DETERMINANTS OF STUDENTS' SELECTION OF HOMESCIENCE IN PUBLIC SECONDARY SCHOOLS IN MUMIAS SUB COUNTY, KENYA

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DECLARATION AND APPROVAL

DECLARATION

I declare that this Thesis is my original work and has not been presented to any other university or any exam body for award of any degree.

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DEDICATION

I dedicate this work to my Mum Valentine Makokha and Late Dad Ambassador Joseph Sefu for motivating me to go a step higher with my formal education. Without you, I wouldn't have engaged in this challenging but fulfilling endeavour.

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I thank the Almighty God for the far much He has taken me. This achievement has been a success due to His mercy and protection in the entire course. Secondly, I take this opportunity to thank my family members for being patient with me as I sat for long hours compiling this report. I'm grateful to my supervisors Dr. Sammy Mutisya and Dr. Augustine Muchiri Kara for bestowing me high range advice and guidance in the entire process. I will also not forget other lecturers from Maasai Mara University who offered their time and resources to make sure that the course was successful. I also acknowledge the principals, teachers and students who participated in the study. The research would not be complete without you. Thank you all and may the almighty God bless you copiously.

ABSTRACT

Home Science as a subject has been given emphasis in the Kenya's Basic Education Curriculum Framework. It has been identified as one of the core subjects to be taught in Junior Secondary School. However, there has been low numbers of students selecting Home Science in public Secondary Schools. This trend is also evident in Mumias Sub-County. The study therefore sought to investigate the determinants of students' selection of Home Science in public Secondary Schools in Mumias Sub-County. The objectives of the study were to: Investigate the relationship between gender related perceptions and students' selection of Home Science; examine the relationship between students' attitude towards Home Science and students' selection of Home Science; determine the relationship between students' awareness of Home Science related career opportunities and students' selection of Home Science subject; establish the relationship between availability and adequacy of Home Science teaching resources at school and students' selection of Home Science subject in public Secondary Schools in Mumias Sub-County. The study adopted a descriptive survey research design. The study population was 761 form three students from five (5) schools offering Home Science subject. A stratified random sampling procedure was used to select 268 students from the five schools. Data were collected using a questionnaire for the students and interview guides for the principals and Home Science teachers. A pilot study was conducted in two (2) schools in Kakamega Central Sub-County with a sample of 50 form three students out of which 25 were students taking Home Science and 25 students who did not chose the subject. Data was analyzed using descriptive of frequency, percent, mean and standard deviation. Chi Square tests was used to test hypotheses at $p<.05$. The analysis was aided by Statistical Package for the Social Science (SPSS) version 28.0. The study found that there is a statistically significant relationship between students' gender related perceptions [x^2 (2, n = 263) = 12.501, p= .002], students' attitude towards Home Science [x^2 (2, n = 263) = 6.121, p= .047] and students' selection of Home Science subject. However, there is no statistically significant relationship between students' awareness of Home Science related career opportunities [(2, n = 263) = 4.395, p= .111], availability and adequacy of Home Science teaching resources [x^2 (1, n = 263) = .249, p= .618] and students' selection of Home Science. The study concluded that gender related perceptions and students' attitude towards Home Science were important predictors of students' selection of Home Science subject in public Secondary Schools in Mumias Sub-County. The study recommends sensitizing the learners, educators and community members about the importance of Home Science in the households and the community as a strategy to eradicating gender stereotypes on the subject. This would likely contribute towards students having a positive attitude towards Home Science. Teachers may use the findings to develop strategies to improve students' attitudes towards Home Science. Students may use the findings to make informed decisions about their choice of subjects. Policy makers may use the findings to inform the development of policies that promote the teaching and learning of Home Science. The community may use the findings to advocate for the importance of Home Science education.

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LIST OF ABBREVIATIONS AND ACRONYMS

CBC	Competency Based Curriculum
NS	Not Sure
SA	Strongly Agree
SD	Standard Deviation
SPSS	Statistical Package for Social Sciences
NACOSTI	National Council for Science, Technology, and Innovation
SQ	Student Questionnaire
IEBC	Independent Electoral and Boundaries Commission
SLT	Social Learning Theory
KCSE	Kenya Certificate of Secondary Education
KICD	Kenya Institute of Curriculum Development
KNEC	Kenya National Examinations Council
NESP	National Education Sector Plan

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Home Science, also known as Home Economics, is an interdisciplinary field of study that focuses on the scientific and systematic approach to home management. The instructional content covered include food, nutrition, healthy lifestyle, dietetics, textiles and clothing, home, consumption, personal and family economics, the person's and family's progress, and design and technology (Erjavšek, 2021). Ode (2013) points out that Home Science draws knowledge from disciplines such as Biology, Physics, Social Science, Humanities and Arts. The knowledge is unified to facilitate learners to acquire vital skills that are needed for a fulfilling life and sustainable development in the 21st Century. It is also a foundation subject for learners who want to pursue careers in health education, foods and nutrition, home management, costume and fashion design or culinary arts amongst others (Sempele, 2019).

Home Science is regarded as a technical and applied subject that provides prevocational skills that are immediately relevant to the workplace and at home (Nyangara et al., 2013; RoK, 2003; Serem, 2016). Indeed, if Home Science as vocational subject can be effectively delivered, learners would acquire practical skills and attitudes necessary for enterprise creation among graduates. Erjavšek (2021) also asserts that Home Science enables the learner to acquire knowledge which they can transfer to theoretical and practical situations. It empowers individuals and families for their well-being and enables future generations to manage global social challenges.

According to Phiri and Kanyati (2021), the provision of Home Science education at all levels of education has lifelong benefits to the families and for sustainable social and economic development. Some countries offer Home Science all the way through the university level. In Nigeria, Home Economics is offered to both male and female learners in Junior and Senior Public Secondary Schools. It is also available at the tertiary and university levels. In Ghana and Tanzania, the subject is taught from elementary school through college (Ma & Pendergast, 2017).

Despite the documented importance of Home Science education, educators, students and the society in general perceive the subject as having low status often leading to low enrolment (Ma & Pendergast, 2011; George; 2018; Trumper, 2016). George (2018), Hausser and Hoffmann (2014) and Trumper (2016) observe that students' interest in Home Science tend to be low compared to other subjects. The same trend has been reported in studies in New Zealand, Australia and United Kingdom. In these countries, the low selection of Home Science by students was attributed to lack of role models, lack of adequate training resources and high cost of education resources for teaching the subject (Bolstad & Hipkins, 2015; Vaidya, 2015; Smither & Robinson, 2015; Dakkers & De-Laeter, 2016). Home Science being a technical subject practical subject applies experiential learning approaches in authentic environments hence the high cost of education resources.

Studies by Crawley and Black (2015), Lyons (2015), Nahashon (2013), and Cleaves (2015) indicate that teachers wield some motivation over students' choices to select Home Science subject since they provided career information. This assertion underscores the importance of mentors in selection of Home Science subject. The low number of

students selecting Home Science could be associated with limited number of role models at community and school to mentor students and demystify the gender stereotyping of Home Science. Meighan (2013) observes that there were few career guidance instructors qualified to provide career guidance to students at secondary school level.

Positive attitude by learners is associated with increased interest and enjoyment of technical subjects (Miller et al., 2019). Student mentorship in Home Science should therefore target spurring interest towards the subject. Learners should be exposed to the value of Home Science subject including learning experiences that expose learners to authentic skills for application in health education, food and nutrition, home management, costume and fashion design, culinary arts among others (Kenya Institute of Curriculum Development [KICD], 2017; National Education Sector Plan [NESP], 2015).

Uwameiye (2015) study in Nigeria found that Home Science teachers did not have the requisite teaching methods for Home Economics. The teachers did not encourage, support and provide individualized learning. This made the students develop negative attitude towards the subject because they found the subject unattractive. The study also found that home economics laboratories were under resourced, poorly maintained, and students had to bring equipment from home for Home Science practicals. Ankoma-Sey et. al. (2019) research in Ghana found that that factors which significantly influenced senior high school students' decision to enroll in Home Economics programme were interest, job prospects, influence from fathers, teachers, relatives and perceived workload. Factors such as gender, desire to be an entrepreneur, mothers and friends did not influence students' decision to enroll in the programme.

In Kenya, Home Science is an applied and integrated science subject that is taught in Secondary Schools as an optional subject. The National Education Sector Plan [NESP] (2015) demonstrated that Home Science has the best learning activities for exposing a learner's skills in the fields of health education, food and nutrition, home management, costume and fashion design, and culinary arts, among others (Kenya Institute of Curriculum Development [KICD], 2017). According to a needs assessment survey conducted by KICD, Home Science should be emphasized and made mandatory in the revised curriculum (KICD, 2017).

The Kenya's Basic Education Curriculum framework has incorporated Home Science as a compulsory subject in primary schools. It is an optional subject from lower secondary school based on personality, abilities, interests and career choices of the learner (KICD, 2017). Mugambi and Matula (2016) argue that the significance of Home Science cannot be emphasized enough. Learners are expected to develop competencies in caring for self and family, food nutrition, clothing, housing the family, home-based care, laundry labor, maternal child health care, and consumer education through the study of Home Science. KICD (2017) emphasizes further that Home Science is a foundational subject for high school students interested in health education, foods and nutrition, home administration, consumer education, and fashion and design. Consequently, a clear comprehension of the factors that influence students' selection of Home Science would go a long way toward mitigating the difficulties currently associated with student enrollment in Home Science.

Despite an annual increase in the number of students enrolling in secondary school in Kenya, the number of students choosing Home Science has remained low throughout the years. According to a report by the Kenya National Examination Council (2020), the

proportion of candidates taking Home Science in 2017, 2018, and 2019 was 9.01%, 8.93%, and 8.55%, respectively. Obonyo's (2011) study on the educational and career expectations of form three girls at Nyabururu and Kereri public Secondary Schools in Kisii Central Sub-county revealed that teachers do not adequately inform students about the career opportunities available to those who choose to major in Home Science. Similarly, Mutua (2012) found that there were few career guidance sessions in institutions in Kitui District. However, Meighan (2013) asserts that there are few career guidance instructors who are qualified to provide students with career advice. Mukire (2023) study found that gender roles are a major contributor to low enrolment rates in home science in public secondary schools in Pokot Central Sub-County. In Mumias Sub-County, data from Kakamega County Education Office show that between the years 2016 to 2020, very few students select Home Science in public Secondary Schools as compared to those selecting other subjects in the same cluster as summarized on Table 1.

Table 1

Enrolment of Students in Technical and Applied Subjects in Mumias Sub-County

Year	Computer	Business studies	Home Science	Agriculture	Total
2016	86 (5.1%)	827 (49%)	60 (3.6%)	716 (42.4%)	1,689
2017	57 (3.1%)	842 (46.3%)	59 (3.3%)	854 (47.3%)	1,812
2018	107 (5%)	957 (44.4%)	62 (2.9%)	1031 (47.8%)	2,157
2019	140 (7.1%)	874 (44.3%)	79 (4.0%)	882 (44.7%)	1,975
2020	172 (8.2%)	865 (41.4%)	80 (3.8%)	973 (46.5%)	2,090
Total	**562**	**4365**	**340**	**3574**	

Source: Kenya National Examinations Council (2020)

According to the data presented on Table 1, Home Science exhibits a comparatively lower rate of enrolment when compared to other subjects within the same cluster. The identification and proactive resolution of issues influencing the selection of Home Science is crucial due to the significant role that Home Science plays in fostering economic development and societal welfare. The aforementioned factors may continue to influence students' selection of Home science within the framework of the recently implemented Competence Based Curriculum (CBC). It is imperative to gain a comprehensive understanding of the variables that influence students' preference for the subject with the ultimate aim developing effective interventions aimed at promoting students' enrolment in Home Science.

1.2 Statement of the Problem

Technical and applied subjects like Home Science are of paramount importance for fostering economic growth and facilitating numerous jobs, particularly in impoverished nations. The primary aim of Home Science is to provide students with fundamental competencies in self-reliance and applied domains, encompassing culinary arts, household management, and textile craftsmanship. Despite the increasing significance of Home Science, there exists a notable deficiency in student enrolment for this subject in public secondary schools in Mumias Sub-County. However, a definitive explanation for the underlying factors contributing to the low enrolment rates in the field of Home Science remains elusive. In light of the prominent position of Home Science in the new Competence Based Curriculum (CBC), it is imperative to promptly identify and address factors that impact students' choice of subjects for timely and decisive intervention. Students' gender related perceptions, attitude towards the subject, awareness of career

opportunities related to the subject and resources devoted to the teaching of Home Science could be influencing students' choice of the subject in the study area. This study therefore sought to determine the interplay between the aforementioned factors and students' selection of Home Science subject in public secondary schools within Mumias Sub-County of Kenya.

