacy development (UNICEF, 2021). Early marriage not only curtails educational opportunities but also

reinforces traditional gender roles, perpetuating cycles of poverty and limiting women's empowerment.

Language also presents a significant hurdle for Somali girls seeking education in Kenya. Many schools do not provide instruction in Somali, which is the native tongue for these students. Instead, the primary languages of instruction are Kiswahili and English. For girls who may not be fluent in these languages, the educational experience can be challenging and intimidating, leading to lower academic performance and higher dropout rates (Kimani et al., 2020). The inability to comprehend lessons fully can diminish students' confidence and interest in education, further exacerbating literacy challenges. Access to education is another critical factor influencing literacy rates among Somali women. In marginalized areas and refugee camps, where many Somali families reside, schools may be scarce or non-existent. The lack of infrastructure, qualified teachers, and learning materials significantly limits educational opportunities for girls (World Bank, 2020). In refugee settings, the instability and transient nature of living conditions can disrupt schooling, making it difficult for girls to maintain consistent attendance (UNHCR, 2021). Moreover, safety concerns, including the threat of violence or harassment while traveling to school, can further deter families from sending their daughters to educational institutions. These barriers restrict girls' access to quality education and contribute to lower literacy rates.

The implications of low literacy levels among Somali women extend beyond individual capabilities. A lack of literacy can restrict opportunities for employment, limit participation in civic life, and hinder access to essential information about health and well-being. Women with low literacy skills may struggle to understand health information, seek medical care, or advocate for their rights effectively (Kimani et al., 2020). This situation creates a cycle of disadvantage that can be difficult to break without addressing the underlying cultural norms and practical limitations.

Addressing the barriers that Somali women face in accessing education and achieving literacy requires a multifaceted approach. This includes challenging cultural norms that prioritize domestic roles over education for girls, promoting awareness about the importance of female education, and implementing community-based educational programs that cater to the specific needs of Somali girls. Additionally, providing instruction in the Somali language and improving infrastructure in marginalized areas can help enhance educational access and literacy outcomes. International organizations, NGOs, and local governments must collaborate to create safe and inclusive learning environments that empower Somali women and girls. By focusing on these strategies, it is possible to improve literacy rates, enhance economic opportunities, and contribute to the overall development of Somali communities in Kenya.

Garissa County, located in northeastern Kenya, is characterized by significant challenges in the education sector, with Ijara Sub-County facing unique difficulties largely due to its geographical proximity to Somalia and the influx of refugees and internally displaced populations. This demographic shift exacerbates existing educational challenges, making it vital to understand the specific factors influencing literacy levels among Somali women in this area. Literacy levels among Somali women in Ijara Sub-County are shaped by various interrelated determinants, including the nomadic lifestyle prevalent in the Somali community, where families frequently move in search of pasture and water for their livestock. This nomadic lifestyle creates significant barriers to education, as children particularly girls often miss school due to relocation, disrupting their learning continuity. Consequently, many girls are unable to complete their education, leading to lower literacy rates (World Bank, 2020), and the instability associated with a nomadic lifestyle makes it challenging to establish consistent educational opportunities and support systems.

Additionally, the HIV and AIDS pandemic has profound implications for education, particularly for women and girls. In regions heavily affected by the disease, families may prioritize immediate survival over long-term educational investments, and the stigma surrounding HIV can lead to social isolation for affected individuals, further limiting educational access (UNAIDS, 2021). In Ijara Sub-County, this health crisis also impacts the economic stability of families, making it difficult for them to afford school-related expenses. The prevalence of early marriages represents another critical determinant affecting literacy levels among Somali women in Ijara Sub-County. Cultural practices often dictate that girls marry at a young age, which frequently results in their withdrawal from school and severely restricts educational opportunities, ultimately limiting girls' future economic prospects (UNICEF, 2021). This cycle of early marriage and low educational attainment contributes to persistent poverty and gender inequality within the community.

Moreover, the societal preference for educating boys over girls poses a significant cultural barrier that affects literacy rates among Somali women. In many families, resources are disproportionately allocated to boys under the assumption that they will be the primary breadwinners. This bias results in lower enrollment rates for girls in schools and can discourage families from investing in their daughters' education (Kimani et al., 2020). Consequently, this gender disparity in education perpetuates cycles of illiteracy and economic disadvantage among women. Understanding and addressing these determinants is crucial for improving literacy outcomes among Somali women in Ijara Sub-County. By conducting research on the specific challenges faced by this demographic, the study aims to provide valuable insights that can inform policymakers, educators, and stakeholders about the realities on the ground. Identifying the severity and implications of these determinants will facilitate evidence-based interventions and strategies designed to enhance literacy levels. Ultimately, this research seeks to empower Somali women through improved

access to education and increased literacy skills, and by identifying effective strategies and interventions, the findings will contribute to socio-economic development and create greater opportunities for individuals and the community at large. Enhancing literacy not only benefits the individual but also contributes to the overall development and stability of the community, fostering a more equitable society.

1.2 Statement of the Problem

The determinants of literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya, is a pressing issue with significant social and economic implications. Despite efforts to promote education and literacy in the region, Somali women continue to face barriers to accessing quality education, hindering their overall development and socio-economic empowerment. The problem at hand revolves around the low literacy levels among Somali women in Ijara Sub-County. Nomadic lifestyle, HIV and AIDS pandemic, early marriages and gender roles have resulted in a significant gender disparity in literacy rates. This disparity not only affects the individual well-being and empowerment of Somali women but also has broader consequences for households, communities, and the county's overall development. The lack of literacy skills among Somali women in Ijara Sub-County has adverse effects on their ability to access employment opportunities, participate in the formal labor market, and contribute to the local economy. Furthermore, low literacy levels limit their capacity to engage in decision-making processes and advocate for their rights, perpetuating gender inequalities within the community. The problem extends beyond individual women's well-being and impacts community development. Low literacy levels hinder community members' access to essential information, services, and resources, impeding overall socio-economic progress. The region's economic potential is constrained by the underutilization of human capital due to limited education and literacy

opportunities for Somali women. Despite the recognized importance of literacy and education, there is a lack of comprehensive research on the determinants of literacy levels among Somali women in Ijara Sub-County. Existing studies often focus on broader educational issues and may not adequately capture the specific challenges faced by Somali women in the region.

Mohamud, Hassan, and Nasir (2023) investigated the factors influencing HIV/AIDS knowledge among women in Somalia. Similarly, Cumar et al. (2025) analyzed gender disparities in literacy across various regions and age groups in Somalia, utilizing data from the 2022 Somalia Integrated Household Budget Survey (SIHBS). However, these studies highlight a contextual gap, as they were conducted in Somalia, while the current research focuses on Ijara Sub-County in Garissa County, Kenya. Maliti, (2021) explored the challenges that hinder Somali women refugees in Kenya from accessing education, while Seadya, M. A. (2022) investigated the determinants of poverty in Somalia through a household-level analysis. These studies reveal a conceptual gap regarding the study variables, as Maliti (2021) focuses on the barriers to education for Somali women refugees in Kenya, whereas Seadya (2022) examines the determinants of poverty in Somalia. The current study aims to conceptually analyze the determinants of literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya. Kimani et al. (2020) conducted a qualitative study to investigate the barriers that prevent Kenyan Somali women with female genital mutilation (FGM) from accessing healthcare. However, this study presents a methodological gap as it utilized a qualitative approach. In contrast, the current study employs a quantitative research design. Similarly, Mohamed, S. H. (2023) assessed literacy across different learning contexts and languages by focusing on three Somali families living in Nairobi, which also reveals a methodological gap due to its limited target population of just three families. In contrast, the

current study will target a population of 64,339 females residing in Ijara Sub-County, Garissa County, Kenya.

Therefore, this research aims to address this knowledge gaps by investigating the determinants of literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya. By examining the factors that influence literacy attainment and the barriers faced by Somali women, this study seeks to provide evidence-based insights and recommendations to inform targeted interventions and policies. Ultimately, understanding the determinants of literacy levels among Somali women is crucial for fostering gender equality, enhancing community development, and promoting sustainable socio-economic progress in Ijara Sub-County and beyond. By shedding light on this critical issue, the research aims to contribute to the creation of a more inclusive and empowered society for Somali women in the region.

1.3 General objective of the study

The general objective of this study was to investigate the determinants of literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya. The study aimed to identify and analyze the specific factors that influence the literacy levels of Somali women in order to provide insights into the challenges they face in accessing education and acquiring adequate literacy skills. By examining the determinants, the study seeks to contribute to the existing body of knowledge and generate evidence-based recommendations for interventions and strategies that can effectively improve literacy outcomes for Somali women in Ijara Sub-County.

1.3.1 Specific Objectives on the Study

1. To assess how nomadic lifestyle, affect literacy levels among Somali women in Ijara Sub-County.

2. To examine the effects of the HIV and AIDS pandemic on the literacy levels of Somali women in Ijara Sub-County.
3. To investigate the influence of early marriages on the literacy levels of Somali women in Ijara Sub-County.
4. To assess how gender roles determine the literacy levels of Somali women in Ijara Sub-County.

1.4 Research Questions

The research questions for this study on the determinants of literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya, were as follows:

1. How does the nomadic lifestyle affect the literacy levels of Somali women in Ijara Sub-County?
2. What are the effects of the HIV and AIDS pandemic on the literacy levels of Somali women in Ijara Sub-County?
3. How does early marriage impact the literacy levels of Somali women in Ijara Sub-County?
4. How does gender roles influence literacy levels of Somali women in Ijara Sub-County?

1.5 Significance of the Study

The significance of this study on the determinants of literacy levels among Somali women, particularly in Ijara Sub-County, Garissa County, is multifaceted. Firstly, the findings offered valuable insights into the underlying factors contributing to low literacy rates among Somali women, which can inform policies and interventions aimed at enhancing educational outcomes in these communities. Government agencies, non-governmental organizations, and other

stakeholders can leverage these findings to design and implement effective literacy programs tailored to the specific needs of these women.

Secondly, this study illuminated the challenges Somali women face in accessing education and the consequences of low literacy levels on their social, economic, and political development. This understanding will empower policymakers to prioritize and allocate resources effectively to tackle these challenges, such as establishing schools and providing educational materials in remote areas, as well as offering literacy programs specifically designed to meet the needs of Somali women.

Thirdly, the importance of this study also lies in its potential to empower Somali women by raising awareness about their educational needs and encouraging them to advocate for improved access to education and literacy programs. The research creates a platform for these women to share their views and experiences, ensuring their voices are acknowledged by policymakers and other relevant stakeholders. Furthermore, the outcomes of this study have significant implications for policies and practices aimed at enhancing literacy levels among Somali women in Ijara Sub-County, ultimately contributing to their overall development and well-being.

1.6 Scope of the Study

The study specifically targeted Somali women living in Ijara Sub-County, Garissa County, Kenya. It included participants from various age groups and educational backgrounds, with a particular focus on those who have faced challenges in accessing education or who have lower literacy levels. The research explored several factors that may influence literacy levels among Somali women, including the nomadic lifestyle, the effects of the HIV and AIDS pandemic, early marriages, and traditional gender roles. Additionally, a cross-sectional research design was employed, where quantitative data was collected at a single point in time using questionnaires to gather information

about these determinants and their impact on literacy levels among Somali women. The study was conducted over a one-year period, from April 2024 to April 2025.

1.7 Study Limitations

Like any research study, this study has certain limitations that need to be acknowledged. They include;

The use of a cross-sectional research design, collecting data at a single point in time, inherently limits the ability to establish causal relationships between the explored factors (nomadic lifestyle, HIV/AIDS, early marriage, traditional gender roles) and literacy levels. While the study can identify correlations and associations between these variables, it cannot definitively determine which factors directly cause lower literacy levels. For instance, while the study might find a correlation between early marriage and lower literacy, it cannot definitively prove that early marriage causes lower literacy without longitudinal data that tracks women over time. Other unmeasured confounding variables might also influence both early marriage rates and literacy levels.

A significant limitation stems from the specific geographical and cultural context of the study. Focusing solely on Somali women in Ijara Sub-County means the findings might not be directly transferable or generalizable to other Somali women in different regions of Kenya or in other countries. The cultural nuances, specific challenges related to nomadic lifestyle within this particular sub-county, and the local impact of HIV/AIDS, early marriages, and traditional gender roles might differ significantly elsewhere. Therefore, while the study provides valuable insights into this specific population, caution must be exercised when attempting to apply the findings to broader populations of Somali women or women in other cultural contexts facing similar challenges.

1.8 Delimitation of the Study

Delimitations refer to the specific boundaries and constraints that are set for a study in order to focus the research and make it more manageable.

The researcher intentionally limited the study's scope to Somali women residing in Ijara Sub-County, Garissa County, Kenya. This geographical and population delimitation was likely a strategic decision to allow for a more focused and in-depth investigation of the specific challenges and influences within this community. By narrowing the focus, the researcher could potentially gain a richer understanding of the interplay between the chosen factors and literacy levels within this particular context, rather than attempting a broader, potentially less nuanced study across a more diverse population.

The study deliberately focused on the influence of nomadic lifestyle, HIV/AIDS pandemic effects, early marriages, and traditional gender roles on literacy levels, primarily employing quantitative data collected through questionnaires. This delimitation means the study did not explore other potential factors that could influence literacy, such as the quality of available educational resources, parental education levels, or community support systems, unless these were specifically captured within the questionnaire. Furthermore, by primarily relying on quantitative data, the study intentionally limited the depth of understanding that qualitative methods (like interviews or focus groups) could have provided regarding the lived experiences and perspectives of the participants on these issues. This focus allowed for statistical analysis and identification of trends within the chosen variables.

1.9 Assumptions of the study

Assumptions refer to the beliefs or suppositions made in a study without being fully proven. The study will have several assumptions:

1. The respondents will provide accurate and honest responses during data collection.
2. The sample of the Somali women residing in Ijara Sub- County Garissa County, will be a representative of the wider population and will provide insights into the determinants of literacy levels among Somali women.
3. The research instruments used in this study will be reliable and will provide valid measures of literacy levels and determinants.
4. The data collected will be free from bias or errors that could influence the findings of the study.
5. The recommendations provided in this study will be feasible and can be implemented to improve literacy levels among Somali women in Ijara sub-county and other similar regions.

1.10 Operational definition of key terms

To ensure clarity and consistency in the study on the determinants of literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya, the following key terms will be operationally defined:

1. **Literacy Levels:** For the purpose of this study, literacy levels refer to the proficiency and competency of individuals in reading, writing, and numeracy skills. It encompasses the ability to comprehend and critically engage with written and numerical information, enabling individuals to effectively participate in various aspects of life, including education, employment, and civic activities.

2. **Determinants:** Determinants are the factors or variables that influence or contribute to a particular outcome. In this study, the determinants of literacy levels among Somali women refer to the various social, cultural, economic, and educational factors that impact their ability to access and acquire literacy skills.
3. **Somali Women:** Somali women are women who are identified as Somali, either through their ethnic, cultural, or national background. They may belong to the Somali ethnic group and share cultural traditions, language, and heritage.
4. **Nomadic Lifestyle:** A nomadic lifestyle refers to a way of life where individuals or communities move from one place to another in search of resources, such as water, pasture, or food for their livestock.
5. **HIV** (Human Immunodeficiency Virus) is a virus that attacks the body's immune system, making it difficult for the body to fight off infections and diseases. If left untreated, HIV can progress to **AIDS** (acquired immunodeficiency syndrome), which is the final stage of HIV infection. AIDS weakens the immune system to the point where it becomes vulnerable to severe infections and certain cancers.
6. **Early Marriages:** Early marriages, also known as child marriages or underage marriages, refer to unions where one or both partners are below the legal age of marriage, which varies from country to country.
7. **Gender Roles:** Gender roles refer to societal expectations, norms, and behaviors associated with individuals based on their perceived gender identity. These roles are often culturally determined and can vary across societies and historical periods.
8. **Data collection methods:** Specific techniques used to gather information, such as surveys, interviews, or focus groups.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, the literature review will provide a comprehensive analysis of existing studies, research, and scholarly works that have explored similar topics or variables. The literature review will also examine the determinants that potentially influence the literacy levels among Somali women which include: nomadic lifestyle, the HIV and AIDS pandemic, early marriages, and gender roles. This section will highlight the existing research and evidence on how these determinants affect literacy rates among Somali women in similar contexts. Moreover, the review will identify gaps in the literature and emphasize the need for further research to fill these gaps. It will acknowledge the limited existing studies specifically focusing on the determinants of literacy levels among Somali women in Ijara Sub-County. By addressing these gaps, the study will aim to contribute to the existing body of knowledge and provide insights that can inform policies, interventions, and programs aimed at improving literacy levels among Somali women in similar marginalized and underrepresented communities.

2.2 Empirical Literature

While specific research on the impact of the nomadic lifestyle on literacy levels among Somali women is scarce, broader studies on nomadic communities shed light on related educational challenges. For instance, Mburu (2017) noted that the migration of livestock herds significantly hinders child schooling, as frequent relocations for grazing disrupt children's educational continuity and limit their access to learning resources. Though focused on children, these findings underscore the pervasive educational obstacles faced by nomadic populations, which likely extend

to hindering literacy development among women due to limited formal education opportunities and a prioritization of traditional knowledge.

The HIV and AIDS pandemic is widely recognized for its adverse effects on educational outcomes, including literacy. It exacerbates vulnerability and poverty within affected households and communities. In the Somali context, despite a relatively lower prevalence of HIV and AIDS compared to other regions, there's limited research specifically examining its impact on literacy levels among Somali women. However, Abdi and Namin (2020) highlighted that HIV and AIDS create barriers to education for nomadic women, exploring socio-cultural factors like stigmatization and discrimination that restrict educational opportunities and literacy within this demographic.