1.3 Purpose of the Study

The purpose of this study was to establish the extent to which students' gender related perceptions, attitude towards the subject, awareness of career opportunities related to the subject and resources devoted to the teaching of Home Science could be influencing students' choice of the subject in public secondary schools in Mumias Sub-County, Kenya.

1.4 Objectives of the Study

This study was guided by the following objectives:

1. To investigate the relationship between students' gender related perceptions towards Home Science and students' selection of Home Science subject in public secondary schools in Mumias Sub-County.
2. To examine the relationship between students' attitude towards Home Science and students' selection of Home Science subject in public secondary schools in Mumias Sub-County.
3. To determine the relationship between students' awareness of Home Science related career opportunities and students' selection of Home Science subject in public secondary schools in Mumias Sub-County.

4. To establish the relationship between availability and adequacy of Home Science teaching resources in schools and students' selection of Home Science in public secondary schools in Mumias Sub-County.

1.5 Null Hypothesis

In order to respond to the objectives of the study, the following hypotheses were formulated and tested at $p<.05$.

H_{O1}: There is no statistically significant relationship between students' gender related perceptions towards Home Science and students' selection of Home Science subject in public secondary schools in Mumias Sub-County

H_{O2}: There is no statistically significant relationship between students' attitude towards Home Science and students' selection of Home Science Subject in public secondary schools in Mumias Sub-County

$H_{O}3$: There is no statistically significant relationship between students' awareness of Home Science related career opportunities and students' selection of Home Science subject in public secondary schools in Mumias Sub-County

$H_{O}4$: There is no statistically significant relationship between availability and adequacy of Home Science teaching resources in schools and students' selection of Home Science in public secondary schools in Mumias Sub-County.

1.6 Significance of the Study

This study has several significant implications for education policymakers, school administrators, and teachers. Firstly, the findings on the influence of gender related perceptions on students' selection of Home Science may provide insights into the gender

disparities in subject selection and help educators to develop strategies to promote gender equity in subject choices. Secondly, the study's examination of students' attitudes towards Home Science may highlight the importance of fostering positive attitudes towards the subject to promote its uptake. Thirdly, the investigation on the influence of awareness of Home Science-related career opportunities may enable educators to identify strategies for increasing students' awareness of potential careers in Home Science-related fields. The study's findings on the influence of the availability and adequacy of Home Science teaching resources may provide insights into the importance of investing in teaching resources to enhance the quality of Home Science education and promote student interest in the subject. Overall, this study's results will provide valuable information that may be used to improve the quality of Home Science education and increase student interest and uptake of the subject in public Secondary Schools in Kenya. The findings may also motivate researchers in the field of curriculum and instruction to carry out more research in areas relating to selection of Home Science subject in post primary institutions within and outside Mumias sub-county.

1.7 Scope of the Study

The objective of this study was to gain insight into the factors influencing the selection of Home Science as the primary field of study among students in public secondary schools within Mumias Sub-County. This study exclusively examined four factors in subject selection: Students' gender related perspectives on Home Science as an academic discipline, students' attitude towards the subject, students' thoughts regarding the professional prospects associated with pursuing a career in Home Science and availability and adequacy of teaching resources devoted to the subject. The study only focused on

students and teachers of Home Science education, specifically those who actively engage in teaching the subject. Home Science courses are offered by both public and private secondary schools. The scope of this study was limited to public secondary schools within the Mumias sub-county of Kenya. This specific selection was made due to the presence of distinct observable characteristics among these schools such as funding, posting of teachers by the Teachers' Service Commission, and similar administrative structure which allows for the generalizability of the findings.

1.8 Limitations of the Study

Throughout the course of its implementation, the study encountered the subsequent constraints:

i. The study's findings on students' attitudes towards Home Science may be subject to self-report bias, where students may not give honest or accurate responses due to social desirability bias or other factors. The researcher explained to the learners the importance of honesty and its implication to the study.

ii. The study's findings may not be generalizable to other regions or populations beyond Mumias sub-county, as the study only focused on one specific area. This is because the findings of the study may not be the same in other parts of the country beyond Mumias Sub County.

iii. Some respondents were unwilling to provide all of the requested information during data collection out of dread of being victimized. This limitation was surmounted by assuring the respondents' anonymity throughout the research. In

addition, respondents were not required to provide their identities in the data collection instruments.

1.9 Assumptions of the Study

The study was based on the following assumptions:

1. That the respondents gave correct information at all times
2. That the respondents gave truthful representation of their views.
3. That the respondents interpreted the questions correctly.

1.10 Definition of Terms

Students' Attitude: This refers to the mental predispositions of liking or disliking Home Science.

Home Science: This is the study of home management and encompasses the study of foods and nutrition, laundry work, clothing construction processes, maternal child healthcare, home based care, household management and consumer education. Home Science may also be referred to as Home Science.

Home Science related career opportunities: For purposes of this study, it refers to student's knowledge of work opportunities ability that may arise from their knowledge of Home Science subject

Gender perceptions: These are socio-societal differences in regard to different roles for boys and girls in the community and how they shape decisions in the selection of Home Science Subject by boys' and girls' students in Secondary Schools

Teaching and Learning resources: Refer to resources including buildings, teachers, materials and equipment made available to support learning activities during Home Science.

Subject Selection: Refers to students' choice of Home Science Subject.

Perceived Determinants of Subject Selection: The factors that students believe influence their choice of subjects to study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section encompasses a comprehensive analysis of relevant previous studies, a concise summary of the literature under investigation, and a detailed discussion on the theoretical and conceptual underpinnings. Moreover, it identifies any shortcomings within the current body of knowledge.

2.2 Gender Perceptions and students' Selection of Home Science

The systemic indoctrination of gender norms and social inequalities during the nineteenth and twentieth centuries was facilitated by various factors, including textbooks, role models, and the development, management, and execution of curriculum (Mullally, 2013). Before examining the impact of Home Science education on the perpetuation of these practices, it is imperative to go into their origins and analyse their underlying foundations. The examination of gender identity within the realm of Home Science education can be approached through multiple theoretical perspectives, such as feminism, sociology, and psychology (Mullally, 2013). In accordance with Fiske's (2015) assertion, which is grounded in the aforementioned ideas, it may be posited that the culture of a particular group of individuals is derived from their collective social encounters and the interpretations they derive from their social connections.

The social structure not only serves as a contextual framework for these understandings, but it also undergoes evolutionary changes based on the interpretations and attributions made by individuals. The cultural interpretations of "meanings" have a significant

influence on social hierarchies. In accordance with the assertions made by Fiske (2015), the stability or instability of power dynamics is influenced by individuals' interpretations, with cultural influences playing a substantial role in the perpetuation of power imbalances within society. Furthermore, as highlighted by Taylor (2019), cultural processes possess an intrinsic dynamism due to the active role individuals play in changing the social structure. According to Taylor (2019), the many interpretations presented are grounded on a fluid ideological framework that is developed over multiple tiers. Moreover, Taylor argues that distinct social collectives maintain distinct yet strongly ingrained gender standards. The author recognises the presence of discourses and ideologies within a dynamic ideological realm, but argues that ideologies possess greater comprehensiveness and coherence in their collection of meanings. The perception and societal norms surrounding gender roles and expectations exhibit variability throughout time and across diverse cultural contexts.

According to the speaker, androcentrism is grounded in factual occurrences depicted in the Bible. Bem (2013) refers to the concept of "androcentrism" as the belief in the intrinsic superiority of men, commonly known as "male centeredness." In the past, the term "man" connoted a belief in the intrinsic superiority of males over females within the same species. The underlying factors contributing to the ongoing subordination of women can be attributed to the concept of 'gender order' and the historical power dynamics between sexes. Macionis and Plummer (2018) assert that patriarchy is a societal structure characterised by male dominance, oppression, and exploitation of women.

Macionis and Plummer (2016) argue that social constructions of gender norms play a crucial role in shaping societal perceptions of masculinity and femininity, ultimately

resulting in the establishment of power dynamics within social structures, as experienced by individuals of both genders. These experiences have a significant influence on the evolution of society. The extent of Home Science's impact on women's lives is uncertain, despite assertions suggesting its potential role in perpetuating domestic servitude among young girls. The formation of learners' initial perceptions of gender roles is influenced by various institutions, including family, media, schools, and curricula. Tovey and Share (2013) assert that a significant number of scholars have historically linked educational institutions to the perpetuation of cultural norms, the reinforcement of gender roles, and the unequal socialization of male and female students.

Hannon et al. (2009) conducted an analysis to examine the cultural elements that might contribute to the gender disparity in academic topic preferences. The study aimed to discover the underlying causes that contribute to the distinct interests observed between men and women. The theory posits that the variations in students' interests across courses based on gender can be attributed to deeply ingrained societal sex roles, cultural assumptions prevalent in educational settings, and the early experiences of pupils with regard to learning and socialization. According to the SEC (2013), the proportion of male students participating in Home Science courses at the junior certificate level was 15% in 2013, while at the leaving certificate level, it was 12%. These numerical findings indicate a potential lack of significant advancements within the business since that time. The findings highlight significant concerns pertaining to the decline in male enrolment in Home Science classes and the potential implications of this trend for future developments.

Insufficient data exists regarding the proportion of male individuals enrolled in Home Science courses. According to Attar's study conducted in 1990, it was observed that men exhibited a greater inclination towards Home Science compared to females, primarily due to their perception that it would enhance their culinary skills. The instructor determined that male students are less likely to perform well or exhibit significant engagement with the issue, potentially due to the drive to fulfil adolescent appetites, as compared to their female counterparts. According to Wynn (2009), the presence of a gender disparity within the field of Home Science may serve as a deterrent for boys who are considering studying this discipline. The individual asserts that despite being a mandatory subject, Home Science continues to be plagued by persistent misconceptions. Students are often subjected to the formation of stereotypes as a consequence of the implicit teachings conveyed by these notions. The author further asserts that educators exhibit either a lack of knowledge or possess inaccurate information regarding modifications to the curriculum. These viewpoints demonstrate a deficiency in comprehending the potential benefits of home scientific education.

According to Kimani (2008), the level of Home Science education in Kenyan public secondary schools is lamentable, with both teachers and students displaying minimal regard for the topic. Research suggests that male students exhibit a lower propensity to select Home Science as their major, mostly influenced by prevailing preconceived notions associated with this academic discipline. According to Scotts (2009), there exists a prevailing belief among individuals, both within and outside the field, which home scientific education mostly caters to males. This underscores the need of drawing

attention to the fact that the field of Home Science holds considerable advantages for both genders.

According to the findings of Christidiou (2016), it was observed that female students in the ninth grade in Greece exhibited a higher level of familiarity with technical tools utilised in the exploration of subjects such as cookery, crafts, and nature. Additionally, these students displayed a greater inclination towards topics related to human biology, health, and physical fitness. Dalgety and Coll (2014) assert that, apart from the influence of friends and family, teachers also have a significant impact on students' decision to enrol. According to a study conducted by Mapfumo et al. (2012), the fields of engineering, building, electrical work, carpentry, management, security, welding, mining, and transportation in Zimbabwe have historically been predominantly occupied by males. Various job fields such as housekeeping, administration, medical, design, cuisine, education, and others are all feasible options for women. There was a significant positive correlation ($r = 0.95$) observed between the alignment of boys' and girls' perspectives on occupations typically associated with femininity and masculinity. Evans (2006) posits that women place a higher degree of importance on social interactions and collaboration compared to men. In contrast, it has been shown that men have a greater inclination towards valuing leadership, authority, and financial remuneration in the workplace, as compared to women.

2.3 Students' Attitude Towards Home Science and Selection of Home Science Subject

Academics may exhibit either a favourable or unfavourable disposition towards a particular subject, contingent upon their own inclinations. Serem (2011) defines attitudes

as affective states characterised by individuals' emotional responses towards objects or individuals, encompassing inclinations or aversions towards those entities. The prevailing viewpoint suggests that a significant number of students would opt to abstain from attending a class altogether in the event of harbouring strong negative sentiments towards the subject matter. There are others who argue that rendering the subject optional would further accentuate this phenomenon. Conversely, when students adopt a positive attitude towards the subject, they are more inclined to develop a sense of affinity towards it, so rendering it a conspicuous choice. Oriahi et al. (2012) share a common perspective.

According to the research conducted by Young et al. (1997), individuals exhibited a higher inclination towards pursuing careers in STEM subjects when they possessed a strong sense of self-efficacy in these domains. According to a study conducted by De Almeida et al. (1998), individuals with high levels of intelligence tended to gravitate towards careers in the fields of science and engineering. According to the survey findings, those who identified as engineers expressed intentions to enhance their level of autonomy in the next period. The impetus for conducting this study originated from the observed phenomenon of low student enrolment rates and the notable absence of Home Science courses within educational institutions. Consequently, the objective of this study was to evaluate the participants' perspectives on Home Science as a scholarly field.

According to Serem (2011), a significant number of students expressed interest in Home Science due to the diverse range of themes it encompasses. The majority of respondents (47.2%) expressed a desire to acquire knowledge in the field of foods and nutrition. A significant proportion of respondents (21%) indicated their interest in gaining knowledge related to house management. A smaller percentage of respondents (3%) expressed a

desire to expand their understanding of clothes and textiles. There were two primary factors that contributed to their positive reception of the subject matter of Clothing & Textiles: its comprehensibility and their personal affinity for the learning experience. In a study conducted by Risser and Laskin (1996), an investigation was undertaken to examine the factors that captured the attention of women in a certain academic discipline. However, their fervour and enthusiasm for the subject they choose were evident. Additionally, a study conducted by Kerka (2003) suggests that the professional performance of individuals is influenced to a considerable extent by their interest, excitement, and self-motivation. Nevertheless, a study conducted by Ode et al. (2013) revealed that the lack of financial resources allocated to the Home Science topic was a significant factor contributing to students' lack of interest in it.

According to Muthui (2009), a persistent sense of pessimism within the field of clothes and textiles can be attributed to the widely held perception among educators that they are unable to effectively teach this subject, as well as the scarcity of commercial patterns available. If teachers lack appropriate credentials, the enrolment rate is likely to be poor. The restructuring known as the eight-four-four initiative involved the consolidation of the three departments within the field of Home Science into a single department. Additionally, this initiative led to the establishment of two new departments, namely consumer education and baby care. The responsibility rests mostly with the teacher, who must possess comprehensive knowledge in all aspects of Home Science to effectively motivate students and provide knowledgeable guidance for their course selections.

According to a study conducted by Maina (2015), the attitudes of teachers towards Home Science were contingent upon the educational approaches employed for the subject

matter. Within an educational setting, the acquisition of knowledge is shaped by the combined impact of both educators and learners. Maintaining a positive perspective towards a particular subject engenders increased motivation among both educators and students, fostering a greater desire to acquire further knowledge in that domain. The motivation levels of students may be negatively impacted in the presence of a teacher who holds a pessimistic perspective. The manifestation of attitudes, whether through vocal or nonverbal means, serves as a means of elucidating an individual's desires and requirements, while simultaneously facilitating the establishment of a shared comprehension that forms the bedrock of prosperous interpersonal connections.

2.4 Students' Awareness on Home Science Related Career Opportunities and Students' Selection of Home Science Subject

The availability of employment prospects within a specific industry has the potential to impact pupils. According to the findings of Jones and Larke (2005), it was observed that students had a perception that pursuing a prosperous career in the field of agriculture was not feasible. When confronted with limited opportunities, individuals often turn to pursuing alternative careers that provide increased versatility. Ouma (2016) asserts that students consistently strive to secure admission into prestigious courses, even in the absence of ample opportunity to do so. The candidates participating in the Kenya Certificate of Secondary Education (KCSE) examination in 2014 held a pessimistic perception of the prospects of pursuing environmental education and liberal arts disciplines due to their perceived limited employment opportunities. The decline in enrolment for the Home Science major at the university level can be attributed to

students' lack of awareness regarding the available job prospects, as highlighted by Uwameiye (2015) and Ode et al. (2013).

Indoshi et al. (2010) discovered that students opted out of Art and Design degrees due to their perception that alternative career options held greater appeal. Furthermore, it was confirmed by teachers at that students had the perception that alternative professions offered more lucrative remuneration compared to art and design courses. Sang (2002) arrived at a comparable outcome, indicating that Home Science electives exhibit diminished employability in comparison to alternative choices. As per the findings of Osoki et al. (2006), students expressed their perception of limited opportunities for advancement within the teaching profession, as well as comparatively lower remuneration when compared to alternative careers. Singaravelu et al. (2005) conducted a study which revealed that intermediate-level students, as opposed to native-born students, tend to assign greater significance to professional repute and prestige as determining factors in their choice of major. When considering the choice of electives that may yield financial benefits in the future, the significance of this aspect is heightened due to the perceived prestige linked to such electives.

In a study conducted by Sigot (2013), it was revealed that Home Science programmes in public secondary schools in Kenya are perceived unfavourably. The research focused on evaluating the status of Home Science programmes within the country. The primary determinant in this case was its unfavourable reputation. There was a misperception propagated within the staff and administration of that the class was exclusively intended for students who had encountered difficulties in earlier iterations. Despite the numerous rewarding employment opportunities offered by Home Science, a majority of

academically gifted secondary school students at public educational institutions displayed a lack of enthusiasm in pursuing such courses. The cultivation of students' technical, vocational, and professional competence constitutes a significant objective within the realm of Home Science education courses implemented in schools. The diverse range of courses offered to students equips them with the knowledge and skills necessary to construct and assemble various objects. By engaging in consistent practise, individuals acquire a sense of self-assurance and proficiency in unfamiliar domains.

According to Kibera (2013), a significant number of secondary school pupils exhibit a preference for office and administrative occupations as opposed to those that include manual labour or technical expertise. The majority of employment opportunities within the domain of Home Science tend to be of a technical or practical nature, with just a limited proportion necessitating specialised expertise. Nyangi (2012) identified several factors contributing to the low enrolment rates in Home Science courses, including a lack of interest in the subject, challenges in reconciling theoretical concepts with practical applications, inadequate facilities, a dearth of enthusiasm among Home Science instructors, and the presence of underqualified instructors. Additionally, the findings indicated that a limited number of universities employed standardized criteria in the selection process for Home Science majors. Although the enrolment in Home Science was seeing a decline, it is important to note that it was not completely stagnant. Additionally, the available data indicated that both students and teachers held a favourable perception of the subject. Consequently, it became necessary to implement measures aimed at enhancing the level of enthusiasm among the learners regarding the subject of Home Science. The aforementioned scenario could potentially materialize

through collaborative efforts among educators worldwide to enhance the appeal of the area for both male and female students.

Annually, Kenyan institutions organize job fairs with the purpose of enlightening their student populations about the diverse range of career opportunities accessible to them. Exposure to such displays has been observed to generate curiosity among students, potentially influencing their decision to choose a major aligned with their vocational interests. The primary objective of the study was to determine the extent to which students' awareness of employment opportunities in the field of Home Science influenced their enrolment decisions in Home Science courses.

2.5 Availability and Adequacy of Home Science Teaching and Learning Resources in Schools

In order to facilitate the process of education, it is imperative to provide the availability and ease of access to adequate teaching and learning resources. The objective of incorporating instructional and learning technologies is to enhance students' comprehension by employing more effective communication methods. Farrant (2009) argues that in order to see substantial progress and development, it is imperative to allocate sufficient resources towards the field of education. Shiundu and Omulando (2012) argue that prior to implementing a novel educational intervention, educators should ensure the availability of essential instructional resources. Intangible resources, such as a proficient labour force, possess comparable value to tangible resources, such as books and written materials. Material resources encompass various elements, such as structures and machines, that are utilized in various contexts.

Bishop (2011) asserts that alterations to the curriculum will merely constitute transient trends unless there exists a dependable provision of educational resources. According to the individual, the availability of resources enhances the self-assurance, efficiency, and output of educators. In a study conducted by Mwangi (2014), the focus was on examining the decision-making process and utilisation of instructional resources by Home Science teachers at the college level. The study was predicated on the supposition that these materials are crucial for students' scholastic achievement in the discipline. Based on his research, a limited proportion of educators had previously contemplated the integration of multimedia and real-world materials into their Home Science instructional practises. The individual held the belief that Home Science students had the potential to enhance their performance by optimising their utilisation of available resources.

According to the findings of Newby et al. (2013), it has been suggested that teachers of have the potential to enhance their students' learning outcomes by adopting an objective approach to lesson preparation and properly utilising available resources. According to the scholarly work "Towards the utilisation of instructional media for effective teaching and learning" (2014) authored by Wamalwa and Wamalwa, instructional media plays a vital role as a component. The utilization of instructional resources enhances the overall quality of the learning experience. However, it is evident that many educators continue to employ traditional methods that do not incorporate any form of instructional technology. Given the circumstances, it is evident that a significant number of Home Science classes struggle to engage students and inspire them to gain the requisite knowledge and skills essential for realizing their maximum capabilities.

According to Keuk (2016), the desire of students to enhance their Home Science skills can be influenced by the accessibility of resources and instructional materials. According to scholarly enquiries and research, there has been a notable decline in the level of enthusiasm towards the field of Home Science, which may be attributed to various factors. However, it is worth noting that students still acknowledge the significance of this subject in both their professional and personal lives (Goe, 2014; Keuk, 2016). Research suggests that various factors, such as peer pressure, cognitive style, student participation, instructional strategies employed by teachers, and the accessibility of educational resources, have an influence on students' attitudes and perspectives towards Home Science education.

Students exhibit a greater inclination towards engaging in reading practises that foster the cultivation of their own comprehension, assertions, and hypotheses, in relation to the texts they are perusing. Students who actively participate in their education and possess critical thinking skills are more adept at acquiring empirical knowledge and comprehending its implications. According to a study conducted by Soo-Phing and Tse (2017) titled "Interactive Multimedia Learning: Students Attitudes and Learning Impact in an Animation Course," it was found that students exhibit a favourable disposition towards active learning. Moreover, the study revealed that students possess the necessary self-assurance to effectively utilise suitable instructional materials and resources, enabling them to progress at their own individualised pace. Additionally, it has been discovered that the implementation of student-centered learning using online platforms is not only feasible, but also significantly superior to conventional and unsuccessful instructional methods.

In a study conducted by Ochieng (2010), a descriptive case study design was employed to examine the Home Science curriculum's efficacy and student perceptions of it within the context of Pre-Service Teacher Training Colleges (PTTCs). The researcher discovered that students expressed satisfaction with the course content when there existed an adequate provision of resources to facilitate practical learning. According to Kiptoon (2011), the most effective instructional approaches are those that leverage students' pre-existing knowledge, foster their inquisitiveness, and engage them in both the theoretical and applied dimensions of the topic. Learner-focused techniques have been found to effectively enhance students' cognitive, emotional, and psychomotor capacities due to their dynamic nature. Learner-centric strategies have gained popularity among students due to their emphasis on active learning and experimentation within the classroom setting. The retention of learnt material is enhanced among students when they are provided with opportunities to apply their knowledge in practical settings.

2.6 Theoretical Framework

This research will be grounded in the Social Learning Theory (SLT) proposed by John Krumboltz in 1979 and the Social Cognitive Theory developed by Albert Bandura in the 1980s.

2.6.1 Social Learning Theory

Based on this concept, the educational experiences of students exert a substantial influence on their subsequent decisions regarding employment. According to the Krumboltz theory, individuals' acquired habits exert a significant influence on their career decisions, persisting beyond their completion of higher education. The theory

recognises that numerous factors exert influence on an individual's process of making professional decisions, and one of its advantages lies in its consideration of contextual elements. According to the study conducted by Patton and McMahon (2016), several elements contribute to an individual's development, including their attitude, genetic composition, environmental context, and educational encounters.

The theory and the investigation exhibit a clear congruence, as the study centres on the various elements that impact the selection of Home Science. When making decisions concerning their choice of degree, students take into consideration their future employment prospects. Rather than focusing on students' career options, the Student Leadership Team (SLT) provides them with the necessary knowledge and skills to discern which occupation aligns most effectively with their individual needs. According to a theoretical review conducted by Ireh (2000), the decision to pursue Home Science is influenced by various factors, including learning experiences, inherent skills of the learner, knowledge of work opportunities, learner attitude, and the presence of conducive teaching and learning environments.

Environmental variables that impact subject choices include policies related to the integration of educational subjects and the accessibility of resources for teaching and comprehending the subject matter. The implementation of these policies lies outside the purview of the pupils. A fundamental aspect of student learning involves the process of expanding upon existing knowledge and assessing their proficiency in the field of Home Science. The theory's integration of environmental factors, including the impact of parental influence, within the educational context renders it pertinent to the research. According to Krumboltz (2015), individuals construct their worldview assumptions by

drawing upon their restricted life experiences. Due to the limited exposure and experiences of secondary school students, their selection of academic majors is sometimes influenced. Consequently, these students require assistance in determining suitable career paths that align with their individual skill sets.