Early marriage is a well-established impediment to girls' education and literacy attainment, particularly in Somali communities where it remains prevalent. Girls are often married at a young age, leading them to assume adult and household responsibilities that disrupt their schooling and limit literacy development, thus perpetuating gender inequality. A study by Lowe et al. (2022) further detailed how child marriage is deeply embedded in the cultural practices and social norms of nomadic pastoralist communities, influenced by economic factors, dowry traditions, and gendered expectations. This practice, often viewed as a means to ensure a girl's security and maintain family honor, significantly disrupts girls' education, hindering their literacy and formal schooling opportunities as they prioritize domestic duties and face restricted access to educational resources due to societal expectations.

Gender roles are a critical socio-cultural determinant influencing girls' education and literacy levels in Somali communities. Research indicates that gender biases and stereotypes shape educational opportunities and resource allocation within households, often leading to discrimination, limited support, and restricted access to educational resources for girls, resulting in lower literacy rates compared to boys. There is a clear call for interventions to challenge these gender norms, promote educational gender equality, and empower girls to overcome these barriers. Ombati and Ombati (2012) underscored the widespread gender disparities in education across sub-Saharan African countries, attributing them to cultural, social, and economic factors, including deep-rooted gender biases and norms that prioritize boys' education, often influenced by traditional beliefs assigning higher value and status to males within the family and community.

2.2.1 Nomadic Lifestyle on Literacy Levels among Somali Women

Khakzad and Razi (2022) investigated strategies for enhancing reading proficiency among nomadic schoolchildren through the establishment of inclusive reading environments. Their research underscores the systemic marginalization and limited access to essential services, particularly education, faced by nomadic communities despite their contributions to national development. These communities often exhibit significantly lower literacy rates than urban populations, as children frequently prioritize livestock care over formal schooling—an issue often overlooked in educational policies that predominantly cater to urban needs. To address this disparity, Khakzad and Razi implemented an action research project, "Books in Rural Libraries and Home Bookcases," in Piranshahr city, China. This two-year initiative established intra-school and rural public libraries through collaborative efforts with local stakeholders, aiming to foster literacy among nomadic children by creating conducive learning environments and expanding access to reading resources. Interviews with local librarians and school principals affirmed the

project's success in boosting reading literacy, highlighting the pivotal roles of dedicated local librarians and cooperative school leadership. Key success factors included context-specific book selection, engaging reading activities, and sustained support for literacy initiatives. These findings emphasize the necessity of tailored strategies for addressing educational challenges within nomadic populations. Building upon Khakzad and Razi's insights, the current study specifically examines how the nomadic lifestyle, characterized by frequent mobility and distance from educational institutions, impacts literacy levels among Somali women in Ijara Sub-County, seeking to identify unique educational barriers within this demographic.

Lanyasunya (2024) assessed the influence of the nomadic pastoralist lifestyle on the Alternative Basic Education (AABE) program in Samburu County, Kenya. The AABE initiative, a collaborative effort by the Kenyan government, religious organizations, and non-governmental organizations, aims to expand access to basic education and advance Universal Primary Education (UPE). Despite these efforts, Samburu County reports concerning low school enrollment rates of 44% and literacy levels of merely 12%, highlighting the urgent need to evaluate the AABE program's efficacy. Lanyasunya's study hypothesized that the nomadic lifestyle significantly impedes the AABE program's success. Employing a survey research design, data were collected from 400 household heads, 56 AABE center teachers, and 10 AABE providers using structured questionnaires, with stratified random sampling ensuring representativeness. Data analysis involved frequency tabulations, chi-square tests, multiple regressions, and correlation analyses. The findings revealed that 80% of respondents perceived that mobility and herding practices adversely affected the AABE program's outcomes, underscoring the challenges nomadic communities face in accessing consistent educational opportunities. The study concluded by advocating for a comprehensive development approach in nomadic pastoralist regions,

emphasizing that addressing issues such as water scarcity, healthcare access, infrastructure, and conflict resolution is crucial for improving educational outcomes. Additionally, Lanyasunya recommended further research on the AABE program's viability in other nomadic pastoral regions, stressing the importance of considering various influencing factors. This research directly informs the current study, which investigates how the nomadic lifestyle affects literacy levels among Somali women in Ijara Sub-County.

2.2.2 Gender Roles influence literacy levels among Somali women

Daniels (2019) explored the nexus of adult learning, gender, and mobility, specifically focusing on Somali refugee mothers and their literacy development facilitated by engaging with their children's education. This research addresses a notable gap in existing literature concerning the active role of refugee parents, particularly mothers, in their children's educational journeys amidst the complexities of globalization and displacement. Daniels critically reviewed existing scholarship on parental support and involvement, noting its tendency to overlook the unique experiences of refugee parents and their historical contexts of educational disruption and mobility. The study emphasized the profound connection between parental engagement in children's education and parents' own educational histories and prevailing socio-cultural factors. Utilizing a narrative inquiry approach, Daniels analyzed the life experiences and educational beliefs of four Somali refugee mothers, unraveling the intricate interplay of gender, language, ethnicity, and power within their narratives. The findings demonstrated that these mothers accumulate community cultural wealth throughout their journeys, which significantly contributes to their empowerment and literacy development. The study highlighted how the mothers' involvement in their children's education not only fostered their personal learning but also served as a mechanism for navigating the challenges of displacement and cultural adaptation, framing this engagement as

a crucial pathway for personal empowerment and community resilience. The current study seeks to expand upon Daniels' insights by specifically assessing how gender roles—including gender-based discrimination, societal norms, and attitudes toward girls' education—impact the literacy levels of Somali women in Ijara Sub-County. By focusing on this demographic, the research aims to pinpoint the distinct barriers Somali women encounter in accessing education and achieving literacy, particularly in the context of their maternal roles and societal expectations.

Bradley et al. (2024) investigated the role of education in fostering empowerment and agency among women and girls in Somaliland, specifically through the Somali Girls Education Programme (SOMGEP). This qualitative research, based on interviews with 100 young women who participated in the program, explored the long-term impacts of education on their lives seven years post-program. The findings established a strong correlation between higher educational attendance and attainment and the positive development of agency among these women, demonstrating that education empowers them by providing the skills and confidence necessary for informed life choices. However, the study also identified significant contextual factors that can impede the expression of this agency, often acting as a counterforce against the transformative potential of secular education, suggesting that while education is a powerful tool, it is not a singular solution. The research underscored the importance of understanding the broader socio-cultural and economic contexts influencing these women. Despite educational benefits, many women face challenges stemming from gender-based discrimination, societal norms, and attitudes that may devalue their educational achievements and limit their opportunities for agency. Building on these insights, the current study aims to assess how gender roles—specifically gender-based discrimination, societal norms, and attitudes toward girls' education—affect the literacy levels of Somali women in Ijara Sub-County. By focusing on this demographic, the research endeavors to

identify the unique barriers Somali women confront in accessing education and achieving literacy, particularly given the societal pressures and norms shaping their educational experiences.

Abdikarim, Otieno, and Kariuki (2024) examined the socio-cultural factors influencing women's participation in higher educational leadership in Mogadishu, Somalia. This research is particularly pertinent within the global pursuit of gender equality, as highlighted by Sustainable Development Goal 5 (SDG 5), which indicates a significant underrepresentation of women in leadership roles. Employing social feminist theory, the authors framed their analysis to recognize the crucial role of social and cultural dynamics in shaping women's opportunities for leadership in higher education. Using a Pearson correlational design, the study analyzed data through descriptive statistics and correlational analysis to explore the relationship between socio-cultural factors and women's involvement in leadership positions. The findings revealed a negative and significant correlation ($r = -0.631$, $p < 0.05$) between social-cultural factors and women's participation in higher educational leadership, suggesting that prevailing social norms, stereotypes, and cultural expectations substantially hinder women's advancement into leadership roles within educational institutions. The study concluded that these social and cultural barriers contribute to the underrepresentation of women in leadership in Somalia. The authors recommended that university management actively discourage gender stereotyping and foster a universal leadership mindset among staff and students to create a more inclusive environment supportive of women's leadership aspirations. The current study aims to build upon these findings by assessing how gender roles—specifically gender-based discrimination, societal norms, and attitudes towards girls' education—affect the literacy levels of Somali women in Ijara Sub-County. By focusing on this demographic, the research seeks to identify the unique barriers Somali women face in accessing education and

achieving literacy, particularly in light of the societal pressures and norms that may influence their educational experiences.

2.2.3 HIV and AIDS Pandemic on Literacy Level among Somali Women

Ogbodo et al. (2024) investigated the impact of Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) on labor productivity across 53 African economies between 2010 and 2020, also examining the moderating role of literacy rates. Utilizing the System Generalized Method of Moment estimation technique, they measured labor productivity as the ratio of gross domestic product to total employment, with literacy rates proxied by gross secondary school enrollment. The findings indicated that HIV/AIDS significantly impedes labor productivity, a negative effect that literacy rates are crucial in mitigating. The study found the adverse impact of HIV/AIDS most pronounced in Southern Africa and less severe in Northern and Central Africa. Additionally, key drivers of labor productivity identified included per capita health expenditure, per capita income, gross capital formation, and advancements in information and communications technology. The authors concluded that governments and stakeholders must prioritize enhancing school enrollment and improving the quality of educational curricula across Africa, including increasing HIV/AIDS awareness, particularly regarding transmission channels like unprofessional blood transfusions, unprotected sexual activity, and genital mutilation. Building on these insights, the current study aims to assess how the HIV/AIDS pandemic, specifically prevalence rates and associated stigma, affects the literacy levels of Somali women in Ijara Sub-County. This focus seeks to identify unique educational and literacy barriers faced by Somali women in a nomadic context, particularly in relation to the health challenges posed by HIV/AIDS.

Muhula et al. (2021) investigated the impact of COVID-19 on HIV/AIDS programming in the Kibera informal settlement and other COVID-19 hotspot counties during the pandemic's initial wave. The research proceeded in two phases: first, a retrospective analysis of secondary data on HIV care and treatment from the Kenya Health Information System (2018-2020); second, a prospective cohort study of 176 randomly sampled individuals living with HIV (aged 18+) in Kibera, followed for three months. Retrospective analysis revealed a significant 56% reduction in HIV service uptake ($p < 0.000$, 95% CI: 31.3%–62.8%). Notably, new antiretroviral therapy (ART) initiations decreased by 48% ($p < 0.001$, 95% CI: 35.4%–77%) in hotspot counties. Conversely, pre-exposure prophylaxis (PrEP) uptake significantly increased by 24% ($p < 0.019$, 95% CI: 4%–49%). In Kibera, 14% of participants reported missing medications at the pandemic's onset, primarily due to food insecurity (38%) and government measures (11%) hindering ART access. Additionally, 11% avoided health facilities due to fear of contracting COVID-19, government regulations, and lack of personal protective equipment. The study highlighted how socioeconomic factors, particularly food insecurity and government interventions, negatively impacted HIV/AIDS service uptake during the pandemic. The authors underscored the urgent need for strategies to enhance access to HIV/AIDS services during health crises, emphasizing the interconnectedness of health and socio-economic stability. Building on these findings, the current study aims to assess how the HIV/AIDS pandemic, specifically HIV prevalence rates and associated stigma, impacts the literacy levels of Somali women in Ijara Sub-County. This research seeks to identify unique educational and literacy barriers faced by Somali women in the context of ongoing health challenges.

Bernard et al. (2022) investigated the effects of the COVID-19 pandemic on access to HIV and reproductive healthcare among women living with HIV (WLHIV) in Western Kenya. The research aimed to understand how the pandemic influenced access to essential health services, including

HIV care, pregnancy, and family planning (FP) for this vulnerable population. Data collection commenced after June 2020, integrating pandemic-related questions into two ongoing mixed-methods studies: the Chaguo Langu (CL) study, focusing on non-pregnant WLHIV receiving care at 55 AMPATH-supported facilities, and the Opt4Mamas study, which included pregnant WLHIV receiving antenatal care at five FACES-supported facilities. Outcomes measured included self-reported difficulties in refilling medications, accessing care, and managing family planning during the pandemic. The analysis encompassed 1,402 surveys and 15 in-depth interviews. Findings indicated that 32% of CL participants reported increased difficulty in refilling medications, and 14% experienced greater difficulty accessing HIV care during the pandemic. In contrast, nearly all (99%) Opt4Mamas participants reported no difficulties in refilling medications or accessing HIV and pregnancy care. The study found that older women were less likely to report difficulties refilling medications, while those with more children were more likely to face challenges. Notably, only 2% of CL participants reported greater difficulty managing family planning, with 95% indicating no change in their likelihood of using family planning methods or their desire to become pregnant. Qualitative analysis revealed three major themes: (1) adverse organizational and economic implications of the pandemic, (2) the increased importance of pregnancy prevention during this time, and (3) fear of contracting COVID-19. The study concluded that while access to HIV services and antiretrovirals was significantly disrupted for many non-pregnant WLHIV, access to pregnancy and family planning care remained relatively stable. The authors underscored the necessity of innovative solutions to prevent further deterioration of HIV and reproductive health outcomes during ongoing crises, emphasizing the interconnectedness of health services and the need for comprehensive support strategies for WLHIV. The current study aims to build on these findings by assessing how the HIV/AIDS pandemic, specifically HIV prevalence rates and

associated stigma, impacts the literacy levels of Somali women in Ijara Sub-County. By focusing on this demographic, the research seeks to identify unique barriers to education and literacy development that Somali women face in the context of ongoing health challenges.

2.2.4 Early Marriages on Literacy Level Among Somali Women

Elnakib et al. (2021) investigated the prevalence, correlates, and consequences of child marriage among Somali refugees in Ethiopia's Kobe refugee camp. Recognizing the limited research on child marriage in humanitarian contexts, this study holds significant importance. Employing a cross-sectional survey design, the researchers used multi-stage cluster-based sampling to select households with at least one female aged 15-49 and one adolescent female aged 10-19. Data from 603 adult women were analyzed, and a household roster comprising 3,319 members, including 522 adolescent girls aged 15-19, was created. Findings revealed that 14% of these adolescent girls were currently married, and 11% had been married before age 18. Factors significantly associated with child marriage risk included girls' educational attainment, household head's sex and employment status, and the number of girls under 18 in the household. The study also found that adult women frequently misidentified the minimum legal age for marriage and favored lower marital ages for both genders, particularly in households where child marriage was common. Among married adolescent girls, contraceptive use was notably low at 11%, and early childbearing was prevalent, with 60% reporting a birth at a young age. These findings underscore the severe implications of child marriage for sexual and reproductive health, alongside broader socio-economic consequences for young women. The study provides valuable insights into child marriage dynamics in humanitarian settings, emphasizing the need for targeted interventions to prevent and mitigate its harmful effects. The authors suggested that understanding the drivers of child marriage in refugee contexts can inform programs aimed at improving adolescent girls' health

and well-being. Building on these findings, the current study will assess how gender roles—specifically gender-based discrimination, societal norms, and attitudes toward girls' education—affect the literacy levels of Somali women in Ijara Sub-County. This research aims to identify unique barriers to education and literacy development faced by Somali women, particularly amidst ongoing challenges related to child marriage and gender inequality.

Sakwa (2020) examined the impact of early marriages on primary school girls' education in Buna Sub-County, Wajir County, Kenya. Despite Kenya's progress in basic education, significant disparities persist, especially in arid and semi-arid regions, where harmful traditional practices like female genital mutilation/cutting (FGM/C) and early marriages disproportionately affect girls' educational opportunities. Using a descriptive research design, the study employed simple random sampling to collect data from 159 respondents: 114 pupils from standard seven and eight, 39 teachers, and 6 headteachers across six schools, forming a total sample of 133 participants. Data were gathered via questionnaires and analyzed using the Statistical Package for Social Sciences (SPSS). Findings indicated that early marriages are prevalent in Buna Sub-County and severely impede girls' education. Contributing factors include poverty, high illiteracy rates, and deeply ingrained regional customs that prioritize girls' domestic roles over their education. The study found that girls are often socialized for domestic duties, leading to the perception that educating them is preparing "someone else's wife," which, coupled with limited resources, results in a preference for boys' education. Additionally, predominant Muslim beliefs in the area perpetuate practices like FGM/C, often seen as a precursor to early marriage. The research revealed alarmingly low completion rates for girls' education, with many marrying between ages 14 and 17, thus ending their schooling before completing 12 years of compulsory education. To address early marriages and their educational impact, the study recommended interventions such as

strengthening school-based guidance and counseling, offering conditional cash transfers to girls and their parents, increasing female teachers as role models, and community sensitization on the risks of early marriages. The study also advocated for punitive measures against offenders and emphasized community education on the harmful effects of early marriages and the importance of girls' education. The current study aims to build on these findings by assessing how gender roles—specifically gender-based discrimination, societal norms, and attitudes toward girls' education—affect the literacy levels of Somali women in Ijara Sub-County. By focusing on this demographic, the research seeks to identify unique barriers to education and literacy development faced by Somali women, particularly in the context of early marriage and gender inequality.