In summary, a notable limitation of SLT lies in its excessive emphasis on environmental factors as the primary determinants of students' course selection. This phenomenon can be attributed to the fact that students tend to prioritise external variables, such as school regulations regarding subject combinations, familial influence, personal attitudes, peer relationships, and the guidance provided by their teachers, when providing justifications for their decision to pursue Home Science. Given the direct impact of a student's behaviours on their own well-being, it can be argued that the environment holds greater significance than the individual student. Hence, the theory is deemed incorrect since it neglects to consider intrinsic elements such as students' vocational aspirations, aptitudes, and prior experiences in elucidating the reasons behind the preference of some students for Home Science courses over alternative options. The external variables encompass educational institutions, familial connections, and peer pressure. Therefore, the enquiry persists over the extent to which pupils have acquired sufficient knowledge and skills during Forms 1 and 2 to enable them to make informed choices regarding their pursuit of a particular subject.

2.6.2 Social Cognitive Theory

During the mid-1980s, Bandura established the foundation for the Social Cognitive Theory of Human Functioning. This theory aims to elucidate the processes through which individuals develop and transform, by examining the reciprocal interactions between

one's self-perception and environmental factors. It seeks to understand how these interactions collectively influence an individual's behaviour. The preferences exhibited by high school students in Home Science classes can perhaps be elucidated by considering this concept. The framework of human behaviour can be better understood and utilised for improved forecasting and adjustments through the valuable insights provided by social cognitive theory. According to Bandura's theory (1997), individuals acquire their routines and habits through a dual process including observation and interaction with their social environment. The primary emphasis lies in the student's inclination towards Home Science as a chosen field of study during their high school education.

The theory of social learning was initially introduced by Miller and Dollard in 1941, and then underwent further development, eventually evolving into what is now known as social cognitive theory. The fundamental basis of their concept is predicated upon the notion that individuals, when provided with appropriate incentives, have the potential to adopt novel behaviours through the process of observational learning. In other words, if students were able to establish a connection between acts of benevolence and favourable consequences, such as an increased likelihood of achieving success in higher education by pursuing a Home Science major, they would be more inclined to engage in such behaviour. The process of habit reinforcement can be facilitated by an observer who engages in the imitation of behaviours exhibited by individuals in their social environment (Miller & Dollard, 2019). The psychological functioning of an individual is defined by the dynamic interaction between their immediate environment and their internal cognitive processes (Bandura, 1997). In 1973, Bandura and Walters made significant contributions to the concept of social learning by including the principles of

observant learning and vicarious reinforcement into their framework. Social cognitive theory posits that the acquisition of new knowledge and patterns of behaviour is influenced by various processes, such as symbolic, vicarious, and self-regulatory learning. The utilization of symbols facilitates the potentiality of deliberate action.

Individuals acquire knowledge and retain recollections of previous experiences by employing symbolic language and engaging in cognitive processes. Individuals frequently employ symbolic representations as a means of comprehending their experiences and challenges, rather than engaging in the actual enactment of every conceivable solution. According to Bandura, vicarious learning refers to the process of acquiring knowledge about performing new behaviours by seeing others. This information is then stored and utilized as a guide for future actions. The comprehension of the consequences of individual actions can be enhanced via observation of others' behaviours. Modelling is a prevalent method of learning within the framework of social cognitive theory. As previously said, individuals engage in the process of modelling with the purpose of acquiring symbolic representations that are crucial for subsequent deliberate actions.

According to social cognitive theory, the capacity for self-regulation plays a vital role in an individual's learning process. Individuals demonstrate accountability for their actions by taking into account not only their immediate surroundings and social context, but also their internal motivations and personal perspectives. Drawing inspiration from the "agentic perspective" proposed by Bandura (1986) and further supported by Goddard and Hoy (2018), social cognitive theory examines the cognitive processes through which individuals make decisions and engage in actions. Bandura (2001) posits that individual

agency is encompassed by an intricate network of sociostructural influences. Individuals play dual roles as both the subjects and agents within these social structures. Due to the intricate network of factors that shape human behaviour, it is uncommon for an individual to possess absolute authority over the course of their life (Bandura, 1997). Although social cognitive theory acknowledges the influence of evolution on human behaviour, it presents a counterargument to the perspective of "one-sided evolutionism." This perspective posits that biological evolution is the sole factor determining behaviour, disregarding the effects of social and technological advancements on biological evolution (Bandura, 2001). When selecting their Home Science courses, secondary school students take into account various factors, including environmental, societal, and personal considerations. This prompts students to engage in critical thinking regarding their role and influence inside this particular process.

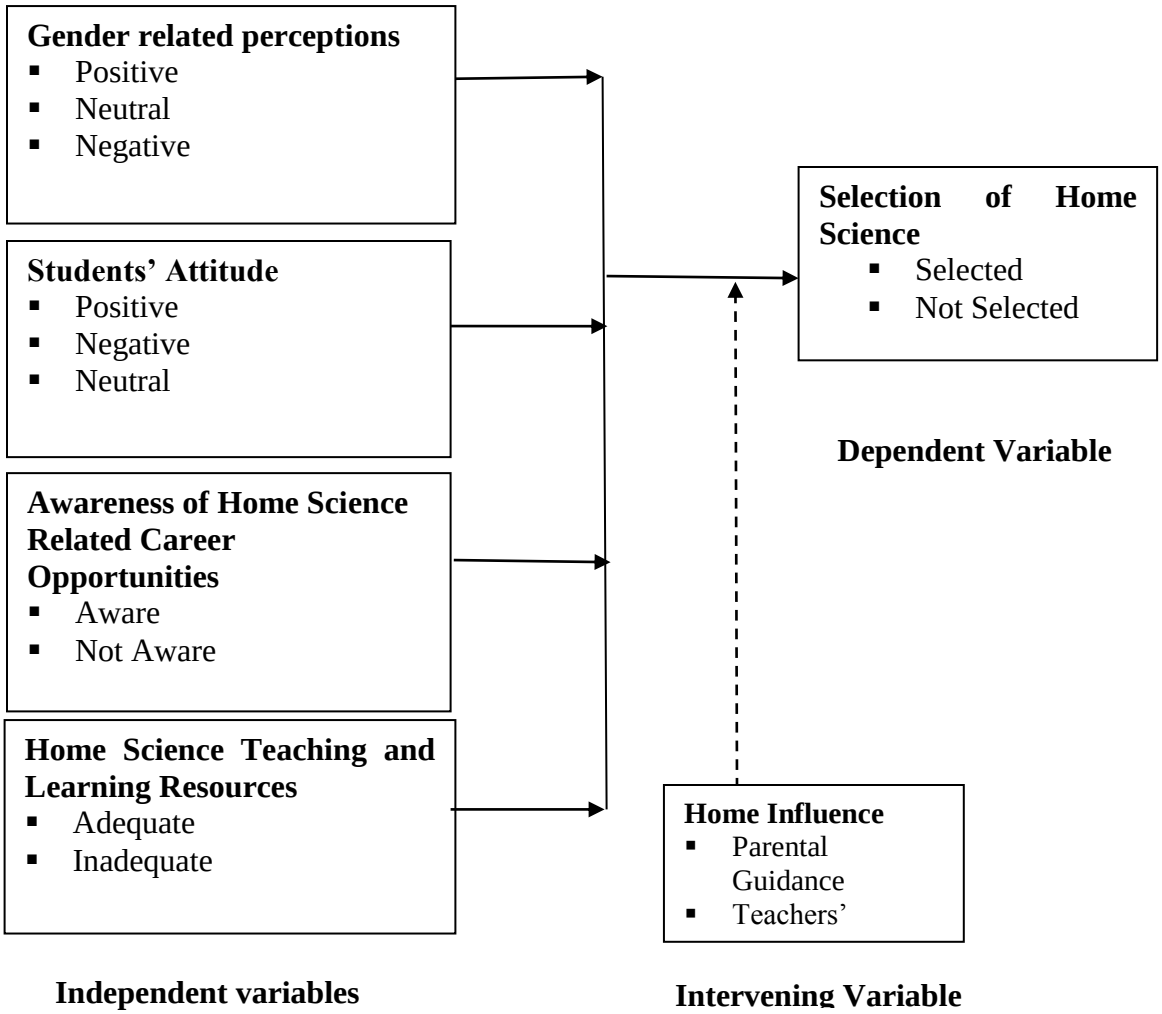
2.7 Conceptual Framework

The conceptual framework diagrammatically illustrates the hypothesized relationship between the study variables. The independent components of the study include the gender of the students, their attitude towards Home Science, their knowledge of Home Science-related job alternatives, and the availability of educational resources for Home Science instruction and training. The intervening variable in this study is the home environment, specifically parental guidance, while the dependent variable is students' choice of Home Science. According to the hypothesis, the independent variables, namely gender, attitude towards Home Science, awareness of job options related to Home Science, and educational resources for teaching and training in Home Science, have an effect on the dependent variable, which is students' selection of Home Science. One possible mediator

of the relationship between the two sets of parameters is the influence of parental guidance and other forms of home influence. This relationship is represented in Figure 1.

Figure 1

Determinants of Students' Selection of Home Science as a Subject



Source: Researcher (2020)

2.8 Summary of Reviewed Literature

Consistent endeavours to enhance students' academic achievement are enduring indicators of high-quality educational institutions. The enrolment and graduation

outcomes of college students are significantly influenced by the high school elective courses they undertake. Numerous authors have evaded the pivotal enquiry regarding the resolution of the discrepancy between the selection of subjects made by students in public secondary schools and the demands associated with opting for technical and applied courses. The lack of motivation and inspiration among students to pursue applied and technical disciplines, coupled with a limited understanding of the significance of these subjects for their future jobs, poses a challenge in driving technological growth on a worldwide level. In order to bridge this knowledge deficit, the researcher embarked on a study aimed at investigating the factors that influence the selection of Home Science as a major among students in Mumias Sub-County, Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides an overview of the methodology employed in the study. The study has placed emphasis on various significant elements, including research design, sample methodologies, data collection tools, data analysis techniques, ethical considerations, instrument piloting, instrument reliability and validity, data gathering procedures, and the instruments themselves.

3.2 Research Design

The methodology employed in the study was an exploratory survey. The objectives of descriptive research are to obtain comprehensive understanding of the present condition of a certain phenomenon and, to the best extent feasible, derive significant inferences from the gathered data. Utilising the methodology employed in this study, the researcher successfully gathered data, derived conclusions, and formulated generalisations pertaining to the determinants that impact students' decision-making process regarding enrolment in the field of Home Science within the Mumias Sub-County of Kenya.

3.3 Study Location

The study was conducted in Mumias, which is a sub-county located inside Kakamega County. The adjacent sub-counties to the area in question include Navakholo, Mumias, and Kakamega Central. According to the Independent Electoral and Boundaries Commision (IEBC, 2021), the Sub-County is delimited by the coordinates 90°N and 30°W, with a longitude range of 340°E to 420°W. Mumias Sub-County was selected due

to its comparatively lower enrolment rates in the field of Home Science, as seen among the several sub-counties under consideration. In addition, it is worth noting that the enrolment rate for Home Science has seen a constant decline since 2012, as reported by CDE Kakamega in 2017.

3.4 Target Population

According to Mugenda and Mugenda (2012), a population is characterised as the entirety of observable individuals, events, or entities that possess a common trait. The target group is operationally defined by researchers as the specific subset of the population that would experience the most direct effects or consequences resulting from the outcomes of their investigation. The primary focus of the study was on students in the third form, as subject selection concludes during this academic year.

Given the pre-existing determinations of the students regarding their enrolment in the field of Home Science, they proceeded to provide pertinent information pertaining to the many factors that influenced their decision-making process. Hence, the study's target group comprised all 761 third-year students enrolled in the five schools located in Mumias Sub-County, which offered Home Science as a subject. There are a total of eight (8) teachers specialising in Home Science who are employed in these establishments. Table 2 presents the distribution of the population inside the school.

Table 2

Distribution of the Population in the Study

School	No. of Form 3 students	No. of students chosen Home Science	No. of students not chosen Home Science	No. of Home Science teachers
St. Mary's Mumias Girls High School	433	69	364	3
Mumias Muslim Girls	67	7	60	1
St. Elizabeth Lureko Girls Secondary School	171	34	137	1
St. Angela Secondary School for the Deaf	48	26	22	2
A.C.K. St. Mary's Shitoto Girls Secondary School	42	8	34	1
Total	**761**	**144**	**617**	**8**

3.5 Sample Size and Sampling Procedures

A sample is a representation of a larger population that is statistically valid. To derive inferences about a larger population, it is customary to employ the method of selecting a subset of instances and referring to it as a sample (Sounders, 2019). Due to the limited availability of Home Science programmes, the study included all five schools that offered this particular subject. The contribution of all eight (8) Home Science teachers was of equal significance to the investigation. According to Mugenda and Mugenda (2012), a sample size ranging from 10 to 30.0% is considered sufficient when the number of elements in the sample reaches thirty. However, due to the low enrolment in the Home Science programme at all five schools, we intentionally surveyed all 144 students. The

researchers were assisted by Home Science teachers in locating the students. A total of twenty-four students, including 20% of the participants, were enrolled in the Home Science elective and participated in the study. In order to ascertain the number of students who expressed a lack of interest in enrolling in the Home Science course, a proportional random sampling technique was employed.