Raj (2010) highlighted the significant consequences of early marriages, specifically focusing on the detrimental effects of early pregnancies and childbirth on young girls' health and education. Early marriages frequently lead to complications during pregnancy and childbirth, posing serious risks to young mothers' well-being. These health challenges can disrupt their educational trajectories, impeding their ability to concentrate on studies and literacy development. The demands of early motherhood create additional educational barriers, making it challenging for young mothers to balance responsibilities with pursuing their own education, which can perpetuate a cycle of illiteracy across generations. When girls marry early, their daughters are also at risk of facing similar challenges, sustaining a cycle where illiterate mothers may not fully recognize the importance of education for their daughters, leading to persistently low literacy levels in future generations. The implications of early marriage extend beyond individual health and education, reflecting broader societal issues such as gender-based discrimination and entrenched societal norms that prioritize early marriage over girls' education. These norms often dictate that girls should focus on domestic roles rather than academic pursuits, reinforcing the belief that educating

girls is less valuable than educating boys. The current study aims to address this gap by assessing how gender roles—specifically gender-based discrimination, societal norms, and attitudes toward girls' education—determine the literacy levels of Somali women in Ijara Sub-County. By focusing on this demographic, the research seeks to identify the unique barriers Somali women face in accessing education and achieving literacy, particularly in the context of early marriage and associated societal pressures.

2.3 Theoretical framework

The theoretical framework is an important component of any research study as it helps to guide the research process and provides a conceptual basis for interpreting the findings.

2.3.1 Feminist Theory

Feminist theory emerged as a significant analytical framework in the late 18th century, gaining considerable traction throughout the 1970s and 1980s in parallel with the burgeoning women's rights movements. Its conceptual foundations can be traced to early proponents such as Mary Wollstonecraft, whose seminal 1792 work, *A Vindication of the Rights of Woman*, championed women's education and entitlements. Over time, feminist theory has undergone substantial development, integrating diverse intellectual traditions including Marxism, psychoanalysis, and postcolonial studies to critically analyze and challenge the power structures and oppressive systems that perpetuate gender inequality (Bradley et al., 2024; Daniels, 2019; Abdikarim et al., 2024).

This theoretical paradigm incorporates several core constructs. The distinction between gender and sex is fundamental, with feminist theory emphasizing that while sex refers to biological attributes, gender encompasses socially constructed roles, expectations, and behaviors associated with femininity and masculinity (Bhandari, 2024). Intersectionality, a crucial concept, illuminates how

various aspects of identity—such as race, socio-economic status, sexual orientation, and ability—interact to produce unique experiences of both oppression and privilege, thereby enabling a nuanced understanding of women's diverse realities across contexts (Crenshaw, 2020). Power and oppression are critically examined through this lens, which scrutinizes how societal dynamics often privilege male perspectives while marginalizing women's voices, with the aim of disrupting these systems and advocating for equity (Moges & Kedir, 2021). Agency and empowerment are central tenets, highlighting women's capacity for autonomous choice and action. Empowerment is viewed as a vital outcome of education and social reform, enabling women to advocate for their rights and participate more fully in their communities (Bradley et al., 2024). Finally, the social construction of gender posits that gender roles are not inherent but rather mutable constructs, shaped by cultural norms and practices that are amenable to challenge and transformation (Egbert & Sanden, 2019).

The application of feminist theory to the investigation of literacy levels among Somali women in Ijara Sub-County offers several pertinent insights. It facilitates an understanding of gender-based discrimination by exploring how societal norms and established gender roles contribute to educational disparities among Somali women, thereby identifying specific cultural barriers to educational access and literacy (Moges & Kedir, 2021). The theory's emphasis on intersectionality is particularly salient, as the experiences of Somali women are shaped by the interplay of multiple identities, including ethnicity, socio-economic standing, and cultural background, allowing for a multifaceted analysis of how these factors collectively influence literacy outcomes (Crenshaw, 2020). Furthermore, feminist theory aids in challenging oppressive structures by illuminating systemic issues that perpetuate gender inequality in education, including the influence of traditional practices such as early marriage and gender stereotypes that may curtail educational

opportunities for women (Sakwa, 2020). The framework also underpins the concept of empowerment through education, positing that improved literacy among Somali women can significantly enhance their agency. Education serves as a critical instrument for disrupting oppressive norms and fostering social change, enabling women to advocate for their rights and participate more actively in their communities (Bradley et al., 2024). Finally, the insights derived from this theoretical application can inform policy implications, guiding stakeholders in developing targeted strategies to enhance educational access and support literacy development by addressing the specific barriers faced by Somali women (Abdikarim et al., 2024).

2.3.2 Socio-Ecological Model (SEM)

The Socio-Ecological Model (SEM), developed by American psychologist Urie Bronfenbrenner in the 1970s and 1980s, initially served as a framework for comprehending child development. Bronfenbrenner's model underscored the intricate interactions between individuals and their social environments, positing that human development is influenced by a range of interconnected systems, from immediate family dynamics to broader societal factors (Cherry, 2023). His ecological systems theory was formally articulated in his seminal 1979 work, *The Ecology of Human Development*, and has since expanded to provide a more comprehensive understanding of human behavior across diverse contexts (Poux, 2017).

The SEM comprises several interrelated constructs that delineate how various levels of influence collectively impact individual behavior and development. The microsystem constitutes the innermost layer, representing the immediate environments in which an individual directly interacts, encompassing relationships with family, peers, and institutions such as schools and workplaces, thereby exerting the most direct influence on an individual's behavior and development (Kilanowski, 2017). The mesosystem captures the interconnections among different

microsystems. For instance, it highlights the relationships between a child's family and their school, illustrating how interactions in one setting can influence experiences in another (Scarneo et al., 2019). The exosystem includes broader social systems that do not directly involve the individual but nonetheless impact their development, such as parental workplaces, community resources, and extended social networks that indirectly shape the individual's immediate environment (Cherry, 2023). The macrosystem encompasses overarching cultural values, laws, and societal norms that contextualize individuals' lives, influencing policies and practices that affect both individuals and communities (Moges & Kedir, 2021). Lastly, the chronosystem introduces the dimension of time, accounting for life transitions and historical events that can influence an individual's development across their lifespan, emphasizing that development is dynamic and occurs within evolving contexts (Bronfenbrenner, 1995).

The Socio-Ecological Model (SEM) is particularly pertinent to the study of literacy levels among Somali women in Ijara Sub-County for several reasons. Firstly, it facilitates an understanding of contextual influences, enabling researchers to explore how various factors—such as family dynamics (microsystem), community resources (exosystem), and societal norms (macrosystem)—impact women's access to education and literacy. By examining these systemic layers, the study can identify specific barriers confronting Somali women in their pursuit of literacy (Bradley et al., 2024). Secondly, the SEM's multi-layered approach aligns with the principle of intersectionality, recognizing that Somali women's experiences are shaped by the confluence of multiple identities, including ethnicity, socio-economic status, and cultural background. This comprehensive understanding aids in analyzing how these intersecting factors collectively influence literacy outcomes (Crenshaw, 2020). Thirdly, by applying the SEM, the study can assess the efficacy of community engagement and support systems in promoting women's literacy, examining how local

organizations, educational institutions, and community leaders can facilitate educational opportunities and empower women (Moges & Kedir, 2021). Fourthly, the SEM underscores the significance of policy-level influences on education, allowing the study to inform policymakers about systemic barriers hindering women's literacy and advocate for targeted interventions addressing these challenges at multiple levels (Sakwa, 2020). Finally, the SEM promotes a holistic approach to addressing literacy challenges. By acknowledging the intricate interplay between individual, interpersonal, community, and policy factors, the study can propose multifaceted strategies designed to promote literacy and empower Somali women in Ijara Sub-County (Abdikarim et al., 2024).

2.4 Conceptual Framework

A conceptual framework, as articulated by Kothari (2004), functions as a structural representation delineating the interrelationships among key variables within a study. This framework enables researchers to succinctly illustrate how independent variables influence the dependent variable under investigation. In the context of this study, which examines the determinants of literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya, the conceptual framework depicts the intricate interplay of various hypothesized factors. These factors include the nomadic lifestyle, the impact of the HIV and AIDS pandemic, the prevalence of early marriages, and gender roles, particularly the societal preference for male children.

In this research, the dependent variable is the literacy levels among Somali women, serving as the primary outcome influenced by the aforementioned determinants. Literacy is assessed through indicators such as reading and writing skills, formal educational attainment, and proficiency in Somali or other relevant languages. The independent variables are the factors posited to affect these literacy levels:

Nomadic lifestyle: This variable captures the influence of a nomadic existence on educational access and opportunities. Its impact can be gauged by indicators such as the frequency of mobility, proximity to educational institutions, the availability of educational resources in nomadic environments, and the inherent challenges faced by nomadic communities in accessing formal education.

HIV and AIDS pandemic: This variable signifies the effect of the HIV and AIDS pandemic on the literacy levels of Somali women. Measurements can include HIV prevalence rates, knowledge regarding HIV and AIDS, the stigma associated with the disease, and the accessibility of healthcare and support services for affected individuals.

Early marriages: This variable represents the impact of early marriages on the educational attainment and literacy of Somali women. It can be measured through indicators such as the prevalence of child marriage, age at marriage, educational disruptions caused by early unions, and the subsequent influence on women's empowerment and agency.

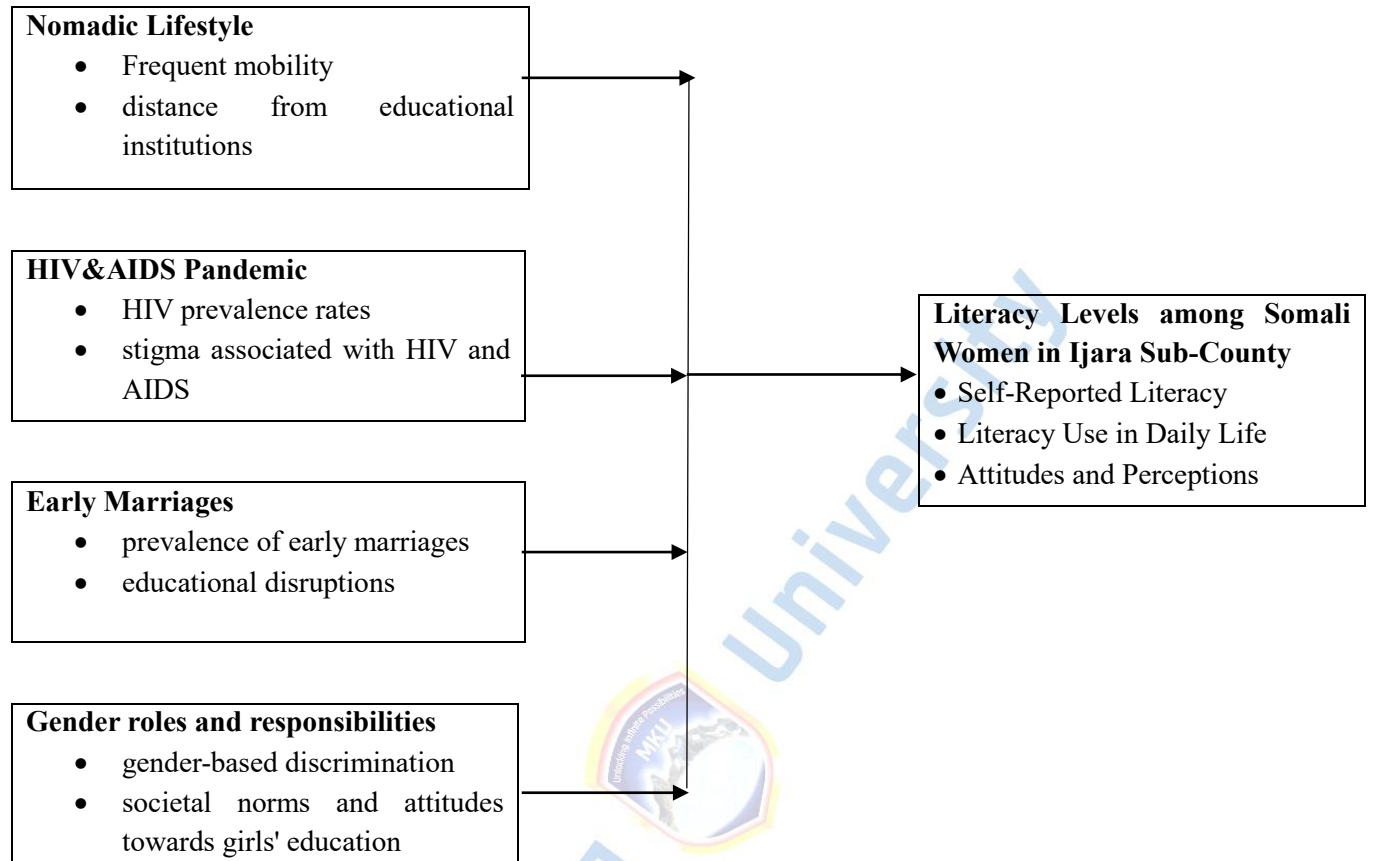
Gender roles and responsibilities: This variable reflects the influence of gendered expectations and preferences on educational opportunities and literacy levels among Somali women. It can be quantified by factors such as gender-based discrimination, equitable access to education for girls, prevailing societal norms and attitudes towards girls' education, and observed gender disparities in educational attainment.

By systematically examining these variables within the established conceptual framework, this study aims to offer a comprehensive understanding of the multifaceted determinants impacting literacy levels among Somali women in Ijara Sub-County.

Figure 2.1 Conceptual Framework

Independent Variables

Dependent Variable



(Source: Researcher (2024))

2.5 Summary of Literature Review

This literature review will comprehensively examine the determinants influencing literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya. The review will primarily focus on four key factors: the nomadic lifestyle, the HIV and AIDS pandemic, the prevalence of early marriages, and gender preference for male children. Furthermore, it will critically analyze existing empirical evidence pertaining to literacy levels among Somali women in this specific sub-county. This analysis will involve evaluating prior academic studies, reports, and other relevant data sources, including government statistics, census reports, and survey findings. Ultimately, the objective of this literature review is to foster a comprehensive understanding of the factors shaping

literacy levels among Somali women, particularly within Ijara Sub-County. This foundational knowledge is crucial for developing a robust research study that not only builds upon existing scholarship but also significantly contributes to the understanding of literacy challenges within marginalized communities. The review underscores the complex interplay of these identified factors in influencing literacy outcomes for Somali women in the region. It highlights the imperative for targeted interventions designed to address the unique challenges confronted by marginalized and nomadic populations, such as improving access to education, enhancing awareness regarding HIV and AIDS, actively challenging detrimental cultural practices, and promoting gender equality.



Mount Kenya University

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter delineates the research methodology employed for investigating the determinants of literacy levels among Somali women in Ijara Sub-County, Garissa County, Kenya. It provides a comprehensive outline of the research approach and procedures to be utilized throughout the study. Specifically, this section details the research design, target population and sampling strategy, data collection methods, and data analysis techniques that will be implemented to achieve the stated research objectives. The primary purpose of this chapter is to offer a transparent and meticulous explanation of the adopted methodology, thereby ensuring the systematic and rigorous execution of the research, which is crucial for collecting reliable and valid data. Furthermore, this section addresses pertinent ethical considerations and potential limitations associated with the study, upholding principles of transparency and integrity in its conduct.

3.2 Research Design

The research design is a fundamental component of any study, as it dictates the overarching strategy for addressing the research question. For this investigation, a cross-sectional research design will be employed. This design is particularly apt for examining the determinants of literacy levels among Somali women in Ijara Sub-County, as it involves collecting data from a defined population of interest at a single point in time. The adoption of a cross-sectional approach will enable the researcher to efficiently gather concurrent data on various factors hypothesized to influence literacy levels, such as socio-economic status, cultural practices, and access to educational resources. This methodology facilitates the simultaneous collection of diverse

information from participants, thereby providing a comprehensive snapshot of the current literacy landscape within the target demographic.

3.3 Location of the Study

The study will be conducted within Ijara Sub-County, which is geographically located in Garissa County, Kenya. Ijara Sub-County is situated in the northeastern part of Kenya, sharing a border with Somalia. Garissa County itself is an administrative unit in eastern Kenya, bounded by Somalia to the east, Wajir and Isiolo Counties to the north, Tana River County to the west, and Lamu County to the south. Garissa town serves as both the capital and largest urban center of the county. Established as a devolved government unit under the 2010 Constitution of Kenya, Garissa County comprises six constituencies: Garissa Township, Fafi, Dadaab, Lagdera, Balambala, and Ijara. Ijara Constituency, a town and sub-county, is part of this administrative division.

According to the 2019 Census, Garissa County had a total population of 841,353 individuals residing within a land area of approximately 44,753 km². Of this population, 458,975 were males and 382,344 were females, indicating that females constitute approximately 45.4% of the county's population. The 2019 census data further indicates that Ijara Sub-County has a population of 141,591, from which the female population is estimated to be approximately 64,339 (calculated as 45.4% of 141,591). Ijara Sub-County is predominantly rural, characterized by a significant population of Somali women. The selection of this specific geographical area is driven by the necessity to understand the unique determinants of literacy levels within this particular community. By concentrating on Ijara Sub-County, the study aims to generate context-specific insights and actionable recommendations tailored to the distinct circumstances and challenges experienced by Somali women in the region.

3.4 Target Population

The target population for this study comprises the estimated 64,339 women residing in Ijara Sub-County, Garissa County. This demographic represents the primary focus of the research, as the study seeks to investigate the determinants influencing their literacy levels within the specific context of Ijara Sub-County. Data from the Ministry of Education (2023) indicates that Ijara Sub-County hosts a total of 28 public schools, consisting of 26 primary schools and 2 secondary schools.

In addition to the main target population of women, the study will incorporate insights from various key stakeholders capable of offering valuable perspectives. These stakeholders include Somali women, female learners, local women leaders, and school headteachers. The inclusion of these diverse stakeholders aims to gather a broad spectrum of experiences and viewpoints pertinent to the determinants of literacy levels among Somali women in Ijara Sub-County, thereby enriching the study's findings.

Table 3.1 Target population

Target Group	Target population	Percentage (%)
Female (women and female learners)	64,339	100
Primary School Head Teachers	26	100
Secondary School Head Teachers	2	100
Total	64367	100

3.5 Sampling Design and Sample Size

Sampling is defined as the systematic process of selecting a subset of individuals or units from a larger population, based on a pre-defined sample frame (Sontakki, 2010). To effectively execute this research, the study will involve clearly defining the target population, selecting an appropriate sampling technique, and determining the optimal sample size. This process ensures the collection of data from a representative group that allows for inferences about the broader population (Saunders & Thornhill, 2013). A sample must consist of a sufficient number of selected items for analysis, constituting the sample size (Kothari, 2004). Given the substantial size of the female target group (women and female learners), the sample size for this demographic will be computed using the formula proposed by Cochran and Snedecor (1989).

$$n = N / (1 + Ne^2) = 64,339 / (1 + 64,339 (0.1)^2) = 99.85 \text{ respondents} \approx 100 \text{ respondents}$$

(Female target group)

Where: n = sample size, N = is the population size and, e = is the level of precision which is 10%; at 95% confidence level and p is assumed to be = .5

Due to small number of Secondary and Primary head teachers target group the entire population will be sampled in the study.

Based on a total population of 64,339, the study sample size is 128 respondents who were studied.

Table 3.2: Sample Size per Target Group

Table 3.2: Sample Size per Target Group

Target Group	Population per Target Group	Sample Size
Female (women and female learners)	64,339	100
Primary School Head Teachers	26	26
Secondary School Head Teachers	2	2
Total	64367	128

Saunders et al. (2009) define a sample as a sub-group or part of a larger population. This study employed a random sampling technique for the female target group to ensure fair representation and facilitate the generalization of findings. Random sampling, by definition, is a procedure where every element within the population has an equal probability of being selected into the sample. Consequently, female respondents will be randomly chosen from the overall female population in Ijara Sub-County. Conversely, for the secondary and primary headteacher target group, a purposive sampling technique will be adopted. This is due to the smaller size of this specific group, rendering probabilistic sampling less suitable. Purposive sampling allows for the deliberate selection of individuals who possess specific knowledge or characteristics relevant to the study's objectives.

3.6 Data Collection Instrument

According to Kothari (2014), a questionnaire serves as a structured tool designed to solicit, document, and compile data. It typically consists of a written set of questions used to gather information. Questionnaires can be administered by the researcher, trained assistants, or completed independently by respondents, either under supervision or autonomously. For this study, the chosen data collection method will be a self-administered questionnaire. This approach was selected primarily for its cost-effectiveness and convenience, allowing respondents the flexibility to complete the questionnaire within a designated timeframe (e.g., one week).

3.7 Pilot Study

A pilot study involves conducting an initial investigation to assess the feasibility of a research project, anticipate potential execution challenges, and confirm the validity and reliability of the research instruments. This preliminary procedure is also instrumental in estimating an adequate sample size for the main study. In line with this methodology, 10% of the calculated main sample size, translating to 13 respondents, will participate in the pilot study. These 13 respondents will be explicitly excluded from the final study's data analysis. Data collected from this pilot group will be utilized to identify and resolve any ambiguities in the questionnaire questions or potential researcher biases. It is imperative that participants in the pilot study do not comprise the final study's research population (Kothari, 2008).

3.7.1 Validity testing of Research Instrument

The validity of the questionnaire will be established through content validity. This process will ensure that the instruments accurately measure the constructs they are intended to assess. Additionally, the pilot testing phase will be crucial for confirming that all questions are clear, unambiguous, and readily comprehensible to the study participants. The questionnaire will be meticulously designed to include questions that are directly relevant to the research objectives and comprehensively cover all necessary aspects of the study. Furthermore, adequate training will be provided to research assistants to ensure consistency in instrument administration and response recording.

3.7.2 Reliability testing of Research Instrument

Cronbach (1951) introduced the concept of reliability as the degree of consistency observed among a set of scores. As outlined by Krishnaswamy (2009), reliability refers to an instrument's capacity to consistently and dependably measure a specific construct, yielding reproducible and stable results over time. This study will employ the test-retest reliability method, which involves administering the same questionnaire on two separate occasions to evaluate its trustworthiness. An instrument is considered reliable if a respondent's scores on the same test, when administered twice, demonstrate strong similarity. A trustworthy research tool consistently produces comparable results upon repeated use. To confirm the reliability of the research instruments and ensure their alignment with the study's objectives, appropriate measures will be undertaken. For the purpose of this study, a Cronbach's alpha coefficient of 0.7 or higher will be considered an acceptable threshold for reliability.

3.8 Data collection methods and procedures

Primary data for this study will be collected using closed-ended questionnaires. A structured questionnaire will be administered to a selected sample size of 128 respondents, comprising Somali women, female learners, local women leaders, and school headteachers in Ijara Sub-County. The questionnaire will be specifically designed to gather data pertaining to both the independent and dependent variables of the study. The survey administration will be conducted face-to-face by trained research assistants to ensure clarity and support for respondents. Complementary to primary data, secondary data sources, such as existing reports, academic articles, and government publications, will be reviewed to compile information on historical and current policies and programs related to education and literacy among Somali women.

3.9 Data Analysis and Presentation

Data analysis involves the systematic process of inspecting, cleaning, transforming, and modeling data to extract meaningful insights. As emphasized by McDaniel and Gates (2004), the ultimate objective of this analysis is to uncover significant insights and draw conclusions from extensive datasets. For this study, the collected data will be analyzed using SPSS software version 21.0. To effectively present the findings and enhance comprehensibility, tables and charts will be utilized for their simplicity and clarity. All diagrams will be appropriately labeled with descriptive tags to facilitate user understanding of the conveyed information. Descriptive statistics, including measures of central tendency (e.g., mean) and dispersion (e.g., standard deviation), alongside frequency tables, will be employed to summarize the characteristics of the data.

Furthermore, the study will employ multivariate regression analysis to establish the relationships between the variables under consideration and generate inferential statistics. The proposed regression model for this study will feature one dependent variable and four independent variables.

The regression model is predicated on the following statement:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_i$$

Where: Y = Literacy levels among Somali women

X₁ = nomadic lifestyle

X₂ = HIV and AIDS pandemic

X₃ = early marriages

X₄ = gender roles

β_0 = the intercept (value of Y when X = 0)

β_{1-n} = the regression coefficient

ϵ_i = error term

3.10 Ethical considerations

Conducting research ethically is paramount, especially when involving vulnerable populations.

This study will adhere to the following ethical principles to ensure the rights and welfare of all participants:

Informed Consent: Prior to participation, all individuals will be fully briefed on the study's nature, purpose, and procedures. They will have ample opportunity to ask questions and will be explicitly informed of their right to decline involvement without any adverse repercussions. This transparent approach aims to build trust between the researcher and participants.

Anonymity and Confidentiality: To safeguard participant privacy, all collected data will be treated with the utmost anonymity and confidentiality. Personal identifiers will be removed or coded, and all information will be securely stored to prevent any unauthorized disclosure. This commitment is vital for maintaining research integrity and participant trust.

Cultural Sensitivity: The research will be conducted with profound respect for the cultural values, beliefs, and traditions of the Somali women involved. This cultural awareness is essential to ensure the study's appropriateness and foster a positive, respectful relationship with the community.

Voluntary Participation: Engagement in the study will be entirely voluntary. Participants will retain the right to withdraw at any point without penalty or negative consequences. This principle reinforces the ethical commitment to respecting individual autonomy and choice.

Benefit to Participants: The study endeavors to offer tangible benefits to participants by contributing to an improved understanding of factors affecting their literacy levels and, ultimately, their educational outcomes. By focusing on their needs, the research aims to generate positive contributions to their lives.

Researcher Integrity: The researcher pledges to conduct the study with unwavering integrity and honesty. This includes ensuring that all collected data are accurate, reliable, and free from manipulation. This adherence to ethical research practices is fundamental for establishing the credibility of the study and its findings.

Institutional Review: The research protocol will undergo comprehensive review and secure approval from the relevant institutional review board (IRB). This essential oversight ensures compliance with established ethical standards and guidelines, thereby safeguarding the rights and well-being of all participants.

Debriefing: Upon the conclusion of data collection, participants will receive a debriefing to ensure they fully comprehend the study's purpose and the general findings. This session will also provide an avenue for addressing any lingering concerns or questions, further reinforcing the ethical commitment to participant welfare and understanding.

By rigorously upholding these ethical considerations, this study aims to be conducted in a responsible manner that fully respects the rights and dignity of all participants.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the research findings derived from the collected data, focusing on the response rate, demographic characteristics, and both descriptive and inferential statistics. The initial section examines the response rate to ascertain participant engagement and the representativeness of the sample. Subsequently, demographic data are analyzed to provide contextual insights into the study population's characteristics, including age, gender, educational attainment, and socio-economic status. The chapter also details the reliability and sample adequacy testing of the data collection instrument, followed by an exploration of the descriptive and inferential statistical analyses used to interpret the findings in relation to the study's objectives. Overall, this chapter aims to offer a comprehensive understanding of the collected data and its implications for literacy levels among Somali women in Ijara Sub-County.

4.2 Response Rate

The data presented in Table 4.1 indicate an exceptional 100% response rate for the study. All 128 administered questionnaires were properly completed and returned by participants. This complete response rate is highly significant, as Rear and Parker (2011) suggest that a response rate of 50% or more is generally considered adequate. The perfect response rate in this study implies a high level of participant engagement and cooperation, which is crucial for enhancing the validity and reliability of the research findings.

Table 4.1: Response Rate

Category	Frequency	Percentage
Responses	128	100%
Non-responses	0	0%
Totals	128	100%

4.3 Test of Reliability and Sample Adequacy

The validity and reliability of the pilot study's data collection instrument were rigorously assessed. Face validity was established by evaluating the readability and clarity of the questionnaire items from the perspective of the pilot study participants. Questions that elicited interpretations divergent from the intended meaning, or those not directly aligned with the study objectives, underwent subsequent modification to enhance their precision and relevance. The reliability of the instrument was quantified using Cronbach's Alpha, with the resultant coefficients detailed in Table 4.2.

Table 4.2: Reliability Test Results

Variable	No. of Items	Cronbach's Alpha
Nomadic Lifestyle	6	0.74
HIV And AIDS Pandemic	6	0.76
Early Marriages	6	0.73
Gender Roles And Responsibility	6	0.89
Literacy Levels	8	0.71

Source: Research data, 2024

As indicated in Table 4.2, the Cronbach's Alpha values for all variables demonstrate acceptable to strong internal consistency reliability. Specifically, "Nomadic Lifestyle" yielded an alpha of 0.74, "HIV and AIDS Pandemic" showed 0.76, and "Early Marriages" registered 0.73. These values generally exceed the commonly accepted threshold of 0.70 for exploratory research, suggesting that the respective sets of items are adequately consistent in their measurement. The variable "Literacy Levels," comprising eight items, also exhibited acceptable reliability with an alpha of 0.71.

Notably, the "Gender Roles and Responsibility" variable displayed a particularly high Cronbach's Alpha of 0.89. This robust coefficient signifies excellent internal consistency, indicating that the six items designed to measure this construct are highly cohesive and reliable in their measurement. The consistently acceptable to strong reliability coefficients across all variables enhance the credibility of the data collected, suggesting that the instrument is a dependable tool for measuring the intended constructs within the study population of Somali women in Ijara Sub-County. These findings provide a solid foundation for the subsequent analysis of the determinants influencing literacy levels. Warmbrod, (2014) indicated that for Cronbach alpha coefficient of values equal or above 0.7 indicate there is consistency while values below 0.7 signifies that the research instrument lacked reliability. After the reliability results indicated that the instrument was found to be dependable it was then used to collect the data for the main study.

Kaiser-Meyer-Olkin (KMO) was used to measure the adequacy of the sampling which is an indicator to test whether a correlation matrix is appropriate for factor analysis. The rule of thumb is KMO equal or greater than 0.7 it indicates adequacy of sampling. The data is as shown in table 4.3.

Table 4.3 Kaiser-Meyer-Olkin (KMO) test results

Variable	KMO	Bartlett's Test of Sphericity		
		Chi-Square (χ^2)	df	Sig. Level
Nomadic Lifestyle	.720	254.312	15	.000
HIV and AIDS Pandemic	.758	247.697	15	.000
Early Marriages	.719	414.692	15	.000
Gender Roles and Responsibility	.819	532.654	15	.000
Literacy Levels	.795	418.331	28	.000

Source: Research data, 2024

Table 4.3 presents the results of the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity for each variable. These statistical tests are fundamental for evaluating the suitability of the data for factor analysis, by assessing the degree of inter-item correlation and the overall factorability of the correlation matrix. The Kaiser-Meyer-Olkin (KMO) values for all variables consistently surpassed the generally accepted threshold of 0.60, indicating that the sample size is adequate and the data are appropriate for factor analysis. Specifically, the KMO values ranged from 0.719 for "Early Marriages" to a robust 0.819 for "Gender Roles and Responsibility." The KMO values for "Nomadic Lifestyle" (.720), "HIV and AIDS Pandemic" (.758), and "Literacy Levels" (.795) also affirm the sampling adequacy for their respective scales. These high KMO values collectively suggest that there is sufficient common variance among the items within each variable to justify the application of factor analytic techniques.

Concurrently, Bartlett's Test of Sphericity yielded statistically significant results for all variables ($p < 0.001$). For instance, "Nomadic Lifestyle" exhibited a Chi-Square (χ^2) value of 254.312 ($df = 15$), while "Gender Roles and Responsibility" showed a χ^2 of 532.654 ($df = 15$). The consistent significance level of 0.000 across all tests indicates that the correlation matrices are not identity matrices, thereby confirming the presence of significant relationships among the items that are suitable for underlying factor extraction.

4.4 Demographic Information

Participants were asked for their demographic data, which included details regarding their age, gender, marital status, religion, education level, and occupation.

4.4.1 Respondents Age

The research results in Table 4.4 present the demographic profile of the study participants based on their age distribution. A total of 128 respondents participated in the study, providing a comprehensive overview of the age cohorts represented.

Table 4.4: Age Distribution of Respondents

Age	Frequency(n)	Percent (%)
20 – 30 years	47	36.7
31 – 40 years	49	38.3
41 – 50 years	24	18.8
51 – 60 years	8	6.3
Total	128	100.0

Source: Research data, 2024

The data in Table 4.4 indicate that the majority of the respondents fall within the younger to middle adult age brackets. Specifically, the largest proportion of participants, 38.3% (n=49), were aged between 31 and 40 years. Closely following this group, 36.7% (n=47) of the respondents were aged between 20 and 30 years. Combined, these two age categories account for a substantial 75% of the total sample, suggesting a strong representation of young and middle-aged women in the study.

Conversely, older age groups constituted a smaller segment of the sample. Respondents aged 41 to 50 years comprised 18.8% (n=24) of the total, while those aged 51 to 60 years represented the

smallest proportion at 6.3% (n=8). This distribution suggests that the study primarily captured the perspectives and experiences of younger and middle-aged Somali women in Ijara Sub-County, which may be particularly relevant given the emphasis on factors such as early marriages and literacy levels, which often have significant implications during these life stages. The observed age distribution provides important context for interpreting the study's findings regarding the determinants of literacy among this specific population.

4.4.2 Respondents Gender

This section outlines the gender composition of the study participants, providing crucial demographic context for the research findings. Results are shown in table 4.5.

Table 4.5: Gender Distribution of Respondents

Gender	Frequency(n)	Percentage
Male	8	6.4%
Female	120	93.6%
Total	128	100%

Source: Research data, 2024

Table 4.5 presents the gender distribution of the study respondents. A total of 128 individuals participated in the study, and their gender breakdown is detailed in the table. The data unequivocally indicate a significant predominance of female respondents within the sample. Specifically, 93.6% (n=120) of the participants were female, while male respondents constituted a very small minority at 6.4% (n=8). This highly skewed gender distribution is consistent with the explicit scope of the study, which specifically targeted Somali women living in Ijara Sub-County,

Garissa County, Kenya, to explore factors influencing their literacy levels. This demographic characteristic is pivotal for interpreting the study's results, as the findings are overwhelmingly representative of the experiences and perspectives of Somali women. It reinforces the study's focus on gender-specific challenges and opportunities related to literacy within this community.

4.4.3 Respondents Religion

This section details the religious composition of the study participants, offering vital demographic context for the interpretation of the research findings (Table 4.6). A total of 128 respondents were included in this analysis.

Table 4.6: Respondents Religion

Gender	Frequency(n)	Percentage
Male	8	6.4%
Female	120	93.6%
Total	128	100%

Source: Research data, 2024

The data unequivocally indicate a significant predominance of Muslim respondents within the sample. Specifically, 94.5% (n=121) of the participants identified as Muslim. This overwhelming majority is consistent with the study's explicit focus on Somali women in Ijara Sub-County, Garissa County, Kenya, a region predominantly inhabited by individuals of Somali ethnicity who are overwhelmingly Muslim. A smaller proportion of the sample, 5.5% (n=7), identified as Christian.

The observed religious distribution strongly reflects the demographic characteristics of the target population. This homogeneity in religious affiliation is a crucial contextual factor for interpreting the study's findings, particularly concerning the influence of traditional gender roles and cultural norms on literacy levels, as these elements are often deeply intertwined with religious practices and beliefs within the community. It reinforces the study's ability to provide insights specifically relevant to the socio-cultural landscape of the Somali community under investigation. This demographic overview of religious affiliation is essential for contextualizing the socio-cultural dynamics that may influence literacy outcomes within the studied population.