Table 3

Sample Size for the Students to Participate in the Study

School	**No. of students chosen Home Science**	**Sample Size of students taking Home Science**	**No. of students not chosen Home Science**	**Sample size of students not taking Home Science (*n*/N)**
St. Mary's Mumias Girls High School	69	69	364	73
Mumias Muslim Girls	7	7	60	12
St. Elizabeth Lureko Girls Secondary School	34	34	137	27
St. Angela Secondary School for the Deaf	26	26	22	5
A.C.K. St. Mary's Shitoto Girls Secondary School	8	8	34	7
Total	**144**	**144**	**617 (N)**	**124**

3.6 Research Instruments

The researchers employed a questionnaire as a data collection instrument to get information from the participants. The data collection process involved the utilization of pre-established interview questions to elicit responses from educators specializing in

Home Science within the context of the CBC curriculum. The subsequent sections include descriptions of the instruments.

3.6.1 Students Questionnaire

In the student questionnaire (SQ), a five-point Likert scale was employed, with a rating of 1 indicating "strongly agree" and a rating of 5 indicating "strongly disagree." The demographic information of the respondents was collected through a five-part questionnaire, wherein the four objectives were sequentially presented as the survey progressed. The study employed a mixed-methods design, wherein each section addressing the research objectives incorporated a set of four questions that encompassed both closed- and open-ended formats.

In the survey, Section A was dedicated to gathering information regarding the demographic characteristics of the participants. Section B consisted of four questions (1-4) aimed at assessing students' perceptions of gender. Section C encompassed four questions (5-8) designed to explore students' attitudes. Section D involved nine to twelve questions that assessed students' knowledge of job opportunities related to Home Science. Lastly, Section E comprised four questions (13-16) focused on Home Science facilities. The questionnaire was designed with the objectives of the study in consideration, aiming to extract comprehensive and profound insights from the participants. One of the advantages highlighted by Sounders et al. (2017) is the ability to collect data from a large and unbiased sample of individuals who have been exposed to similar stimuli, which is facilitated by the use of questionnaires in research.

3.6.2 Interview Guide for Principals and Home Science Teachers

The interview schedule was completed independently by the Home Science principals and teachers under the guidance of the researcher. The principal interview schedule consists of five components. Section A comprises enquiries regarding the demographic characteristics of the students (1-3), Section B encompasses four enquiries pertaining to students' perceptions of gender (4-7) and their attitudes (8-9) towards gender, Section D encompasses two enquiries concerning careers in Home Science (10-12), and Section E encompasses four enquiries regarding the accessibility of healthcare. The collection of qualitative data involved the utilization of an interview template specifically designed for Home Science instructors.

The questions were systematically arranged to encompass all four study objectives. The subsequent enquiries sought to elicit the viewpoints of the students over a range of subjects, including demographics (questions 1-4), gender (questions 5-8), potential employment opportunities in the field of Home Science (questions 12-14), and available facilities relating to Home Science (questions 15-17). According to Kothari (2014), the utilization of this particular data collection strategy facilitated the researcher in posing more comprehensive enquiries, hence enabling the participants to provide more elaborate and extensive solutions.

3.7 Piloting of Research Instruments

Sounders et al. (2017) argue that conducting experimental testing is an essential step in the process of selecting the final version of research equipment. The assessment of instrument correctness is vital due to its ability to facilitate this process. A preliminary investigation was conducted in two educational institutions located in the Kakamega

Central Sub-County prior to the commencement of data collection. The sample consisted of a total of 35 students, 3 teachers specialising in Home Science, and 2 principals. The students had either opted for or were not provided with the opportunity to study Home Science as a subject. In order to mitigate potential pre-exposure effects, the decision was made to exclude Kakamega Central Sub-County from the final study. The reason for its selection was its positioning outside of the designated research area.

According to Kothari (2014), it is advisable to incorporate a pilot study that includes a minimum of 10% of the anticipated study population, and this suggestion aligns with the current approach. Consistent with Creswell's (2014) recommendation, doing pilot testing can serve the purpose of identifying potential issues with research instruments and verifying the clarity of data collection items. Through the implementation of a pilot study, the researcher successfully obtained valuable feedback from participants regarding aspects that required moderation or enhancement. The data was utilised to enhance the efficacy of our research tools (Sounders, 2019).

3.7.1 Validity of the Study Instruments

The validity of research is contingent upon the extent to which its findings are representative of the community under investigation (Sekaran & Bougie, 2016). When a measuring instrument consistently and accurately measures the intended construct, it is considered to possess validity (Sounders, 2019). This study prioritised the examination of construct and content validity, among the various types of validity that are recognised. During the development of the questionnaire, careful consideration was given to the construct validity of each individual component that was intended to be measured. The questionnaire was examined by two experts in content validity from Kakamega Central

Sub-County and two experts in construct validity from the Department of Curriculum, Instruction, and Media at Maasai Mara University. Additionally, the instruments were evaluated by two randomly selected teachers in Home Science. The responsibility of evaluating the clarity, relevance, and significance of each statement in the survey rested with the participants. Prior to data collection, it was imperative to calibrate each device for optimal performance. The inclusion of their judgements and remarks in the piece enhanced its credibility.

3.7.2 Reliability of the Study Instruments

If data gathering methods consistently maintain their measurement accuracy over time, we can confidently assert that they are dependable (Cooper & Schindler, 2008). The pilot research questionnaire demonstrated a reliability of 82.1%, as indicated by a Cronbach's Alpha index of 0.821. The computed result exceeded 0.70 which is the recommended threshold for reliability (Kothari, 2014). Hence, the research questionnaire demonstrated a high degree of reliability in gathering data for this study.

3.8 Data Collection Procedure

The researcher collected an introduction letter from the School of Education, and also from the Director Post Graduate Studies Maasai Mara University to facilitate the processing of the data collection permit from the National Commission for Science, Technology and Innovation (NACOSTI). The research permit allowed the researcher to proceed in collecting the data at the study location. The study's author administered a questionnaire to each student and arranged interviews with specific Home Science instructors. The researcher provided an introductory overview, establishing the context for the participants and elucidating the purpose behind doing the study. The principals of

the schools that were taking part in the study got a letter providing an overview of the project's objectives. The researcher maintained strict confidentiality protocols throughout the whole data gathering process to safeguard the privacy of all participants.

3.9 Data Analysis

The raw data collected were coded for analysed. Since the questionnaire was a Likert scale type, quantitative analysis was most appropriate for the study (Lewins, 2010). The data were analyzed using both descriptive and inferential statistics. Descriptive statistics used in this study were frequencies, percentages, mean, and standard deviation. For inferential statistics, the researcher employed the Chi-Square (x2) test to investigate the relationship between the independent variables and the dependent variable at .05 level of significance. Kothari (2014) suggests that the Chi-Square test is an effective method for identifying significant correlations between two category variables. This test is particularly useful for evaluating the relationship between nominal and categorical data. The statistical analysis was performed using SPSS for Windows, specifically version 28.0. The results were presented using tables and charts. Responses to the interview were analyzed qualitatively where the common themes were noted in each section and used to describe the responses. The qualitative analysis was presented in verbatim and were used to corroborate the findings from the quantitative analysis. Table 4 succinctly presents the statistical analysis techniques employed in the research.

Table 4

Methods of Statistical Analyses Used in the Study

Research Hypothesis	Independent Variable	Dependent Variable	Statistical Test
H_o1: There is no statistically significant relationship between students' gender related perceptions on Home Science and students' selection of Home Science subject in Public Secondary Schools in Mumias Sub-County	Students' gender related perceptions (Negative, Neutral or positive)	Students' selection of Home Science: Yes or No (categorical data)	Chi-Square test
H_o2: There is no statistically significant relationship between students' attitude towards Home Science and students' selection of Home Science Subject in public Secondary Schools in Mumias Sub-County	Students' attitude towards Home Science (Positive, neutral or negative).	Students' selection of Home Science: Yes or No (categorical data)	Chi-Square test
H_o3: There is no statistically significant relationship between students' awareness of Home Science related career opportunities and students' selection of Home Science subject in public Secondary Schools in Mumias Sub-County	Students' awareness on Home Science related career opportunities (Low or high level of awareness)	Students' selection of Home Science: Yes or No (categorical data)	Chi-Square test
H_o4: There is no statistically significant relationship between availability and adequacy of Home Science teaching resources in schools and students' selection of Home Science in public Secondary Schools in Mumias Sub-County.	Availability and adequacy of Home Science facilities (Inadequate or adequate)	Students' selection of Home Science: Yes or No (categorical data)	Chi-Square test

3.10 Ethical Considerations

To conduct the study at public secondary schools in Mumias Sub-County, the researcher obtained consent from NACOSTI by utilizing an introduction letter provided by Maasai Mara University. In addition to the introductory letter and a copy of the permit, the researcher provided the Kakamega County Director of Education with the requisite documentation to request for further authorization for visiting the educational institutions. Prior to doing any site visits, the researcher provided the school principals with a concise explanation of the objectives of the investigation. Prior to administering the questionnaire to the students, the researcher received consent from the principals for the Home Science instructors, Form 3 students, and the principals themselves. Public individuals have the opportunity to maintain their anonymity as their involvement was completely voluntary. The researcher duly acknowledged all individuals who made contributions to the investigation. The work complied with ethical writing norms through the utilization of appropriate citation styles and the implementation of strategies to prevent plagiarism.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The chapter presents the results, undertakes an examination of the findings, and participates in an academic discourse that aligns with the research objectives. The purpose of this research was to investigate the determinants of students' selection of Home Science subject in secondary schools in Mumias Sub-County. The study was guided by the following objectives: To investigate the relationship between students' gender related perceptions towards Home Science and students' selection of Home Science subject in public secondary schools in Mumias Sub-County; to examine the relationship between students' attitude towards Home Science and students' selection of Home Science subject in public secondary schools in Mumias Sub-County; to determine the relationship between students' awareness of Home Science related career opportunities and students' selection of Home Science subject in public secondary schools in Mumias Sub-County; To establish the relationship between availability and adequacy of Home Science teaching resources in schools and students' selection of Home Science in public secondary schools in Mumias Sub-County. This chapter therefore presents results and discussion guided by the objectives of the study.

4.2 Response Rate

In Mumias Sub-County, public secondary schools provided 268 primary participants for the study. There were 124 in this group who did not have Home Science enrollment and 144 students who did. By giving them a questionnaire, the participants provided the data.

Furthermore, the study employed interview protocols to gather data from eight Home Science instructors and five principals of secondary schools who were chosen as key informants. Out of the 268 questionnaires administered to the students, 263 were successfully gathered and deemed suitable for further examination. This translated to 98.13% response rate. All the eight (8) teachers (100.0%) and the five (5) principals were interviewed. Remler and Van Ryzin (2021) define sufficient response rate as 70.0% or higher in order to extrapolate results from a sample to the entire population. The investigation concluded that the response rate was adequate. Table 5 presents a summary of the response rate.

Table 5

Response Rate for the Study

Participant	Sample Size	Number that Participated	Response rate in percent
Students	268	263	98.13%
Home Science teachers	8	8	100.0%
Principals	5	5	100.0%

4.3 Background Characteristics of the Students

In this section, the students were requested to provide their age, whether they pursued Home Science in Form 1 and 2, and their continuation of Home Science in Form 3. The findings are provided in the subsequent sections.

4.3.1 Age of Students

The students were asked to indicate their age and the findings are presented in Table 6.

Table 6

Age of the Students

Age	Frequency	Percentage (%)
14 – 16 years	91	34.6
17 – 19 years	155	58.94
20 – 22 years	17	6.46
Total	**263**	**100.0**

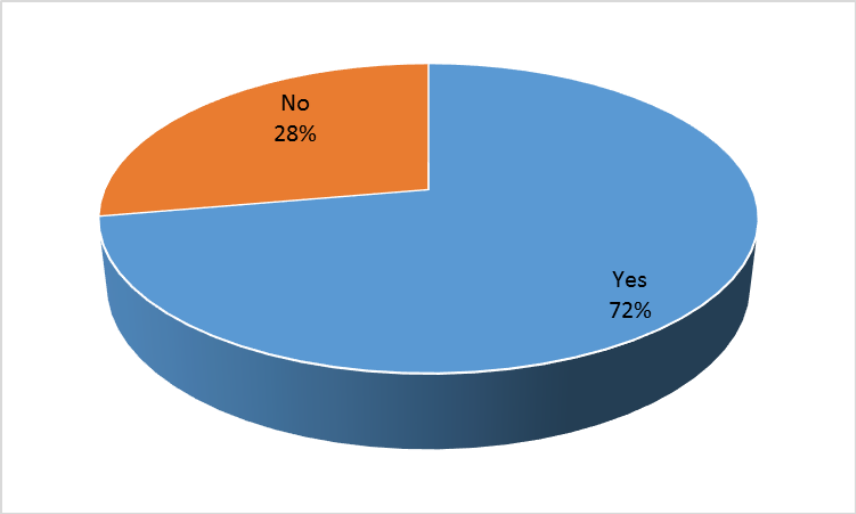
The results indicate that a significant proportion of the student population, specifically 155 individuals (58.94%), fell between the age range of 17 to 19 years. The group of students aged 14-16 years accounted for 91 individuals, or 34.6% of the total sample. In contrast, the 20-22 years age group consisted of 17 individuals, which constituted 6.46% of the sample.