4.4.4 Highest level of education

This section details the educational attainment levels of the study participants, providing critical insights into the academic backgrounds of the sample. Table 4.7 presents the distribution of 128 respondents across various educational levels. A total of 128 individuals participated in the study, and their reported educational backgrounds are summarized.

Table 4.7 Education levels

Level	Frequency(n)	Percent
Primary	8	6.3
Secondary	25	19.5
Tertiary/college	82	64.1
No formal education	6	4.7
Madrassa	7	5.5

Level	Frequency(n)	Percent
Total	128	100.0

Source: Research data, 2024

The data reveal a notable concentration of participants with higher levels of formal education. The largest proportion of respondents, 64.1% (n=82), reported having attained tertiary or college-level education. This substantial representation of highly educated individuals suggests that a significant segment of the sample has progressed beyond basic schooling.

Conversely, lower levels of formal education were less prevalent. Respondents with secondary education constituted 19.5% (n=25) of the sample, while those with primary education accounted for 6.3% (n=8). Furthermore, a small but significant proportion of the sample reported no formal education (4.7%, n=6) or education primarily through Madrasa (5.5%, n=7). The inclusion of Madrasa education as a distinct category is particularly relevant given the study's focus on Somali women in a predominantly Muslim region, as Madrasas typically provide religious and foundational literacy education outside the conventional secular system.

The observed distribution of educational levels, particularly the high representation of tertiary-educated women alongside those with no formal or Madrasa-only education, offers a nuanced perspective on the literacy landscape within the target population. This diversity in educational backgrounds is crucial for understanding the varied experiences and challenges related to literacy, especially when examining factors such as early marriages, gender roles, and access to education among Somali women in Ijara Sub-County.

4.4.5 Marital status

This section details the marital status distribution of the study participants, providing crucial demographic context for understanding the social dynamics within the sample. Table 4.8 presents the marital status of the 128 respondents who participated in the study.

Table 4.8 Marital status

Status Frequency (n) Percent

Status	Frequency (n)	Percent
Single	45	35.2
Married	67	52.3
Divorced	11	8.6
Widowed	5	3.9
Total	128	100.0

Source: Research data, 2024

The data indicate that the majority of the participants are currently married, constituting 52.3% (n=67) of the total sample. This substantial proportion suggests that a significant segment of the Somali women in Ijara Sub-County within the study's sample are in marital relationships. Single respondents represent the next largest group, accounting for 35.2% (n=45) of the sample. A smaller proportion of the respondents reported being divorced, comprising 8.6% (n=11), while widowed individuals constituted the smallest group at 3.9% (n=5). This distribution of marital statuses is

particularly pertinent to the study's objectives, given its focus on factors such as early marriages and their potential influence on literacy levels among Somali women. The prevalence of married individuals in the sample, combined with the presence of single, divorced, and widowed women, allows for a comprehensive examination of how different marital experiences may correlate with or impact educational attainment and literacy within this specific community. This demographic insight is vital for contextualizing the social factors explored in the research.

4.4.6 Respondent occupation

This section details the occupational status of the study participants, providing critical economic and social context for understanding the daily lives and potential opportunities or constraints faced by the sample. Table 4.9 presents the distribution of respondents across various occupational categories. A total of 128 individuals participated in the study, and their reported primary occupations are summarized.

Table 4.9 Respondent occupation

Table 4.9 Respondent occupation

Occupation	Frequency(n)	Percent
Formal Employment (Salaried)	46	35.9
Informal Employment	20	15.6
Trading/Business	29	22.7
Livestock Keeping/Agriculture	7	5.5
Unemployed	26	20.3

Occupation	Frequency(n)	Percent
Total	128	100.0

Source: Research data, 2024

The data reveal a diverse occupational landscape among the respondents, with significant proportions engaged in both formal and informal economic activities, as well as a notable segment experiencing unemployment. The largest single category of employment is Formal Employment (Salaried), accounting for 35.9% (n=46) of the sample. This indicates that over a third of the participants are engaged in stable, salaried positions. Trading/Business represents the next most frequent occupation, with 22.7% (n=29) of respondents involved in entrepreneurial activities. A substantial proportion of the sample, 20.3% (n=26), reported being Unemployed, highlighting a significant economic challenge within the community. Informal Employment accounts for 15.6% (n=20) of the respondents, suggesting engagement in less structured economic activities. The smallest occupational group is Livestock Keeping/Agriculture, representing 5.5% (n=7) of the sample. This relatively low percentage, despite the mention of a nomadic lifestyle in the study's scope, may suggest a transition away from traditional pastoralism for a majority of the surveyed women, or that "livestock keeping" is not their primary reported occupation.

The varied occupational distribution is highly pertinent to the study's objectives concerning literacy levels. Different occupations may impose varying demands on time, provide differing levels of income for educational pursuits, or offer diverse opportunities for applying and enhancing literacy skills. For instance, formal employment and business activities may necessitate higher literacy levels, while unemployment could be a consequence of limited literacy or a barrier to accessing educational opportunities. This occupational profile provides crucial context for

analyzing the interplay between socio-economic factors and literacy among Somali women in Ijara Sub-County.

4.5 Descriptive Analysis

This section presents the descriptive statistics for the study variables: Nomadic Lifestyle, HIV and AIDS Pandemic, Early Marriages, Gender Roles and Responsibility, and Literacy Levels among Somali women in Ijara Sub-County, Garissa County, Kenya.

4.5.1 Nomadic Lifestyle Descriptive Statistics

The study requested the respondents to state the influence of Nomadic Lifestyle among Somali women, in Ijara sub-county in Garissa county Kenya. Respondents were asked to assess the influence of the Nomadic Lifestyle among Somali women in Ijara Sub-County. Participants evaluated indicators associated with Nomadic Lifestyle using a five-point Likert scale, where 1 = no extent, 2 = little extent, 3 = moderate extent, 4 = great extent, and 5 = very great extent. The means and standard deviations for this variable were computed and are presented in Table 4.10.

Table 4.10: Descriptive Statistics for Nomadic Lifestyle

Statement	Mean	Std. Deviation
NomLf_4_The lack of permanent infrastructure, like schools, in nomadic areas limits access to literacy programs for Somali women	3.95	1.193

Statement	Mean	Std. Deviation
NomLf_6_The remoteness of nomadic settlements hinders access to resources and qualified teachers for women's literacy programs	3.66	.982
NomLf_1_The constant movement of nomadic life disrupts opportunities for Somali women to attend formal education	3.61	1.052
NomLf_5_The social structures within nomadic communities discourage or limit the importance placed on female literacy	3.59	.976
NomLf_3_Traditional roles and responsibilities of Somali women in nomadic communities hinder their access to literacy education	3.58	1.208
NomLf_2_The focus on daily survival needs in a nomadic lifestyle leaves little time for Somali women to pursue literacy skills	3.37	1.122
Average	3.63	1.089

Source: Research data, 2024

Table 4.10 presents the descriptive statistics for various statements related to the "Nomadic Lifestyle" variable, offering insights into its perceived impact on literacy access among Somali women. The data include the mean and standard deviation for each statement, reflecting the

respondents' level of agreement on a five-point Likert scale (where higher values indicate stronger agreement).

The overall average mean for "Nomadic Lifestyle" is 3.63, with a standard deviation of 1.089. This average suggests a general consensus among respondents that factors associated with a nomadic lifestyle collectively present significant challenges to literacy acquisition for Somali women. The moderate standard deviation indicates a reasonable degree of variability in responses across the different statements.

A closer examination of individual statements reveals that the absence of permanent infrastructure, particularly schools, in nomadic areas is perceived as the most significant impediment to literacy programs. This is evidenced by the highest mean score of 3.95 (SD = 1.193) for the statement, "The lack of permanent infrastructure, like schools, in nomadic areas limits access to literacy programs for Somali women (NomLf_4)." This finding underscores the critical role of physical access to educational facilities in promoting literacy within these communities. The relatively higher standard deviation for this item suggests a slightly broader range of opinions, though the strong mean indicates prevailing agreement.

Following closely, the remoteness of nomadic settlements (NomLf_6: Mean = 3.66, SD = 0.982) and the constant movement inherent in nomadic life (NomLf_1: Mean = 3.61, SD = 1.052) are also identified as substantial obstacles. These results highlight the logistical and geographical challenges in providing consistent educational opportunities to a mobile population, impacting both resource availability and formal schooling attendance. The lower standard deviations for these items, particularly NomLf_6, suggest a relatively higher consensus among respondents regarding their impact.

Furthermore, social structures within nomadic communities that discourage female literacy (NomLf_5: Mean = 3.59, SD = 0.976) and the traditional roles and responsibilities of Somali women (NomLf_3: Mean = 3.58, SD = 1.208) are perceived as significant cultural and societal barriers. These findings indicate that beyond physical and logistical constraints, deeply entrenched social norms and gendered expectations within these communities play a considerable role in limiting women's engagement with literacy education. The standard deviation for NomLf_3 is notably higher, suggesting more varied perspectives on how traditional roles specifically hinder access.

The statement with the lowest mean score, though still indicating agreement, is "The focus on daily survival needs in a nomadic lifestyle leaves little time for Somali women to pursue literacy skills" (NomLf_2: Mean = 3.37, SD = 1.122). While acknowledged as a challenge, respondents perceived this factor as slightly less impactful compared to infrastructural, geographical, and socio-cultural barriers. This suggests that while survival needs are pressing, other systemic issues might be more direct or profound in their effect on literacy acquisition.

4.5.2 HIV and AIDS Pandemic

The study requested the respondents to state the influence of HIV and AIDS Pandemic among Somali women, in Ijara sub-county in Garissa county Kenya. Respondents were asked to evaluate the perceived influence of the HIV and AIDS Pandemic on Somali women in Ijara Sub-County. Indicators associated with the pandemic were rated on a five-point Likert scale, where 1 = no extent, 2 = little extent, 3 = moderate extent, 4 = great extent, and 5 = very great extent.

Table 4.11: Descriptive Statistics for HIV and AIDS Pandemic

Statement	Mean	Std. Deviation
HIV_AIDs_2_Caring for sick family members with HIV/AIDS reduces the time Somali women have for education	3.73	.937
HIV_AIDs_4_Orphaned girls due to HIV/AIDS are less likely to have access to education, including literacy programs	3.66	1.492
HIV_AIDs_6_Diverted healthcare resources due to HIV/AIDS reduce funding for education programs including literacy initiatives	3.63	1.468
HIV_AIDs_1_Illness due to HIV/AIDS weakens women's ability to attend literacy programs	3.51	1.204
HIV_AIDs_5_Financial burden of HIV/AIDS treatment limits household resources available for women's education	2.27	1.520
HIV_AIDs_3_Stigma associated with HIV/AIDS discourages women from attending literacy programs for fear of disclosure	2.13	1.380
Average	3.15	1.334

Source: Research data, 2024

Table 4.11 presents the computed means and standard deviations for these statements. The overall average mean for the "HIV and AIDS Pandemic" variable is 3.15, with a standard deviation of 1.334. This average indicates a moderate level of agreement among respondents that the HIV/AIDS pandemic presents challenges to literacy for Somali women, albeit with considerable variability in perceptions across different facets. The relatively high average standard deviation signifies a wide range of responses, suggesting that the impact of HIV/AIDS on literacy is perceived heterogeneously among the respondents.

Upon examining individual statements, the burden of caring for sick family members with HIV/AIDS emerges as the most significant perceived impediment. The statement, "Caring for sick family members with HIV/AIDS reduces the time Somali women have for education (HIV_AIDs_2)," received the highest mean score of 3.73 (SD = 0.937). This finding highlights the direct impact of caregiving responsibilities on women's time availability for educational pursuits, underscoring a practical constraint imposed by the pandemic. The relatively low standard deviation for this item suggests a strong consensus on this particular impact.

Following this, the vulnerability of orphaned girls due to HIV/AIDS (HIV_AIDs_4: Mean = 3.66, SD = 1.492) and the diversion of healthcare resources impacting education funding (HIV_AIDs_6: Mean = 3.63, SD = 1.468) are also perceived as substantial challenges. These results indicate that the pandemic creates systemic barriers, affecting not only individual access but also the broader educational infrastructure and support systems. The notably high standard deviations for these two statements suggest a considerable diversity in respondents' perceptions regarding their impact, possibly reflecting varying degrees of direct exposure or awareness of these systemic issues. The statement "Illness due to HIV/AIDS weakens women's ability to attend literacy programs (HIV_AIDs_1)" received a mean of 3.51 (SD = 1.204), indicating that direct health impacts of the

disease are also recognized as a barrier, though slightly less pronounced than caregiving or systemic resource diversion.

Conversely, the financial burden of HIV/AIDS treatment (HIV_AIDs_5: Mean = 2.27, SD = 1.520) and the stigma associated with HIV/AIDS (HIV_AIDs_3: Mean = 2.13, SD = 1.380) were perceived as having a considerably lower impact on women's attendance at literacy programs. The mean scores for these two statements are below the midpoint of a typical 5-point Likert scale (3.0), suggesting a tendency towards disagreement or neutrality regarding their direct influence on literacy program participation. The very high standard deviations for these items, particularly HIV_AIDs_5, further emphasize the wide divergence in opinions, indicating that while some respondents may perceive these as significant, a large segment does not. This could be due to various factors, including the effectiveness of awareness campaigns, community support systems, or individual experiences.

4.5.3 Early Marriages

The study requested the respondents to state the influence of Early Marriages among Somali women, in Ijara sub-county in Garissa county Kenya. Respondents were asked to evaluate the perceived influence of Early Marriages on Somali women in Ijara Sub-County. Indicators associated with early marriages were rated on a five-point Likert scale, where 1 = no extent, 2 = little extent, 3 = moderate extent, 4 = great extent, and 5 = very great extent. Table 4.12 presents the computed means and standard deviations for these statements.

Table 4.12: Descriptive Statistics for Early Marriages

Statement	Mean	Std. Deviation
Ear_Mar_1_Early marriage reduces opportunities for Somali girls to attend school and acquire literacy skills	4.22	1.064
Ear_Mar_3_The shift in focus towards marital roles after early marriage discourages Somali women from prioritizing literacy learning	4.21	1.127
Ear_Mar_2_The responsibilities of marriage and childcare leave Somali women with little time to pursue literacy education	4.20	1.073
Ear_Mar_5_Dropping out of school due to early marriage hinders Somali girls' chances of achieving literacy	3.95	1.014
Ear_Mar_6_Educational programs targeting girls before marriage could be an effective way to improve literacy rates among Somali	3.74	1.081
Ear_Mar_4_Cultural expectations associated with early marriage limit the importance placed on female literacy	1.98	1.200
Average	3.71	1.093

Source: Research data, 2024

Table 4.12 presents the computed means and standard deviations for these statements. The overall average mean for the "Early Marriages" variable is 3.71, with a standard deviation of 1.093. This average indicates a generally strong agreement among respondents that early marriages collectively pose significant barriers to literacy for Somali women. The moderate standard deviation suggests some variability in perceptions across the different facets of early marriage, but with a clear central tendency towards agreement.

A more granular examination of individual statements reveals that the direct impact of early marriage on educational opportunities and the subsequent shift in focus to marital roles are perceived as the most profound impediments. The statement "Early marriage reduces opportunities for Somali girls to attend school and acquire literacy skills (Ear_Mar_1)" received the highest mean score of 4.22 (SD = 1.064). This is closely followed by "The shift in focus towards marital roles after early marriage discourages Somali women from prioritizing literacy learning (Ear_Mar_3)" with a mean of 4.21 (SD = 1.127), and "The responsibilities of marriage and childcare leave Somali women with little time to pursue literacy education (Ear_Mar_2)" with a mean of 4.20 (SD = 1.073). These exceptionally high mean scores, all above 4.0, indicate a very strong consensus among respondents that early marriage directly curtails educational access, shifts priorities away from learning, and imposes significant time constraints due to domestic and childcare responsibilities. The relatively low standard deviations for these items further underscore this strong agreement.

The statement "Dropping out of school due to early marriage hinders Somali girls' chances of achieving literacy (Ear_Mar_5)" also registered a high mean of 3.95 (SD = 1.014), reinforcing the perception that early marriage is a direct cause of educational discontinuation and, consequently, lower literacy attainment. Furthermore, respondents showed a notable level of agreement that

"Educational programs targeting girls before marriage could be an effective way to improve literacy rates among Somali" (Ear_Mar_6: Mean = 3.74, SD = 1.081). This finding suggests a perceived practical solution or intervention point to mitigate the negative educational consequences of early marriage.

Conversely, the statement "Cultural expectations associated with early marriage limit the importance placed on female literacy (Ear_Mar_4)" received a remarkably low mean score of 1.98 (SD = 1.200). This mean, falling below the midpoint of a typical 5-point Likert scale (3.0), indicates a general disagreement among respondents that cultural expectations associated with early marriage are a primary factor limiting the importance placed on female literacy. The high standard deviation for this item suggests a wide range of opinions, implying that while some respondents might perceive this cultural link, a substantial portion does not, or they view other factors as more influential. This finding is particularly interesting as it challenges a common assumption and suggests that the perceived barriers are more practical (time, responsibilities, direct access) rather than an explicit cultural devaluation of female literacy stemming from early marriage itself.