4.3.2 Opportunity for Students to Study Home Science in Form one and Two

The students were whether they took Home Science during their first and second year of secondary education. The participants provided their response by choosing either a "yes" or "no" option. The results are depicted on Figure 2.

Figure 1

Opportunity for Students to Pursue Home Science in Form One and Two



The findings in Figure 2 show that the majority 72.2% of the students took Home Science in form one and two. The students who indicated that they did not take Home Science in form one and two were asked to give reasons why they did not take Home Science in form 1 and 2–where 30(46.15%) cited discouragement by other students, 21(32.31%) cited lack of lucrative careers for Home Science graduates, 9(13.85%) indicated that Home Science subject was performed poorly in their school due to lack of teaching and learning resources while 5(7.69%) were of the view that they did not like the subject. The implication of this finding is that influence from fellow students and career prospects were the main students' determinants for selecting Home Science Subject in secondary schools in form one and two.

Students' selection of Home Science in form one and two is attributable to passing of negative attitudes towards the subject among the students. The source of the negative attitude could be from the society where Home science is perceived to be a feminine

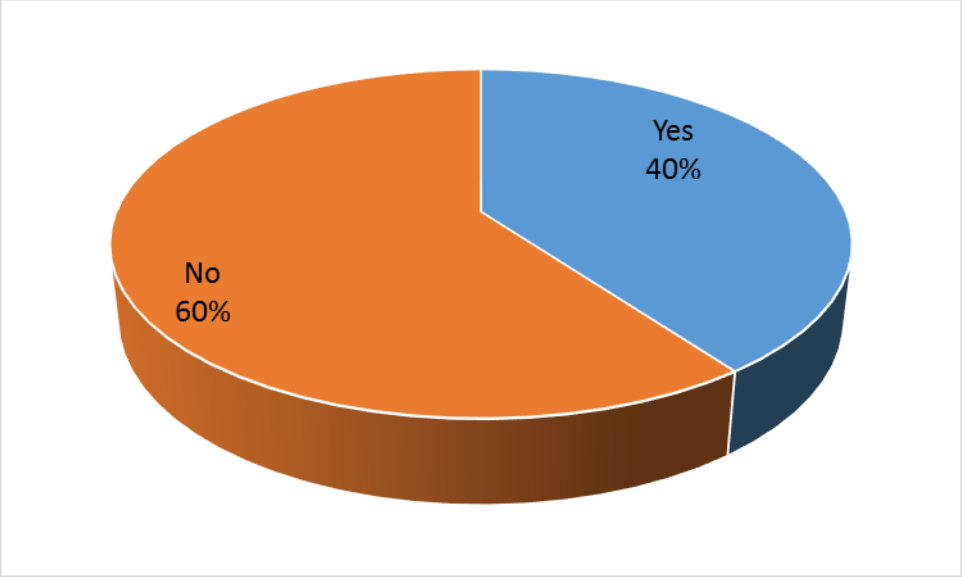
subject. On career prospects, student whose perceptions are that there are prospects of getting a good career upon studying the subject are more likely to select the subject compared to those who may not see any prospects. This is supported by findings from a study by Nyangi (2012) and Tovey and Share (2013) who found that students' choice of subjects in secondary school is informed by their perceived career value of the subject after completion of secondary education.

4.3.3 Students' Choice of Home Science in Form Three

The participants were queried regarding their enrollment in Home Science during their third year of education, and the results are depicted on Figure 3.

Figure 2

Students Choice of Home Science in Form 3



Findings on Figure 3 show that there were nearly equal number of students who had selected Home Science 105 (40%) and those who had not 158 (60%). There was a therefore a fair attempt to gather data from the students who had selected and those who

had not selected Home Science in form three. The following section discusses gender perspectives on selection of Home Science

4.4 Gender Related Perception and Selection of Home Science Subject

The first objective of the study was to investigate the relationship between students' gender related perceptions on Home Science and students' selection of Home Science subject in public secondary schools in Mumias Sub-County. Before determining the relationship, the study examined students' gender related perceptions on Home Science in public secondary schools in Mumias Sub-County and the findings are presented in the following section.

4.4.1 Students' Perceptions Towards Various Gender Aspects on Selection of Home Science

The study aimed to evaluate students' perspectives on various gender-related factors influencing the choosing of Home Science courses. A Likert-type scale, consisting of five points ranging from 1 (strongly disagree) to 5 (strongly agree), was employed to measure the students' perceptions. The frequency and percentage of student ratings for each response were computed. Through the process of calculating the cumulative frequency and percentage of students who indicated disagreement (SD and D) and agreement (A and SA) in their responses, a comprehensive pattern of rating emerged. In order to gauge the students' collective perceptions regarding the choosing of Home Science in relation to gender, the average of all the replies was computed as summarized on Table 7.

Table 7

Students' Gender Related Perceptions on Selection of Home Science

	Rating: Frequency and Percent					Cumulative		
Statement	**SD**	**D**	**NS**	**A**	**SA**	**D**	**A**	**Total**
Home Science is all about cooking and sewing	83	75	24	49	32	158	81	263
	31.6%	28.5%	9.1%	18.6%	12.7%	57.4%	31.3%	100.0%
Home Science subject is mostly regarded as a female subject	27	32	14	101	89	59	190	263
	10.7%	12.2%	5.3%	38.4%	33.8%	22.9%	72.2%	100.0%
Boys are discouraged from taking Home Science Subject	54	65	31	61	52	119	113	263
	20.5%	24.7%	11.8%	23.2%	19.8%	45.2%	43.0%	100.0%
The society regards Home Science subject activities as feminine	51	40	16	81	75	91	156	263
	19.4%	15.2%	6.1%	30.8%	28.5%	34.6%	63.1%	100.0%
Boys should enroll in more challenging subjects like engineering, commerce and accounting.	70	77	23	45	48	147	93	263
	26.6%	29.3%	8.8%	17.1%	18.3%	55.9%	35.4%	100.0%
Mean (*M*) =3.34; Std. Deviation (*SD*) = 0.49								

According to the data presented on Table 7, a significant proportion of students, specifically 158 individuals (57.4%), expressed their disagreement with the notion that Home Science is limited exclusively to sewing and cookery. The findings indicate that a notable percentage of the students maintained the perspective that Home Science

encompasses more than just culinary skills and sewing, therefore demonstrating a positive disposition towards the topic. As a result, the students were aware that Home Science also facilitates the enhancement of other essential skills. The finding was in contrast with commonly held public perceptions that associate Home Science primarily with practical skills such as sewing and cooking (Deagon, 2021).

According to Arfi and Kiran (2015), the Home Science curriculum allocates a minimal amount of attention to cookery and sewing. In addition to consumer education and institutional management, students are also exposed to a comprehensive curriculum encompassing various disciplines such as interior design, home furnishing, and housekeeping. Furthermore, the programme includes the study of handicrafts, clothing and textiles, commercial nutrition, food preservation, hygiene, child development, financial management, and family relationships. The acquisition of competencies through the pursuit of Home Science education is crucial for the nation's attainment of its goals in terms of industrialization and improved domestic welfare, since these abilities may be applied across a wide range of manufacturing and service industries.

The study revealed that a significant majority of the surveyed students, specifically 190 individuals accounting for 72.2% of the total sample, shared the consensus that Home Science is predominantly associated with female participation. Also, a significant majority of 156 students, accounting for 63.1% of the surveyed population, expressed the perception that activities related to the Home Science field were commonly associated with femininity within society. Therefore, it was plausible that majority of the students maintained this particular viewpoint, thereby impacting their decision to pursue a Home Science major. Furthermore, the findings suggest that gender prejudices pertaining to

Home Science may be rooted in the communities from which students come. Ampaire et al. (2021) found that cultural norms surrounding gender influenced the way secondary school students perceived and chose Home Science courses. Consequently, students adhere to cultural norms and beliefs, thereby perpetuating existing discrepancies in the accessibility and participation of Home Science courses (Janhonen-Abruquah et al., 2017). This implies that governmental interventions targeting the augmentation of Home Science course enrollment should also endeavour to modify the prevailing negative societal attitudes associated with Home Science. This would mitigate the possible influence on students' future job decisions stemming from gender stereotypes that link distinct social roles and activities to genders and their educational and professional paths.

Regarding the matter of whether boys were discouraged from enrolling in Home Science, the study findings indicated that a fairly equivalent proportion of the respondents expressed contrasting perspectives. In particular, a total of 119 students, accounting for 45.2% of the sample, expressed disagreement with the proposition that male students face discouragement in their pursuit of Home Science. Furthermore, in relation to the inquiry of whether it is prudent for adolescent males to engage in more challenging academic fields such as engineering, commerce, and accounting, a substantial majority of 147 students (55.7%) voiced dissent towards the proposition, whereas a considerable portion (35.4%) concurred. It is crucial to acknowledge and give due consideration to these findings, as they indicate deliberate efforts to propagate the misconception that Home Science was a field primarily associated with femininity and relatively easier for males to excel in.

After engaging in a comprehensive analysis of the instruments employed to evaluate students' perspectives concerning gender-related aspects in the selection of the Home Science course, this study classified these impressions into three distinct categories: neutral, positive, and negative. It was necessary to assign a mean score of 5.0 as the greatest possible score and 1.0 as the lowest possible score for each student's gender-related perception items. Negative gender perceptions were indicated by a mean score falling within the range of 1.0 to 2.49. Mean scores ranging from 2.50 to 3.49 were indicative of neutral gender perceptions, while scores ranging from 3.50 to 5.0 were indicative of positive gender perceptions. Table 8 presents a concise overview of the results obtained from the analysis.

Table 8

Classification of Students' Gender Related Perceptions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negative	11	4.2	4.2	4.2
	Neutral	145	55.1	55.1	59.3
	Positive	107	40.7	40.7	100.0
	Total	263	100.0	100.0	

Source: Research Data (2022)

Based on the data shown on Table 8, it can be observed that a significant proportion of students, specifically 145 individuals (accounting for 55.1% of the total sample), maintained a neutral perspective when it came to gender-related stereotypes within the domain of Home Science. The sample consisting of 107 individuals, accounted for 40.7% of positive gender attitudes. In order to provide further support for the results obtained through the quantitative analysis of student data, this study explored and analysed

qualitative data related to gender perspectives in relation to the selection of the Home Science course. A total of five (5) principals from Home Science schools and eight (8) teachers teaching the Home Science curriculum participated in the data collection process. The researchers conducted interviews with Home Science teachers and principals to gather information on their strategies for addressing the gender imbalance among Home Science students, which predominantly consists of females. Based on the perspectives shared by the majority of principals contacted (75.0%) and Home Science teachers (80.0%), it is evident that a significant proportion of students enrolled in the topic were female. This trend can be attributed to the perception held by a majority of males, who tend to associate Home Science with femininity and consequently hold a negative view towards it. When queried about their perspective on whether educational institutions, families, and the broader societal context tend to dissuade boys more than girls from studying Home Science disciplines, administrators and instructors responded. According to the consensus among the key informants, there was a prevalent perspective that prevented males from studying the field of Home Science. All five principals who participated in the survey, as well as five instructors from (each accounting for 63.0% of the total), shared this perspective.

When asked about the dominant view that males should pursue challenging academic subjects such as engineering, commerce, and accounting, in contrast to the relatively simpler field of Home Science, the key informant provided clarification on this issue. Based on the results obtained, a significant proportion of teachers held the belief that a considerable number of individuals within the society and educational institutions held expectations and actively encouraged the enrollment of boys in more challenging courses.

This is what a Home Science teacher had to say;

> *In many sections of the community and even in schools and particularly among non-Home Science teachers, boys are discouraged from taking Home Science because they are told that the subject is generally feminine and not challenging at all. Boys are actually encouraged to take on more difficult subjects that guarantee them better employment prospects*.

The provided transcript illustrates the prevailing perceptions among teachers and community members that males should focus on courses other than Home Science. When queried on the sufficiency of male and female teachers to promote the selection of Home Science as a subject among both male and female students, the majority of respondents expressed that there is a scarcity of male Home Science teachers. Based on the interviews conducted with instructors, it was found that out of the total of eight teachers and five principals, a significant majority of them, specifically four out of five principals and all eight teachers, expressed challenges in locating male Home Science teachers.

This is what a principal had to say;

> *One of the reasons why there are gender disparities in the selection of Home Science among Secondary school students with more girls than boys selecting the subject is that boys lack role models among teachers of Home Science. Male Home Science teachers are very rare to come across not only in Mumias Sub-County but in Western region and the County as a whole. This is one of the reasons why male students perceive Home Science as a female subject*.

The principal's response demonstrates how the scarcity of male Home Science Instructors hinders the complete involvement of boys in the Home Science curriculum. Consistent with the conclusions drawn by Kimani (2008), the results demonstrate that the subject of Home Science was frequently devalued. Instructors who were responsible for

executing the Competency-Based Curriculum expressed their annoyance regarding the perceived femininity of the subject, which consequently dissuaded male students from enrolling. Furthermore, societal expectations that place greater emphasis on male students' enrollment in more demanding fields, such as business and the natural sciences, appear to account for a substantial portion of male students' lack of interest in the domain of Home Science, according to the survey. The following section presents the results regarding the relationship between the gender perceptions of students and their decision to select Home Science in Form three.

4.4.2 Relationship between Students' Gender Perceptions and Students' Selection of Home Science Subject

The study sought to resolve the following research hypothesis:

H_o1: There is no statistically significant relationship between students' gender related perceptions on Home Science and students' selection of Home Science subject in Public Secondary Schools in Mumias Sub-County.

To investigate the association between students' gender-related impressions of Home Science (categorised as positive, neutral, or negative) and their decision to select Home Science in form three (indicated by yes or no responses), the chi-square test was employed. The results are presented on Table 9.

Table 9

Chi Square Test: Relationship Between Students' Gender Related Perceptions Towards Home Science and Students' Selection of Home Science Subject

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.501[a]	2	.002
Likelihood Ratio	12.795	2	.002
Linear-by-Linear Association	10.820	1	.001
N of Valid Cases	263		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.56.

The results summarized on Table 9 reveal that there is a significant relationship between students' gender-related perceptions of Home Science and their choice of Home Science subject ($\chi 2$ (2, n = 263) = 12.501, p =.002). The p-value obtained, which is less than 0.05, rejects the null hypothesis (H_O1) that there is no significant relationship between students' gender-related perceptions of Home Science and their choice of Home Science as a subject in Mumias Sub-County Public Secondary Schools. As a result, we affirm the alternative hypothesis, which posits a statistically significant relationship between the students' gender-related perceptions towards Home Science and their preference for this academic discipline. Therefore, such a relationship between the two attributes signifies a statistically significant association. The findings suggest that the gender-related perspectives of the students did influence their selection of Home Science as a major. The existence of adverse gender stereotypes is a contributing factor to the decrease in student enrollment within the domain of Home Science. Efforts directed at raising students' awareness regarding negative gender perceptions and stereotypes linked to Home Science

may result in increased enrollment in Home Science subjects at public secondary schools in Mumias Sub-County. Consistent with the findings of Kong et al. (2023) in China, the results indicate that familial or educational origins of gender stereotypes influenced the attitudes and perceptions of adolescents regarding their preferred careers. There is a possibility that adolescents who adhere to particular gender perspectives believe that girls are more likely to pursue artistic disciplines, whereas boys are better adapted for scientific endeavours. On the contrary, these individuals might also maintain the outlook that women possess a lesser degree of expertise in the realm of science.

A research carried out in Uganda by Ampaire et al. (2021) revealed that pupils demonstrated compliance with gender stereotypes that have persisted throughout history. A significant proportion of students demonstrated a hesitancy to question established conventions and possessed apprehension regarding venturing into uncharted territory. The presence of gender stereotypes poses a substantial barrier that prevents students from conducting career research in order to determine their vocational aptitude. This indicates that the influence of career stereotypes has impeded students' ability to strategically align their career decisions with their experiences, interests, and knowledge. The following section presents an examination and elucidation of the results concerning the second objective of the research.

4.5 Students' Attitude Towards Home Science and Students' Selection of Home Science

The second objective of the research was to determine if students' like or dislike for Home Science had any relationship with students' choice of Home Science as a subject. Prior to finding the link, the study looked at the students' perspectives on a number of

variables that assess the attitude qualities related to choosing Home Science. The next part contains the findings and discussion on students' attitude towards Home Science.

4.5.1 Students' Attitude Towards Home Science Subject

The data collection process involved the acquisition of information pertaining to students' perspectives on home scientific education. This was achieved by employing a five-point Likert scale, which encompassed the following answer options: severely disagree (SD) (no response), disagree (D), not sure (NS), agree (A), and strongly agree (SA). The frequency and proportion of student ratings were calculated for each inquiry that assessed students' viewpoints on various aspects of home scientific education. The determination of the overall pattern of ratings for each question involved the calculation of cumulative frequency and percentage for students who expressed agreement (both A and SA) and disagreement (both SD and D). To ascertain the collective perspective of students about the attitude components of home scientific education, the composite mean of all scale items was computed.

The data reported in Table 7 reveals that a substantial percentage (55.1%), equivalent to 145 students, shared a divergent perspective on the assertion that Home Science did not have a prominent position among the most essential subjects. This finding suggests that a notable number of the participants considered Home Science to be one of the most essential disciplines. The students were cognizant of the fact that pursuing Home Science had the potential to enhance their employability and enable them to be self-employed. According to Maina (2015), the introduction of Home Science in schools has received a positive response. It has been observed that there is a prevailing belief that studying Home Science beyond the classroom setting is not considered valuable.

Table 10

Students' Attitude Towards Home Science Subject

Statement	Rating: Frequency and Percent					Cumulative		Total
	SD	D	NS	A	SA	D	A	
Home Science is not one of the most useful subjects	69 26.2%	76 28.9%	20 7.6%	53 20.6%	45 17.1%	145 55.1%	98 37.3%	263 100.0%
Everybody should have some basic Home Science knowledge	42 16.0%	51 19.4%	25 9.5%	86 32.7%	59 22.4%	103 33.5%	175 66.5%	263 100.0%
It is very easy to study and pass Home Science	71 27.0%	82 31.2%	27 10.3%	38 14.5%	45 17.1%	153 58.2%	110 41.8%	263 100.0%
Home Science is a very interesting subject	39 14.8%	63 24.0%	14 5.3%	83 31.6%	64 24.3%	102 38.8%	161 61.2%	263 100.0%
Home Science is demanding in terms of time and money.	47 26.6%	53 29.3%	22 8.8%	80 17.1%	61 18.3%	100 38.0%	163 62.0%	263 100.0%
Generally, people look down on students taking Home Science	66 26.6%	93 29.3%	21 8.8%	58 17.1%	25 18.3%	159 60.5%	83 39.5%	263 100.0%
Home Science is for those who are academically weak	76 28.9%	112 42.6%	26 9.9%	31 11.8%	18 6.4%	188 71.5%	75 28.5%	263 100.0%
Home Science should be scrapped off from the syllabus	63 24.0%	79 30.0%	25 9.5%	50 19.0%	46 17.5%	142 54.0%	121 46.0%	263 100.0%
Mean (*M*) =3.42; Std. Deviation (*SD*) = 0.44								

Further, a significant majority of pupils, specifically 175 individuals accounting for 66.5 percent of the overall sample, expressed agreement with the notion that it is important for all persons to possess a fundamental comprehension of Home Science. Hence, it is apparent that a significant portion of the students acknowledged the pragmatic use of the subject. A total of 153 pupils, accounting for 58.2% of the sample, indicated their dissatisfaction with the proposition that Home Science study and achievement could be easily accomplished. As a result, the students had an understanding of the cognitive challenges that are inherent in the study of Home Science. This finding played an important role in refuting the belief that Home Science was a simplistic discipline that could be easily understood and successfully completed by anyone of any background or ability.

The data presented on Table 10 indicates that a substantial proportion of students, specifically 161 (61.2%), concurred with the statement that Home Science is a captivating subject matter. Students enrolled in Home Science courses appear to have a keen interest in the subject and take pleasure in the numerous activities associated with its study, according to the findings. The findings of the study indicated that a considerable percentage of pupils, specifically 163 (62.0%), agreed that Home Science demanded a more substantial financial and time commitment. The practical nature of Home Science, which requires financial resources for the purchase of materials, tools, and apparatus, is the cause of this result. Even more, a substantial investment of time is required to complete the Home Science assignments.

According to the data presented on Table 10, a considerable percentage of students, specifically 159 (60.5%), disagreed with the statement that Home Science students were

subject to unfavourable perceptions. Seventy-one percent of the total sample, or 188 students, rejected the notion that Home Science was reserved exclusively for learners with academic difficulties, according to the study's findings. As stated in Sigot's (2013) research, instructors and administrators noted that a prevalent misconception existed among students that Home Science was commonly associated with those who faced academic difficulties in other subjects. It was believed that this perception was deceptive, and it influenced the choices of students who were contemplating Home Science as their major. Hence, a considerable segment of the student body was not under the impression that Home Science was exclusively designed for those with comparatively inferior scholastic aptitudes.

The data presented on Table 10 indicates that approximately 142 students, constituting 54.0% of the students' sample, disagreed with the proposition suggesting the elimination of Home Science from the curriculum. Nevertheless, a considerable percentage of the students, precisely 121 individuals (46.0%), indicated their concurrence with the provided assertion. This implies that educational establishments continued to have an obligation to foster students' understanding of the benefits associated with the study of Home Science. Ochieng (2010) conducted a study to investigate the correlation between students' academic achievement in Home Science and their perspectives on the subject of Home Science. Students were generally pleased with the Home Science curriculum when instructed by qualified instructors who followed the Competency-Based Curriculum and when they perceived that the school administration supported the subject.

As the investigation into the tools employed to gauge students' perspectives on Home Science progressed, the study classified the students' attitude into one of three categories:

Negative, neutral, or positive. The range from 1.0 to 5.0 represented the minimum and maximum mean scores, respectively, for the items used to calculate the average score for each student's attitude. Positive attitudes were those with a score range of 3.50–5.0, neutral attitudes were those with a score range of 2.50–3.49, and negative attitudes were those with a score range of 1.0–2.49. The information on Table 11 offers a comprehensive summary of the classification of students' perspectives regarding the Home Science course.

Table 11

Classification of Students' Attitude Towards Home Science

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negative	13	4.9	4.9	4.9
	Neutral	102	38.8	38.8	43.7
	Positive	148	56.3	56.3	100.0
	Total	**263**	**100.0**	**100.0**	

Source: Research Data (2022)

The results presented on Table 11 demonstrate that a considerable percentage of the student population, precisely 148 students (56.3%), exhibited a positive attitude towards the Home Science subject. The development of a positive attitude towards Home Science may positively influence students' inclination and choice of this field of study. The present conclusion is consistent with the findings of Chelagat et al.'s (2019) study in Elgeyo Marakwet County, which demonstrated that students viewed Home Science with extreme favorability.

The purpose of conducting the analysis and discussion of the data obtained from the key informants was to corroborate the conclusions drawn by the students regarding the factor

under consideration. Eight (8) Home Science-specialized instructors and five school principals participated in a series of interviews. The participants were instructed to furnish an exhaustive analysis of the general attitude exhibited by their students with regard to the topic of Home Science. Students registered for Home Science courses, according to the key informants, held a favourable opinion of the subject and engaged in fruitful conversation regarding it. The participants who chose not to enroll in Home Science demonstrated generally negative attitudes towards the subject and provided various rationales for their choice. These justifications included the conviction that the discipline favoured femininity over masculinity and was not commercially viable.

The researchers asked the key informants to provide an account of the various elements that contributed to the students' negative attitude towards the subject of Home Science. The dominant viewpoint among the key informants was that various stakeholders, including parents, relatives of students, members of the community, subject instructors and peers, played a substantial role in cultivating an unfavourable attitude among students regarding Home Science. This is what a school principal had to say;

> *In any given year, there are fewer students taking Home Science as compared to other subjects for various reasons. What has come out clearly from most students over the years has been the discouragement from community members and close relatives likes parents, siblings and other significant members of the community. Many people who discourage students from taking Home Science paint the subject as being for women and girls.*

The researcher requested the key informants to offer an explanation of the factors that influenced the students' unfavourable disposition towards Home Science subject. Majority of the teachers and principals were of the view that students who were not

taking Home Science did not generally feel that Home Science was for students who were academically weak and this was stated by all the 8 teachers and 3 of the 5 principals.