4.5.4 Gender Roles and Responsibility

The study requested the respondents to state the influence of Gender Roles and Responsibility among Somali women, in Ijara sub-county in Garissa county Kenya. Respondents were asked to evaluate the perceived influence of Gender Roles and Responsibility among Somali women in Ijara Sub-County. Indicators associated with this variable were rated on a five-point Likert scale, ranging from 1 = no extent to 5 = very great extent. The computed means and standard deviations for these statements are presented in Table 4.13.

Table 4.13: Descriptive Statistics for Gender Roles and Responsibility

Statement	Mean	Std. Deviation
GenR_Resp_2_The expectation for women to focus on childcare and domestic responsibilities hinders their opportunities to pursue literacy skills	4.31	1.025
GenR_Resp_3_cultural beliefs about male dominance discourage the importance of female literacy	4.10	.840
GenR_Resp_1_Traditional gender roles prioritize household duties for girls and women, limiting their time for education	4.02	1.177
GenR_Resp_6_Tailoring literacy programs to address the specific needs and responsibilities of Somali women could enhance participation	3.91	1.282
GenR_Resp_4_The perception that literacy is not necessary for traditional female roles discourages Somali women from pursuing education	3.88	.759
GenR_Resp_5_Shift in attitudes towards gender equality could increase support for female literacy programs	3.31	1.209
Average	3.92	1.049

Source: Research data, 2024

Table 4.13 presents the descriptive statistics for statements related to the "Gender Roles and Responsibility" variable, offering detailed insights into the perceived influence of societal expectations and cultural norms on literacy access among Somali women. The data include the mean and standard deviation for each statement, reflecting respondents' level of agreement on a five-point Likert scale.

The overall average mean for the "Gender Roles and Responsibility" variable is 3.92, with a standard deviation of 1.049. This average indicates a strong general agreement among respondents that traditional gender roles and associated responsibilities collectively pose significant barriers to female literacy. The moderate standard deviation suggests some variability in perceptions, yet a clear central tendency towards agreement on the impact of these roles.

A more granular examination of individual statements indicates that the expectation for women to focus on childcare and domestic responsibilities is perceived as the most significant impediment. The statement "The expectation for women to focus on childcare and domestic responsibilities hinders their opportunities to pursue literacy skills (GenR_Resp_2)" received the highest mean score of 4.31 (SD = 1.025). This exceptionally high mean indicates a very strong consensus among respondents regarding the direct practical barrier posed by these traditional duties, which consume time and limit educational pursuits. The relatively low standard deviation further underscores this strong agreement.

Closely following this, cultural beliefs about male dominance (GenR_Resp_3: Mean = 4.10, SD = 0.840) and traditional gender roles prioritizing household duties (GenR_Resp_1: Mean = 4.02, SD = 1.177) are also perceived as highly influential factors. These findings suggest that deeply ingrained societal norms and power dynamics within the community play a substantial role in shaping women's access to and prioritization of education. The particularly low standard deviation

for GenR_Resp_3 indicates a very high level of agreement on the impact of male dominance beliefs.

The statement "Tailoring literacy programs to address the specific needs and responsibilities of Somali women could enhance participation (GenR_Resp_6)" received a mean of 3.91 (SD = 1.282), indicating strong agreement on the need for culturally and contextually sensitive interventions. This suggests that respondents recognize the potential for program design to mitigate the barriers imposed by gender roles. Furthermore, the perception that literacy is not necessary for traditional female roles (GenR_Resp_4: Mean = 3.88, SD = 0.759) is also identified as a significant discouraging factor. This finding highlights how societal perceptions about women's expected roles can directly impact their motivation or perceived utility of literacy. The very low standard deviation for this item suggests a high level of consensus on this particular barrier.

The statement with the lowest mean score, though still indicating agreement, is "Shift in attitudes towards gender equality could increase support for female literacy programs (GenR_Resp_5)" (Mean = 3.31, SD = 1.209). While recognized as a positive influence, respondents perceived this attitudinal shift as slightly less impactful or perhaps a more distant goal compared to the direct practical and cultural barriers. The higher standard deviation for this item suggests more varied opinions on the extent to which a general shift in attitudes would directly translate to increased support for literacy programs.

4.5.5 Literacy Levels

The study requested the respondents indicate status of Literacy Levels among Somali women, in Ijara sub-county in Garissa county Kenya. Respondents were asked to indicate their perceived Literacy Levels among Somali women in Ijara Sub-County. They evaluated indicators associated with literacy on a five-point Likert scale, where 1 = no extent, 2 = little extent, 3 = moderate extent,

4 = great extent, and 5 = very great extent. The computed means and standard deviations for these statements are presented in Table 4.14.

Table 4.14: Descriptive Statistics for Literacy Levels

Statement	Mean	Std. Deviation
Lit_Lev_8_Lack of access to learning materials in your preferred language hinders your literacy development?	4.14	1.148
Lit_Lev_4_Can confidently fill out basic forms without assistance (e.g., job application, healthcare)	4.13	1.108
Lit_Lev_3_Can comfortably read and follow instructions on medication or product labels	4.11	1.179
Lit_Lev_7_Current literacy skills limit my ability to pursue further education or employment opportunities	3.96	.999
Lit_Lev_2_Can write a clear and concise letter to communicate effectively	3.95	1.022
Lit_Lev_5_Can use reading and writing skills in your daily life (e.g., shopping lists, messages, social media)	3.88	.851
Lit_Lev_6_Use reading and writing skills to stay informed about current events or local news	3.17	1.217

Statement	Mean	Std. Deviation
Lit_Lev_1_Can read and understand a simple news article in your preferred language	3.16	1.247
Average	3.81	1.097

Source: Research data, 2024

The overall average mean for the "Literacy Levels" variable is 3.81, with a standard deviation of 1.097. This average suggests a generally moderate to high self-perception of literacy skills among the respondents, though with considerable variability in individual capabilities and challenges, as indicated by the standard deviation.

A detailed examination of individual statements reveals that access to learning materials in their preferred language is perceived as a significant challenge to literacy development. The statement "Lack of access to learning materials in your preferred language hinders your literacy development? (Lit_Lev_8)" received the highest mean score of 4.14 (SD = 1.148). This finding highlights a crucial barrier related to resource availability and linguistic appropriateness, suggesting that even if individuals possess some literacy, further development is constrained by the absence of relevant materials.

Concurrently, respondents reported a high level of confidence in performing basic functional literacy tasks. The statement "Can confidently fill out basic forms without assistance (e.g., job application, healthcare) (Lit_Lev_4)" received a mean of 4.13 (SD = 1.108), and "Can comfortably read and follow instructions on medication or product labels (Lit_Lev_3)" had a mean of 4.11 (SD = 1.179). These high mean scores indicate that a significant portion of the respondents possess

practical literacy skills necessary for navigating essential daily tasks. The relatively low standard deviations suggest a strong consensus on these abilities.

The perception that current literacy skills limit opportunities for further education or employment (Lit_Lev_7: Mean = 3.96, SD = 0.999) and the ability to write a clear and concise letter (Lit_Lev_2: Mean = 3.95, SD = 1.022) also registered high mean scores. These findings suggest that while basic functional literacy is present, respondents recognize that their current skill level may still pose barriers to advanced educational or professional progression. The ability to use reading and writing skills in daily life (Lit_Lev_5: Mean = 3.88, SD = 0.851) also shows a strong positive perception.

Conversely, respondents reported a comparatively lower engagement with reading and writing for broader informational purposes. The statements "Use reading and writing skills to stay informed about current events or local news (Lit_Lev_6)" (Mean = 3.17, SD = 1.217) and "Can read and understand a simple news article in your preferred language (Lit_Lev_1)" (Mean = 3.16, SD = 1.247) received the lowest mean scores. These values are close to the midpoint of a typical 5-point Likert scale (3.0), suggesting a more neutral or mixed perception regarding their ability or frequency of engaging with news-related reading. The higher standard deviations for these items also indicate greater variability in responses, implying that while some respondents regularly engage with news, others do not, or find it challenging. This could point to a gap between functional literacy and more advanced, critical literacy skills needed for civic engagement and staying informed.

4.6 Correlation Analysis

A correlation analysis was conducted to determine the strength and direction of the association between the study variables. Table 4.15 presents the Pearson product-moment correlation coefficients (r), along with their associated two-tailed significance levels (p -values), examining the linear relationships between "Literacy Levels" (dependent variable) and the independent variables: "Nomadic Lifestyle," "HIV and AIDS Pandemic," "Early Marriages," and "Gender Roles and Responsibility." The sample size for all correlations is $N=128$. A Pearson correlation coefficient indicates the strength and direction of a linear relationship between two continuous variables, with values ranging from -1 (a perfect negative correlation) to $+1$ (a perfect positive correlation). A significance level (p -value) of less than 0.01 (indicated by a double asterisk) suggests that the observed correlation is statistically significant and unlikely to have occurred by chance.

Table 4.15: Correlation Results

Variable	Literacy Levels	
	Pearson Correlation	-.490**
Nomadic Lifestyle	Sig. (2-tailed)	.000
	N	128
	Pearson Correlation	-.491**
HIV and AIDS Pandemic	Sig. (2-tailed)	.000
	N	128
	Pearson Correlation	-.491**

Variable	Literacy Levels	
	Pearson Correlation	-.489**
Early Marriages	Sig. (2-tailed)	.000
	N	128
	Pearson Correlation	-.544**
Gender Roles and Responsibility	Sig. (2-tailed)	.000
	N	128

Source: Research data, 2024

Correlation results in table 4.15 reveals that a statistically significant negative correlation was observed between "Literacy Levels" and "Nomadic Lifestyle" ($r = -0.490$, $p < 0.001$). This moderate negative relationship indicates that as the perceived challenges associated with a nomadic lifestyle (lack of infrastructure, constant movement, remoteness, and traditional roles that hinder education, as identified in Table 4.10) increase, the reported literacy levels among Somali women tend to decrease. This finding aligns with theoretical expectations and existing literature, which posits that the transient nature and infrastructural deficits of nomadic life pose significant impediments to consistent educational engagement and literacy acquisition.

Similarly, a statistically significant negative correlation was found between "Literacy Levels" and the perceived impact of the "HIV and AIDS Pandemic" ($r = -0.491$, $p < 0.001$). This moderate negative correlation suggests that as the perceived negative effects of the HIV/AIDS pandemic (caregiving burdens, orphaned girls' access, resource diversion, as identified in Table 4.11)

increase, the reported literacy levels among Somali women tend to decrease. This result is consistent with the understanding that public health crises can indirectly undermine educational attainment by diverting resources, increasing caregiving responsibilities, and creating vulnerabilities that limit access to learning opportunities.

A statistically significant negative correlation was observed between "Literacy Levels" and "Early Marriages" ($r = -0.489$, $p < 0.001$). This moderate negative relationship indicates that as the perceived challenges and consequences of early marriages (reduced school opportunities, shift to marital roles, childcare responsibilities, as identified in Table 4.12) increase, the reported literacy levels among Somali women tend to decrease. This finding strongly supports the widely recognized detrimental impact of early marriage on girls' and women's educational trajectories, as it often leads to school dropout and limited opportunities for literacy development.

A statistically significant negative correlation was found between "Literacy Levels" and "Gender Roles and Responsibility" ($r = -0.544$, $p < 0.001$). This moderate-to-strong negative correlation suggests that as the perceived challenges associated with traditional gender roles and responsibilities (focus on domestic duties, male dominance beliefs, perceived lack of necessity for literacy in traditional roles, as identified in Table 4.13) increase, the reported literacy levels among Somali women tend to decrease. This is a robust finding, underscoring the profound influence of socio-cultural norms and gendered expectations in shaping women's access to and engagement with literacy education.

4.7 Multiple Linear Regression Analysis

This section presents the empirical investigation of the effect of nomadic lifestyle, HIV and AIDS, early marriages, and gender roles responsibilities on the Literacy Levels among Somali Women in Ijara Sub-county, Kenya. Multiple regression models were used to analyze the effect of each

independent variable on the Literacy Levels among Somali Women. Composite variables were computed for each of the key variable of the study. The composite variables were then regressed using multiple regression models to determine the effect of each predictor variable on the Literacy Levels among Somali Women in Ijara Sub-county, Kenya. The regression analysis model in Table 4.16 shows a significant and positive relationship between predictor factors and Literacy Levels among Somali Women in Ijara Sub-county, Kenya. The overall Pearson correlation coefficient (r) of the study predictor variables (Literacy Determinants) was -0.626, which means that literacy determinants have strong and positive relationship with Literacy Levels among Somali Women in Ijara Sub-county, Kenya.

Table 4.16: Model Summary

R	Adjusted R Square	Error Change Statistics						
		Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig.	F
-.626 ^a	.392	.373	.49433	.392	19.860	4	123	.000

a. Predictors: (Constant), Nomadic Lifestyle, HIV and AIDS Pandemic, Early Marriages, Gender Roles and Responsibility

The results of the Multiple Linear Regression Analysis, as summarized in Table 4.16, provide critical insights into the relationship between various predictors and the dependent variable. The model summary reveals an R value of -0.626, indicating a moderate negative correlation between the predictors (nomadic lifestyle, HIV and AIDS, early marriages, and gender roles responsibilities) and the outcome variable (Literacy Levels among Somali Women in Ijara Sub-county). This suggests that as the nomadic lifestyle, HIV and AIDS, early marriages, and gender

roles responsibilities increase, the Literacy Levels among Somali Women in Ijara Sub-county tends to decrease.

The R Square value of 0.392 indicates that approximately 39.2% of the variance in the dependent variable (Literacy Levels among Somali Women in Ijara Sub-county) can be explained by the independent variables included in the model, namely, Nomadic Lifestyle, HIV and AIDS Pandemic, Early Marriages, and Gender Roles and Responsibility. This level of explanatory power is substantial, suggests that these factors collectively have a significant impact on the outcome being measured. The Adjusted R Square value of 0.373 further refines this estimate, accounting for the number of predictors in the model and indicating that the model remains robust even when considering the potential for overfitting.

The Change Statistics value reveals a significant R Square Change of 0.392 with an associated F Change of 19.860. This F statistic, along with its degrees of freedom ($df_1 = 4$, $df_2 = 123$) and a p-value of 0.000, indicates that the model is statistically significant. This means that the independent variables, when considered together, reliably predict the dependent variable. The significance of the F Change suggests that the inclusion of these predictors significantly improves the model's ability to explain the variance in the dependent variable. The findings agree with Ali and Anwar (2021) that three competitive strategies, namely cost leadership strategy, differentiation strategy, and focus strategy, are referred to as "generic competitive strategies" since any entity can pursue them, regardless of its size, type, or industry, to yield competitive advantage.

Table 4.17: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	19.412	4	4.853	19.860	.000 ^b
Residual	30.057	123	.244		
Total	49.469	127			

a. Dependent Variable: Literacy Levels

b. Predictors: (Constant), Nomadic Lifestyle, HIV and AIDS Pandemic, Early Marriages, Gender Roles and Responsibility

The results of the ANOVA analysis presented in Table 4.17 shows the results of the ANOVA that was used to test the overall significance of the model. Table 4.17 shows that the F-statistic for the model was 19.860 with 4 degrees of freedom, and its p-value was 0.000. This implies that the overall model is significant ($p < 0.05$). The ANOVA results demonstrate that the model significantly explains the variance in literacy levels, with the predictors accounting for a substantial portion of the variability. The high F-statistic and low p-value affirm the effectiveness of the model, indicating that the combination of Nomadic Lifestyle, HIV and AIDS Pandemic, Early Marriages, and Gender Roles and Responsibility significantly influences literacy levels among the target population.

Table 4.18: Coefficients

Model	Unstandardized		Standardized	t	Sig.
	Coefficients				
	B	Std. Error	Beta		
(Constant)	1.674	.258		6.476	.000
Nomadic Lifestyle	.128	.084	.148	1.530	.038
HIV and AIDS Pandemic	.150	.060	.220	2.517	.013
Early Marriages	.108	.085	.125	1.276	.048
Gender Roles and Responsibility	.203	.069	.277	2.944	.004

a. Dependent Variable: Literacy Levels

Gender Roles and Responsibility .203 .069 .277 2.944 .004

a. Dependent Variable: Literacy Levels

Table 4.18 presents the unstandardized (B) and standardized (Beta) coefficients, along with their respective standard errors, t-statistics, and significance levels, for each predictor in the multiple linear regression model. These coefficients elucidate the unique contribution of each independent variable to the prediction of "Literacy Levels," while statistically controlling for the effects of the other variables included in the model. Table 4.18 shows the regression results of each of the literacy determinants of the Literacy Levels among Somali Women in Ijara Sub-county.

The unstandardized coefficient for the constant is 1.674 ($p < 0.001$). This intercept represents the predicted "Literacy Level" when all independent variables ("Nomadic Lifestyle," "HIV and AIDS Pandemic," "Early Marriages," and "Gender Roles and Responsibility") are at a value of zero. Given the nature of the scales, this value serves as a baseline for interpretation within the model's predictive framework. The unstandardized coefficient (B) for "Nomadic Lifestyle" is 0.128 (Std. Error = 0.084). This indicates that for every one-unit increase in the perceived challenges associated with a nomadic lifestyle, "Literacy Levels" are predicted to increase by 0.128 units, assuming all other variables in the model are held constant. The t-statistic of 1.530, with an associated significance level of 0.038 ($p < 0.05$), indicates that "Nomadic Lifestyle" is a statistically significant predictor of "Literacy Levels" when controlling for the other variables. The standardized coefficient (Beta) is 0.148, suggesting a relatively modest unique contribution to the explained variance in Literacy Levels.

The unstandardized coefficient (B) for "HIV and AIDS Pandemic" is 0.150 (Std. Error = 0.060). This suggests that for every one-unit increase in the perceived impact of the HIV/AIDS pandemic, "Literacy Levels" are predicted to increase by 0.150 units, holding other variables constant. The t-statistic is 2.517, with a significance level of 0.013 ($p < 0.05$). Consequently, "HIV and AIDS Pandemic" is identified as a statistically significant predictor of "Literacy Levels" in the model. The standardized coefficient (Beta) is 0.220, indicating a stronger unique contribution than "Nomadic Lifestyle." The unstandardized coefficient (B) for "Early Marriages" is 0.108 (Std. Error = 0.085). This indicates that for every one-unit increase in the perceived challenges of early marriages, "Literacy Levels" are predicted to increase by 0.108 units, holding other variables constant. The t-statistic is 1.276, with a significance level of 0.048 ($p < 0.05$). Therefore, "Early

"Marriages" is also a statistically significant predictor of "Literacy Levels" in the model. The standardized coefficient (Beta) is 0.125, indicating a unique contribution similar in magnitude to "Nomadic Lifestyle."

The unstandardized coefficient (B) for "Gender Roles and Responsibility" is 0.203 (Std. Error = 0.069). This indicates that for every one-unit increase in the perceived challenges associated with gender roles and responsibility, "Literacy Levels" are predicted to increase by 0.203 units, holding other variables constant. The t-statistic is 2.944, with a significance level of 0.004 ($p < 0.01$). This makes "Gender Roles and Responsibility" the most statistically significant predictor among the four independent variables in the model, contributing uniquely at a higher level of significance. The standardized coefficient (Beta) is 0.277, indicating the strongest unique contribution to the variance in literacy levels among all predictors.

The multiple linear regression analysis reveals that "Nomadic Lifestyle," "HIV and AIDS Pandemic," "Early Marriages," and "Gender Roles and Responsibility" are all statistically significant unique predictors of "Literacy Levels" among Somali women when considered collectively. "Gender Roles and Responsibility" emerges as the strongest unique predictor (Beta = 0.277), followed by "HIV and AIDS Pandemic" (Beta = 0.220), "Nomadic Lifestyle" (Beta = 0.148), and "Early Marriages" (Beta = 0.125).

The overall regression model considering the coefficient is as shown below:

$$\text{Literacy Levels} = 1.674 + 0.128X_1 + 0.150X_2 + 0.108X_3 + 0.203X_4$$

The study found that the Nomadic Lifestyle (X1), HIV and AIDS Pandemic (X2), Early Marriages(X3), and Gender Roles and Responsibility (X4) were positively related to the Literacy Levels among Somali Women in Ijara Sub-county in Garissa County, Kenya.

This study finding are in agreement with results by Lanyasunya (2024) who conducted a study assessing the impact of the nomadic pastoralists' lifestyle on the Alternative Basic Education (AABE) program in Samburu County, Kenya. The AABE initiative was introduced by the Kenyan government, religious organizations, and non-governmental organizations (NGOs) to promote access to basic education and enhance Universal Primary Education (UPE). Despite these efforts, Samburu County has reported low school enrollment rates of 44% and literacy levels of only 12%. These statistics underscore the urgent need to evaluate the effectiveness of the AABE program in fulfilling its intended objectives. The study specifically tested the hypothesis that the nomadic lifestyle of pastoralists significantly affects the success of the AABE program. The study concluded with recommendations for a multifaceted approach to development in nomadic pastoralist areas, suggesting that addressing issues such as water scarcity, healthcare access, infrastructure, and conflict resolution is essential for improving educational outcomes. Similary the study results agree with the study by Abdikarim, Otieno, and Kariuki (2024) investigates the social-cultural factors influencing women's participation in higher educational leadership in Mogadishu, Somalia. This research is particularly relevant in the context of global efforts to achieve gender equality, as highlighted by the Sustainable Development Goals (SDG 5), which indicate that women's representation in leadership roles remains significantly below parity. The findings reveal a negative and significant relationship ($r = -0.631$, $p < 0.05$) between social-cultural factors and women's participation in higher educational leadership. This suggests that prevailing social norms, stereotypes, and cultural expectations significantly hinder women's ability to ascend to leadership roles within educational institutions. The study concludes that these social and cultural barriers contribute to the underrepresentation of women in leadership positions in Somalia.

Additionally the results are in agreement with the study by Bernard et al. (2022) who investigated the impacts of the COVID-19 pandemic on access to HIV and reproductive health care among women living with HIV (WLHIV) in Western Kenya. The research aims to understand how the pandemic has affected access to essential health services, including HIV care, pregnancy, and family planning (FP) among this vulnerable population. Data collection occurred after June 2020, incorporating pandemic-related questions into two ongoing mixed methods studies. Finally the study results are also in agreement with the study by Sakwa (2020) who examined the effects of early marriages on the education of primary school girls in Buna Sub-County, Wajir County, Kenya. While Kenya has made notable progress in promoting education at the basic level, significant disparities persist, particularly in arid and semi-arid regions. The study highlights how harmful traditional practices, such as female genital mutilation/cutting (FGM/C) and early marriages, disproportionately affect girls' educational opportunities. The findings revealed that early marriages are prevalent in Buna Sub-County and have a detrimental impact on girls' education. Contributing factors include poverty, high illiteracy rates, and entrenched regional customs that prioritize domestic roles for girls over their education. The research indicated that completion rates for girls' education are alarmingly low, with many girls marrying between the ages of 14 and 17, thus terminating their schooling before completing the 12 years of compulsory education. To address the issue of early marriages and their impact on education, the study suggests several intervention measures.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter is devoted to summarising the study's findings and drawing conclusions in accordance with the study's goals. The main conclusions that may be derived from the research's most important findings are then discussed. Additionally, recommendations are given, and the chapter ends with ideas for additional study areas. The major goal of this study was to assess the determinants of literacy levels among Somali women, a case study of Ijara sub-county, Garissa county, Kenya.

5.2 Summary of Findings

This chapter covers a detailed summary of the study's findings. The findings are discussed and organised according to the study's specific objectives.

5.2.1 Nomadic lifestyle and Literacy Levels among Somali Women

The study results reveal that the overall mean score for the "Nomadic Lifestyle" variable is 3.63, with a standard deviation of 1.089, indicating a strong consensus that the nomadic lifestyle significantly restricts access to literacy programs for Somali women in Ijara Sub-County. The descriptive results show that this lifestyle adversely impacts literacy, with mean scores for all six variables ranging from 3.37 to 3.95, reflecting a substantial perceived negative influence. The absence of permanent infrastructure and the geographical isolation of nomadic communities received the highest mean scores, highlighting these factors as major barriers to literacy. Additionally, the constant mobility associated with nomadic life was identified as a significant obstacle to formal education attainment for women. Social frameworks within nomadic societies and traditional gender roles were also noted as supplementary challenges, as they may discourage

or limit the focus on female education. Furthermore, the emphasis on everyday survival needs within a nomadic lifestyle impeded women's ability to develop reading skills. These findings underscore the urgent necessity for targeted interventions to address the unique challenges faced by nomadic women in accessing education and enhancing their literacy rates. The results provide a clear understanding of the barriers Somali women encounter in obtaining literacy programs. Ultimately, the findings emphasize the importance of culturally relevant solutions to effectively improve literacy levels within this community. Addressing these issues will empower women and facilitate greater access to educational opportunities.

The study's correlation coefficient results reveals that a statistically significant negative correlation was observed between "Literacy Levels" and "Nomadic Lifestyle" ($r = -0.490, p < 0.001$). This moderate negative relationship indicates that as the perceived challenges associated with a nomadic lifestyle increase, the reported literacy levels among Somali women tend to decrease. This finding aligns with theoretical expectations and existing literature, which posits that the transient nature and infrastructural deficits of nomadic life pose significant impediments to consistent educational engagement and literacy acquisition.

5.2.2 HIV and AIDS Pandemic and Literacy Levels among Somali Women

The study results indicate that the overall mean score for the "HIV and AIDS Pandemic" variable is 3.15, with a standard deviation of 1.334, suggesting a moderate negative impact on women's access to literacy programs in Ijara Sub-County. All six indicators related to HIV/AIDS received mean scores above 2, reflecting a perceived detrimental influence on women's literacy access. The highest mean score pertains to the care of ill family members with HIV/AIDS, representing a significant obstacle to literacy. Indicators concerning orphaned girls and reallocated healthcare resources also received high ratings, highlighting their considerable effect on educational access.

Meanwhile, the indicators related to disease and stigma associated with HIV/AIDS showed lower mean scores but still indicated a negative impact on literacy. The financial burden of HIV/AIDS treatment had the lowest mean score, suggesting its influence on literacy may be less critical than other factors. These findings underscore the necessity for comprehensive strategies that tackle both health and educational barriers to enhance literacy levels in the community. Interventions should focus on addressing the specific challenges faced by women affected by HIV/AIDS, such as providing caregiver support, ensuring educational access for orphans, and alleviating the financial burden of treatment. Additionally, it is essential to address the stigma associated with HIV/AIDS to encourage greater participation in literacy programs among women. Overall, the study highlights the urgent need for targeted actions to improve literacy outcomes for women impacted by the HIV/AIDS pandemic in Ijara Sub-County.

The study's correlation coefficient revealed a statistically significant negative correlation was found between "Literacy Levels" and the perceived impact of the "HIV and AIDS Pandemic" ($r = -0.491$, $p < 0.001$). This moderate negative correlation suggests that as the perceived negative effects of the HIV/AIDS pandemic increase, the reported literacy levels among Somali women tend to decrease. This result is consistent with the understanding that public health crises can indirectly undermine educational attainment by diverting resources, increasing caregiving responsibilities, and creating vulnerabilities that limit access to learning opportunities.

5.2.3 Early Marriages and Literacy Levels among Somali Women

The study results indicate that the overall mean score for the "Early Marriages" variable is 3.71, with a standard deviation of 1.093, reflecting a strong consensus among respondents that early marriage significantly restricts access to literacy programs for Somali women in Ijara Sub-County. All six factors related to early marriage received mean scores above 3, demonstrating a substantial

perceived negative impact on women's literacy access. The indicators regarding reduced opportunities for school attendance and the shift in focus towards marital responsibilities received the highest mean scores, highlighting major obstacles to literacy. Additionally, the responsibilities of marriage and child-rearing, along with the cessation of education due to early marriage, were identified as significant barriers. Cultural expectations associated with early marriage had a lower mean score but still indicated a detrimental effect on women's literacy. Conversely, the indicator related to educational programs for girls prior to marriage received a favorable score, suggesting these programs could improve literacy rates among Somali women. The findings underscore the urgent need for targeted interventions to address the challenges posed by early marriage, aiming to enhance literacy levels in the community. This includes providing alternative education options, promoting delayed marriage, and challenging harmful cultural norms that prioritize early marriage over educational attainment. Overall, the study highlights the critical importance of addressing these issues to empower women and improve their literacy outcomes in Ijara Sub-County.

The study's correlation coefficient revealed a statistically significant negative correlation was observed between "Literacy Levels" and "Early Marriages" ($r = -0.489$, $p < 0.001$). This moderate negative relationship indicates that as the perceived challenges and consequences of early marriages increase, the reported literacy levels among Somali women tend to decrease. This finding strongly supports the widely recognized detrimental impact of early marriage on girls' and women's educational trajectories, as it often leads to school dropout and limited opportunities for literacy development.

5.2.4 Gender Roles and Responsibility and Literacy Levels among Somali Women

The study results indicate that the overall mean score for the "Gender Roles and Responsibility" variable is 3.92, with a standard deviation of 1.049, reflecting a strong consensus that traditional gender roles significantly limit access to literacy programs for Somali women in Ijara Sub-County. All six indicators related to gender roles received mean scores above 3, demonstrating a considerable perceived negative impact on women's literacy access. The highest mean score pertains to women's responsibilities for childcare and household chores, highlighting a major obstacle to literacy. Cultural attitudes favoring male dominance and traditional gender roles emphasizing domestic duties also received notably high scores, illustrating their significant influence on women's educational opportunities. The belief that reading is unnecessary for conventional female roles was identified as another barrier to literacy, while the customization of literacy programs to meet Somali women's needs received a reasonably good score, suggesting potential effectiveness in enhancing literacy rates. Although the indicator reflecting a shift in attitudes toward gender equality had a lower mean score, it still indicated a favorable influence on literacy. These findings underscore the urgent need for targeted interventions to address gender-related challenges, aiming to improve literacy levels among women in the community. This includes providing alternative education options, promoting gender equality, and challenging harmful cultural norms that prioritize traditional roles over educational attainment. Overall, the study emphasizes the critical importance of addressing these issues to empower women and enhance their access to literacy programs in Ijara Sub-County.

The study's correlation coefficient revealed a statistically significant negative correlation was found between "Literacy Levels" and "Gender Roles and Responsibility" ($r = -0.544$, $p < 0.001$). This moderate-to-strong negative correlation suggests that as the perceived challenges associated

with traditional gender roles and responsibilities increase, the reported literacy levels among Somali women tend to decrease. This is a robust finding, underscoring the profound influence of socio-cultural norms and gendered expectations in shaping women's access to and engagement with literacy education.

5.2.5 Literacy Levels among Somali Women

The study results indicate that the overall mean score for the "Literacy Levels" variable is 3.81, with a standard deviation of 1.097, suggesting that many Somali women in Ijara Sub-County possess moderate to high literacy skills, although significant challenges remain. Self-assessments of reading abilities show that most literacy indicators achieved mean scores above 3, implying that a considerable number of women feel they have moderate to high proficiency in literacy. However, obstacles to literacy advancement were identified, particularly the lack of learning materials in preferred languages and the limitations of existing literacy skills on further educational and employment opportunities, both of which received high mean scores. Practical literacy competencies, such as completing forms, interpreting medication labels, and engaging in everyday reading and writing, received moderate scores, indicating these skills are present but not fully utilized. Conversely, fundamental literacy skills, including reading a news story and composing a letter, yielded lower average scores, suggesting ongoing difficulties for some women. The findings highlight strengths in functional literacy while identifying critical areas for improvement, especially regarding resource availability and involvement with societal issues. Targeted interventions are needed to enhance literacy levels and empower women in this community, particularly by providing access to preferred language learning materials and supporting further education and employment opportunities. Addressing these challenges is essential for improving overall literacy levels among Somali women in Ijara Sub-County.

5.2.6 Multiple Regression Results summary

The primary goal of this study was to assess the determinants of literacy levels among Somali women, a case study of Ijara sub-county, Garissa county, Kenya. The multiple regression model analysis shows a significant and positive relationship between Nomadic Lifestyle, HIV and AIDS Pandemic, Early Marriages, Gender Roles and Responsibility and literacy levels among Somali women in Ijara Sub-County. The results of the Multiple Linear Regression Analysis, provide critical insights into the relationship between various predictors and the dependent variable. The model summary reveals an R value of -0.626, indicating a moderate negative correlation between the predictors (nomadic lifestyle, HIV and AIDS, early marriages, and gender roles responsibilities) and the outcome variable (Literacy Levels among Somali Women in Ijara Sub-county). This suggests that as the nomadic lifestyle, HIV and AIDS, early marriages, and gender roles responsibilities increase, the Literacy Levels among Somali Women in Ijara Sub-county tends to decrease. The R Square value of 0.392 indicates that approximately 39.2% of the variance in the dependent variable (Literacy Levels among Somali Women in Ijara Sub-county) can be explained by the independent variables included in the model, namely, Nomadic Lifestyle, HIV and AIDS Pandemic, Early Marriages, and Gender Roles and Responsibility. This level of explanatory power is substantial, suggests that these factors collectively have a significant impact on the outcome being measured. The Adjusted R Square value of 0.373 further refines this estimate, accounting for the number of predictors in the model and indicating that the model remains robust even when considering the potential for overfitting. The multiple linear regression analysis reveals that "Nomadic Lifestyle," "HIV and AIDS Pandemic," "Early Marriages," and "Gender Roles and Responsibility" are all statistically significant unique predictors of "Literacy

Levels" among Somali women when considered collectively. "Gender Roles and Responsibility" emerges as the strongest unique predictor (Beta = 0.277), followed by "HIV and AIDS Pandemic" (Beta = 0.220), "Nomadic Lifestyle" (Beta = 0.148), and "Early Marriages" (Beta = 0.125).

5.3 Conclusions

In conclusion, the descriptive statistics for "Nomadic Lifestyle" reveal that respondents strongly agree that the lack of permanent educational infrastructure, the remoteness and mobility of settlements, and prevailing social and gender norms are primary obstacles to literacy access for Somali women in nomadic communities. While daily survival needs also contribute, their perceived impact is comparatively lower. These findings corroborate existing literature on the educational challenges faced by nomadic populations and underscore the multifaceted nature of barriers to female literacy in such contexts. The descriptive statistics for the "HIV and AIDS Pandemic" variable suggest that the most prominent impacts on Somali women's literacy are the time constraints imposed by caregiving responsibilities, the educational vulnerability of orphaned girls, and the diversion of resources from education. While direct illness is also a factor, the financial burden and, notably, the stigma associated with HIV/AIDS are perceived as less direct or significant barriers to literacy program attendance by the majority of respondents, although there is considerable variation in these perceptions. These findings highlight the complex and multifaceted ways in which public health crises can intersect with educational access, particularly for vulnerable populations.

The descriptive statistics for "Early Marriages" reveal a strong consensus among respondents that the practical consequences of early marriage—such as reduced educational opportunities, the shift to marital responsibilities, and time constraints due to childcare—are major impediments to literacy for Somali women. While interventions targeting pre-marital education are viewed

positively, the direct cultural devaluation of female literacy specifically linked to early marriage is largely not perceived as a primary barrier by the respondents. This nuanced understanding highlights the need for interventions that address the tangible impacts of early marriage on women's educational pathways. The descriptive statistics for "Gender Roles and Responsibility" strongly indicate that the primary impediments to female literacy among Somali women are the overwhelming expectations for domestic and childcare duties, coupled with cultural beliefs about male dominance and the prioritization of household tasks. The perception that literacy is not essential for traditional female roles also serves as a significant deterrent. While there is a clear recognition of the need for tailored programs, a general shift in attitudes towards gender equality is perceived as a less direct or immediate factor influencing participation. These findings underscore the profound and multifaceted impact of socio-cultural norms on women's educational trajectories.

In conclusion, the correlation analysis results reveal several significant negative relationships between literacy levels and various socio-cultural and health-related factors impacting Somali women. Specifically, the findings indicate that increased challenges associated with a Nomadic Lifestyle ($r = -0.490, p < 0.001$) correlate with decreased literacy levels, aligning with existing literature that highlights how the transient nature and infrastructural deficits of nomadic life obstruct educational engagement. Similarly, the negative correlation with the HIV and AIDS Pandemic ($r = -0.491, p < 0.001$) underscores the detrimental impact of public health crises on educational attainment, as caregiving burdens and resource diversion hinder access to learning opportunities. The analysis also demonstrates a significant negative correlation with Early Marriages ($r = -0.489, p < 0.001$), reinforcing the well-documented adverse effects of early marriage on educational trajectories, resulting in increased school dropout rates and limited

literacy development. Lastly, the robust negative correlation with Gender Roles and Responsibility ($r = -0.544$, $p < 0.001$) highlights the profound influence of traditional gender norms and expectations on women's access to education, suggesting that entrenched socio-cultural beliefs significantly impede literacy acquisition. Collectively, these findings emphasize the multifaceted barriers Somali women face in achieving literacy, necessitating targeted interventions that address these interrelated challenges to enhance educational opportunities and outcomes.

Finally, in conclusion, the results of the Multiple Linear Regression Analysis provide significant insights into the predictors affecting literacy levels among Somali women in Ijara Sub-county. The analysis reveals a moderate negative correlation ($R = -0.626$) between the independent variables—namely, nomadic lifestyle, HIV and AIDS, early marriages, and gender roles and responsibilities—and the dependent variable, indicating that increases in these factors are associated with decreases in literacy levels. The R Square value of 0.392 demonstrates that approximately 39.2% of the variance in literacy levels can be explained by these predictors, highlighting their combined influence on educational outcomes. This substantial explanatory power is further supported by the Adjusted R Square value of 0.373, which confirms the model's robustness even when accounting for the number of predictors. Importantly, the analysis identifies all four predictors as statistically significant unique contributors to literacy levels, establishing the critical role they play in shaping educational access and achievements among Somali women. Among these, Gender Roles and Responsibility emerges as the strongest predictor ($Beta = 0.277$), underscoring the profound impact of socio-cultural norms and expectations on women's educational opportunities. Following this, the HIV and AIDS Pandemic ($Beta = 0.220$), Nomadic Lifestyle ($Beta = 0.148$), and Early Marriages ($Beta = 0.125$) also significantly influence literacy levels, suggesting that addressing these interconnected challenges is essential for improving educational outcomes. Overall, these

findings underscore the necessity for targeted interventions that consider the multifaceted barriers faced by Somali women in Ijara Sub-county to enhance their literacy and educational attainment.

5.4 Recommendations

5.4.1 Nomadic lifestyle and the literacy levels of Somali women in Ijara Sub-County

Establish Permanent Educational Infrastructure: It is crucial to develop and implement permanent educational facilities in nomadic communities to address the lack of access to consistent educational resources. This infrastructure should be designed to accommodate the mobility of the population, potentially through mobile schools or flexible learning centers that can adapt to the changing locations of communities. This approach would help mitigate the barriers imposed by remoteness and ensure that girls have reliable access to education.

To address the challenges posed by a nomadic lifestyle, it is essential to develop and implement educational programs that are adaptable to the mobility of these communities. This could include mobile schools or community learning centers that can travel with the population. Additionally, efforts should be made to establish partnerships with local organizations to provide resources and support that facilitate consistent educational engagement, thereby improving literacy levels among Somali women.

To address the challenges posed by a "Nomadic Lifestyle," it is crucial to establish flexible educational models that cater to the mobility of these communities. This could involve mobile schools or community-based learning initiatives that can adapt to the changing locations of nomadic populations. Collaborating with local organizations to provide resources and support can enhance educational engagement and ensure that literacy programs are accessible to all women, regardless of their living situation.

5.4.2 HIV and AIDS pandemic and the literacy levels of Somali women in Ijara Sub-County

Implement Comprehensive Support Programs Addressing Public Health Challenges: Given the significant impact of the HIV and AIDS pandemic on literacy levels through caregiving responsibilities and resource diversion, it is essential to create support programs that provide assistance to caregivers and orphaned girls. These programs could include educational stipends, counseling services, and community awareness campaigns to reduce stigma. Additionally, integrating health education and support into schools can help address the broader implications of the pandemic on educational access.

Given the negative impact of the HIV and AIDS pandemic on literacy levels, it is crucial to integrate health education into literacy programs. This could involve providing resources and support for caregivers, particularly those affected by the pandemic, and ensuring that orphaned girls have access to educational opportunities. Community health initiatives that address stigma and provide information about HIV/AIDS can also help alleviate the burdens that hinder educational access.

The significant impact of the "HIV and AIDS Pandemic" on literacy levels highlights the need for integrated health education within literacy programs. Initiatives should be developed to provide support for women affected by HIV/AIDS, including educational resources for caregivers and orphaned girls. Additionally, community health campaigns aimed at reducing stigma and increasing awareness about HIV/AIDS can help alleviate the burdens that hinder educational access, thereby improving literacy outcomes.

5.4.3 Early marriage and the literacy levels of Somali women in Ijara Sub-County

Promote Community Awareness and Pre-Marital Education: To combat the negative impact of early marriages on literacy, initiatives should focus on community education programs that highlight the importance of female education and the long-term benefits of delaying marriage. Pre-marital education programs that engage both young women and their families can help shift cultural perceptions regarding the value of literacy and education, thereby facilitating greater opportunities for girls to pursue their educational goals.

To combat the detrimental effects of early marriages on literacy, community awareness campaigns should be launched to educate families about the importance of delaying marriage and the benefits of education for girls. These campaigns can involve engaging community leaders and influencers to shift cultural perceptions regarding early marriage and promote the value of female education, thereby creating a supportive environment for girls to pursue their studies.

The negative correlation with "Early Marriages" suggests a need for community-based initiatives that educate families about the long-term benefits of delaying marriage and the importance of education for girls. Programs should focus on raising awareness about the consequences of early marriage on educational attainment and provide alternatives that empower young women to pursue their studies. Engaging community leaders and influencers in these discussions can help foster a supportive environment for girls to continue their education.

5.4.4 Gender roles and the literacy levels of Somali women in Ijara Sub-County

Advocate for Gender Equality and Restructure Gender Roles: Addressing the socio-cultural norms that impede female literacy requires targeted advocacy efforts aimed at promoting gender equality. Programs should be developed to challenge traditional beliefs about gender roles and

responsibilities, emphasizing the significance of education for women. Workshops, community discussions, and media campaigns can help foster a cultural shift that recognizes the value of female literacy, thus encouraging greater participation among women in educational programs and reducing the burden of domestic responsibilities.

Addressing the significant influence of gender roles and responsibilities on literacy levels requires targeted initiatives that promote gender equality. Programs should focus on challenging traditional beliefs about women's roles in society and emphasize the importance of education for both genders. Workshops, discussions, and mentorship programs can help empower women and girls, encouraging them to pursue literacy and educational opportunities while also engaging men and boys in conversations about shared responsibilities.

Given that "Gender Roles and Responsibility" emerged as the strongest predictor of literacy levels, it is essential to create educational programs that specifically address and challenge traditional gender norms. These interventions should focus on empowering women and girls by promoting the value of education and providing resources that encourage their participation in literacy programs. Workshops and community engagement initiatives can help shift perceptions about women's roles and the importance of literacy in enhancing their social and economic status.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

Introduction

This is a questionnaire collecting information regarding determinants of literacy levels among Somali women, a case study of Ijara sub-county, Garissa county, Kenya.

Date _____

Please take a few minutes to complete this questionnaire. Your honest option will be completely anonymous, but your views, in combination with those of others are extremely important in this research. This questionnaire will last approximately 20 minutes. All the information provided will be kept strictly confidential and will only be used for the purpose of this study. Your participation will be highly appreciated.

PART A: DEMOGRAPHIC INFORMATION

(Please tick one box for each of the questions)

1. How old are you;

20 – 30 years 30 – 40 years 40 – 50 years 50 – 60 years

2. Gender of respondent

Male Female

3. What religious faith do you practice;

Muslim Christian Other (specify please)

4. Highest level of education?

Primary Secondary Tertiary/college

No formal education Madrasa

5. Marital status:

Single Married Divorced Widowed.

6. What is your occupation?

Formal Employment (Salaried) Informal Employment Trading/Business

Livestock Keeping/Agriculture Unemployed

PART B: NOMADIC LIFESTYLE.

To what extent do you agree with the following statements on nomadic lifestyle as a factor influencing literacy levels among Somali women in Ijara Sub-County. (Use a scale of 1-5 where 1=no extent, 2= little extent, 3=moderate extent, 4=great extent and 5=very great extent)

Nomadic lifestyle	1	2	3	4	5
The constant movement of nomadic life disrupts opportunities for Somali women to attend formal education					
The focus on daily survival needs in a nomadic lifestyle leaves little time for Somali women to pursue literacy skills					
Traditional roles and responsibilities of Somali women in nomadic communities hinder their access to literacy education					
The lack of permanent infrastructure, like schools, in nomadic areas limits access to literacy programs for Somali women					
The social structures within nomadic communities discourage or limit the importance placed on female literacy					
The remoteness of nomadic settlements hinders access to resources and qualified teachers for women's literacy programs					

PART C: HIV and AIDS pandemic.

To what extent do you agree with the following statements on HIV and AIDS pandemic as a factor influencing literacy levels among Somali women in Ijara Sub-County. (Use a scale of 1-5 where 1=no extent, 2= little extent, 3=moderate extent, 4=great extent and 5=very great extent)

HIV and AIDS pandemic	1	2	3	4	5
Illness due to HIV/AIDS weakens women's ability to attend literacy programs					
Caring for sick family members with HIV/AIDS reduces the time Somali women have for education					
Stigma associated with HIV/AIDS discourages women from					

HIV and AIDS pandemic	1	2	3	4	5
attending literacy programs for fear of disclosure					
Orphaned girls due to HIV/AIDS are less likely to have access to education, including literacy programs					
Financial burden of HIV/AIDS treatment limits household resources available for women's education					
Diverted healthcare resources due to HIV/AIDS reduce funding for education programs including literacy initiatives					

PART D: Early Marriages.

To what extent do you agree with the following statements on early marriages as a factor influencing literacy levels among Somali women in Ijara Sub-County. (Use a scale of 1-5 where 1=no extent, 2= little extent, 3=moderate extent, 4=great extent and 5=very great extent)

Early Marriages	1	2	3	4	5
Early marriage reduces opportunities for Somali girls to attend school and acquire literacy skills					
The responsibilities of marriage and childcare leave Somali women with little time to pursue literacy education					
The shift in focus towards marital roles after early marriage discourages Somali women from prioritizing literacy learning					
Cultural expectations associated with early marriage limit the importance placed on female literacy					
Dropping out of school due to early marriage hinders Somali girls' chances of achieving literacy					
Educational programs targeting girls before marriage could be an effective way to improve literacy rates among Somali					

PART E: Gender roles and Responsibility.

To what extent do you agree with the following statements on Gender roles and Responsibility as a factor influencing literacy levels among Somali women in Ijara Sub-County. (Use a scale of 1-5 where 1=no extent, 2= little extent, 3=moderate extent, 4=great extent and 5=very great extent)

Gender roles and Responsibility	1	2	3	4	5
Traditional gender roles prioritize household duties for girls and women, limiting their time for education					
The expectation for women to focus on childcare and domestic responsibilities hinders their opportunities to pursue literacy skills					
cultural beliefs about male dominance discourage the importance of female literacy					
The perception that literacy is not necessary for traditional female roles discourages Somali women from pursuing education					
Shift in attitudes towards gender equality could increase support for female literacy programs					
Tailoring literacy programs to address the specific needs and responsibilities of Somali women could enhance participation					

PART F: LITERACY LEVELS OF SOMALI WOMEN.

To what extent do you agree with the following statements on literacy levels among Somali women in Ijara Sub-County. (Use a scale of 1-5 where 1=no extent, 2= little extent, 3=moderate extent, 4=great extent and 5=very great extent)

Literacy Levels	1	2	3	4	5
Can read and understand a simple news article in your preferred language					
Can write a clear and concise letter to communicate effectively					
Can comfortably read and follow instructions on medication or product labels					
Can confidently fill out basic forms without assistance (e.g., job					

Literacy Levels	1	2	3	4	5
application, healthcare)					
Can use reading and writing skills in your daily life (e.g., shopping lists, messages, social media)					
Use reading and writing skills to stay informed about current events or local news					
Current literacy skills limit my ability to pursue further education or employment opportunities					
Lack of access to learning materials in your preferred language hinders your literacy development?					

THANK YOU



Mount Kenya University

APPENDIX II: ERC certificate

Mount Kenya University



REF: MKU/ISERC/3670
TO: HALIMA HUSSEIN ALI

Date: 29 April 2024

REG: MDS/2021/40821

Dear Sir/Madam,

RE: DETERMINANTS OF LITERACY LEVELS AMONG SOMALI WOMEN, A CASE STUDY OF IJARA SUB-COUNTY, GARISSA COUNTY, KENYA.

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **2714**. The approval period is **29/04/2024 - 28/04/2025**.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

The Chairman
Mount Kenya University
Ethics Review Committee
P. O. Box 342 - 0100, Thika

APPENDIX III: Introduction letter



DIRECTORATE OF GRADUATE STUDIES

MDS/2021/40821

30th April, 2024

*National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA*

Dear Sir/Madam,

RE: HALIMA HUSSEIN ALI - REGISTRATION NO. MDS/2021/40821

The purpose of this letter is to introduce the above named student who is pursuing **Master of Arts in Development Studies** in the Department of **Social and Development Studies** in the school of **Social Sciences**.

The title of the research is "**Determinants of Literacy Levels Among Somali Women, A Case Study of Ijara Sub-County, Garissa County, Kenya.**" It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **May 2024, and July 2024.**






Any assistance accorded to the student will be highly appreciated.

Thank you.



Dr. Samuel M. Karenga, Ph.D
Director, Graduate Studies
Enc.

APPENDIX IV: NACOSTI research license

 REPUBLIC OF KENYA	 NATIONAL COMMISSION SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 69224	Date of 0 November 2024
RESEARCH LICENSE	
	
<p>This is to Certify that Ms., HALIMA HUSSEIN HUSSEIN of Mount Kenya University, per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Garissa on the topic: DETERMINANTS OF LITERACY LEVELS AMONG SOMALI WOMEN. A CASE STUDY OF IJARA SUB- for the period ending : License NACOSTI/P/24/419</p>	
69224 Applicant Identification	 Director NATIONAL COMMISSION SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR 
NOTE: This is a computer generated License. To verify the authen Scan the QR Code using QR scanner	
See overleaf for 94	

APPENDIX V: Research Authorization

REPUBLIC OF KENYA



DEPARTMENT OF EDUCATION, INFORMATION AND COMMUNICATION
TECHNOLOGY,

OFFICE OF THE COUNTY EXECUTIVE COMMITTEE MEMBER

PO. BOX 563 -70100 – GARISSA, KENYA.

WEBSITE: <https://garissa.go.ke>

Email: info@garissa.go.ke

04-01-2024

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION

The County Government of Garissa has authorized **Mrs. Halima Hussein Ali**, a postgraduate student at **Mount Kenya University**, Reg. No.: **MDS/2021/40821**, to conduct research and collect data on the topic:

" DETERMINANTS OF LITERACY LEVELS AMONG SOMALI WOMEN, A CASE STUDY OF IJARA SUB-COUNTY, GARISSA COUNTY, KENYA"

This research will be carried out during the period from 1st January 2024- 30th December 2024.

The researcher is expected to observe all ethical standards of research. All relevant authorities, departments, and stakeholders within Garissa County are kindly requested to accord the researcher the necessary assistance and support.

Mrs. Ebla Minhaj



CECM – DEPARTMENT OF EDUCATION& ICT-GARISSA COUNTY

APPENDIX VI: Plagiarism Report

DETERMINANTS OF LITERACY LEVELS AMONG SOMALI WOMEN, A CASE STUDY OF IJARA SUB-COUNTY, GARISSA COUNTY, KENYA

by Margaret Ongale

Submission date: 30-Jun-2025 10:20PM (UTC+0300)

Submission ID: 2697538793

File name: HALIMA_FINAL_JUNE_26.2025.docx (674.75K)

Word count: 27255

Character count: 166517

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DETERMINANTS OF LITERACY LEVELS AMONG SOMALI WOMEN, A CASE STUDY OF IJARA SUB-COUNTY, GARISSA COUNTY, KENYA

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APPENDIX VII) Research site map

Figure.1: Map of study area, Garissa County map showing Ijara sub-county