This is what a Home Science teacher had to say:

> *It is not true to say that students who do not take Home Science consider students who take the subject to be academically weak. In any case, there is always friendship and teamwork among students regardless of the varying subject combinations*.

When queried about whether students perceived Home Science to be more time-consuming and expensive, principals and instructors affirmed through interviews that students did, in fact, perceive Home Science to be extremely demanding monetarily and temporally due to the course's practical components. The interviews also unveiled that parents and custodians of learners engaged in Home Science coursework were dissatisfied with the supplementary charges levied by educational institutions to procure materials and apparatus for hands-on Home Science sessions. This is what a principal had to say;

> *To master concepts in Home Science, students are required from time to time to take part in practical lessons, some of which are costly, time consuming and requiring utmost keenness and concentration. This has had the effect of discouraging some students from taking the subject*.

This suggests that the financial burdens associated with Home Science may have contributed to its negative reputation, particularly among students who were not interested in pursuing the subject. Findings from this study were compared with findings from previous studies on how students' attitude affected selection of Home Science. In a study by Ochieng' (2010), it was revealed that cost was a major factor that affected

students' attitude towards choosing Home Science in public Secondary Schools. The study also noted that many students were discouraged from taking the subject due to financial and time constraints associated with the subject. According to a study by Kiptoon (2011), the majority of parents dissuade their children from enrolling in subjects that require more time and resources than others. Having discussed students' attitude towards Home Science, the study proceeded to determine the relationship between students' attitude towards Home Science education and students' selection of Home Science subject in the schools. The results are presented in the following section.

4.5.2 Relationship Between Students' Attitude Towards Home Science and Students' Selection of Home Science Subject

The study sough to resolve the following research hypothesis:

H_o2: There is no statistically statistically significant relationship between students' attitude towards Home Science and students' selection of Home Science Subject in public Secondary Schools in Mumias Sub-County.

The link between students' attitude towards Home Science (categorised as positive, neutral, or negative) and their choice of Home Science in form three (responding with either yes or no) was evaluated using a Chi-square test. The results are displayed on Table 12.

Table 12

Chi Square Test Results: Relationship between Students' Attitude Towards Home Science and Students' Selection of Home Science Subject

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.121[a]	2	.047
Likelihood Ratio	6.188	2	.045
Linear-by-Linear Association	4.521	1	.033
No. of Valid Cases	263		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.39.

Source: **Research Data (2022)**

A chi-square test (x2) with two degrees of freedom, a sample size (n) of 263 (resulting in a test statistic of 6.121 and a p-value of 0.047) demonstrates that there is a significant relationship between students' attitude towards Home Science and their choice of Home Science subject, as shown in Table 12. The null hypothesis H_O2, which states that there is no statistically significant relationship between students' attitude towards Home Science and their selection of Home Science was rejected because the *p*-value is less than 0.05. Disproven is the hypothesis regarding the subject matter in Mumias Sub-County's public secondary schools. Conversely, we affirm the alternative hypothesis that there is a statistically significant relationship between the attitude of students towards Home Science and their selection of Home Science as a course of study. As a result, it is possible to conclude that there exists a statistically significant relationship between the two variables. The research finding suggests that students' attitude towards Home Science

has a discernible influence on their selection of Home Science as a course of study. A positive attitude towards Home Science is anticipated to result in greater student participation in the subject in public secondary schools in Mumias Sub-County. As a result of this finding, students who developed a positive attitude towards Home Science demonstrated a greater propensity to select the subject matter, whereas those who developed a negative attitude towards Home Science were less inclined to do so.

According to Oriahi et al. (2010), the way in which students perceive the sciences influences their decision-making. A detrimental mindset could precipitate apathy, which would cause students to disregard the subject matter when given the opportunity. Moreover, they validate the importance of implementing strategies to modify students' perspectives on the sciences. According to the findings of Kamau and Orodho (2014), 80% of the students surveyed did not perceive agriculture as a difficult subject because of the simplicity involved in attaining exceptional results. This indicates that the attitude of students enrolled in agriculture programmes was positive. Furthermore, Mwangi et al. (2013) found that the attitudes of females, specifically those attending single-sex institutions, did not have a significant impact on the low enrollment in physics courses. According to studies by Serem et al. (2010) and Serem (2011), a significant proportion of students exhibited a favourable attitude towards the subject of Home Science, particularly as it pertained to clothing and textiles, on account of the perceived utility of the contents in the long run. A study conducted by Mbaabu et al. (2011) revealed that a majority of secondary school students in Imenti South District, specifically 52.5%, maintained a favourable attitude towards the subject of physics.

4.6 Students' Awareness of Home Science Related Career Opportunities and Selection of Home Science Subject

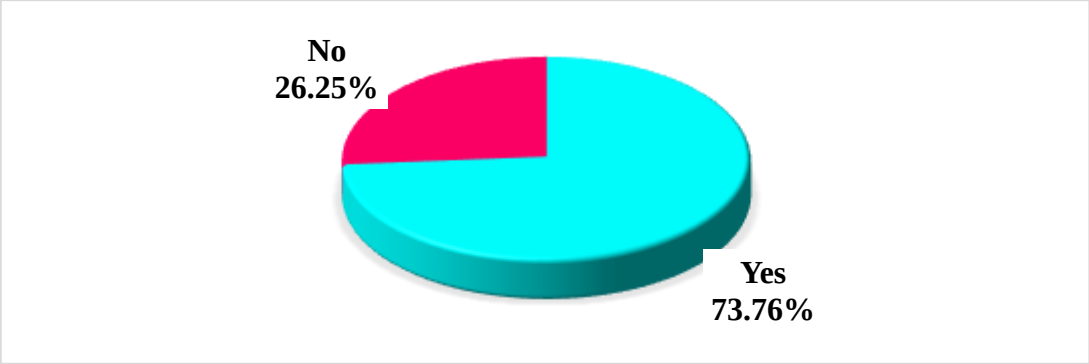
The third objective of the study was to establish the correlation between students' knowledge of employment prospects in Home Science and their decision to choose Home Science as a subject in public secondary schools in Mumias Sub-County. Prior to establishing the link, the study examined students' evaluations on many factors assessing their understanding of professional considerations in Home Science and how it influences their choice of Home Science. The results are detailed in the subsequent sections.

4.6.1 Students' Awareness of Home Science Related Career Opportunities

The students were instructed to identify whether they had received guidance on career choices as they prepared to select subjects in Form three. The results are displayed on Figure 4.

Figure 3

Availability of Career Guidance to Students

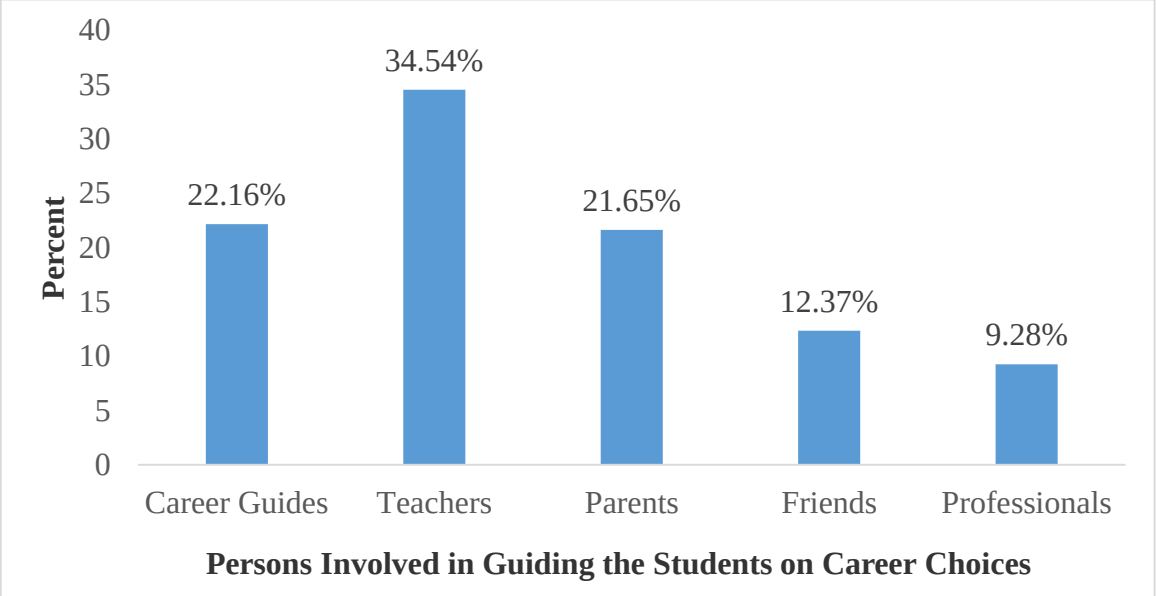


The findings indicate that a significant proportion (73.8%) of the pupils received guidance on career choices when preparing to select topics in form three. Most schools in

Mumias Sub-County offered career advising to students as they approached the decision of selecting subjects at the end of form two. The purpose of career guidance is to provide students with the necessary tools and information to make well-informed decisions when selecting courses for specialization. The students were further requested to identify the individuals responsible for providing guidance to pupils on their academic choices. The results are displayed on figure 5.

Figure 4

Persons Involved in Guiding Students in Career Choices

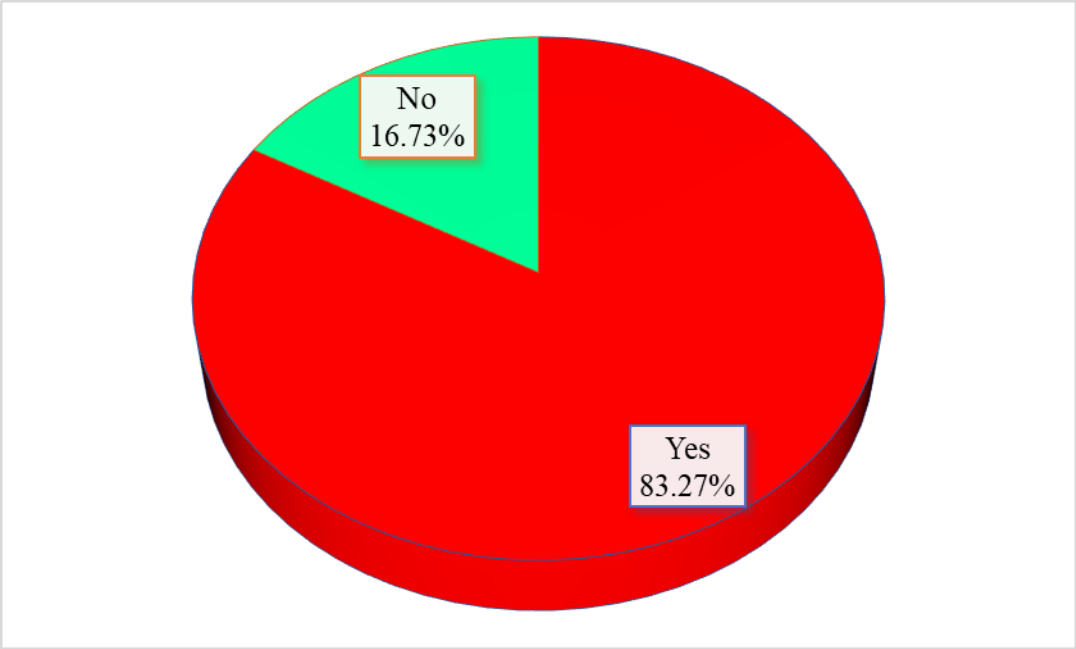


The data presented on Figure 5 convey that students got career assistance from several sources, with the most significant contributors being instructors (34.5%), career guides (22.2%), and parents (21.7%). These players had the most impact on the choosing of subjects. The students were also required to indicate their awareness of professional

prospects in the field of Home Science that may be pursued after studying the subject. The data ware depicted on Figure 6.

Figure 5

Awareness of Careers for Home Science Students



Based on the findings, a significant majority of the students (83.27%) exhibited knowledge regarding the diverse range of employment opportunities that come with completing Home Science in secondary school. Conversely, a minority of the respondents (16.73%) claimed to be uninformed regarding these employment alternatives. This response is attributable to the considerable percentage of students who indicated they had received career guidance during the process of subject selection in form three. Consequently, career guidance was demonstrating efficacy with regard to fostering consciousness on available careers upon pursuing Home Science.

Additionally, the level of students' knowledge regarding employment prospects in the field of Home Science was the subject of the study. A Likert scale comprising five points—"1 = strongly disagree (SD)" to "5 = strongly agree (SA)"—was employed to collect data pertaining to students' comprehension of employment opportunities associated with Home Science. The data included the frequency and percentage of students' responses for each item that evaluated their knowledge of career opportunities associated with Home Science. In order to ascertain the overall trend of responses for each question, the cumulative frequency and percentage of students who expressed disagreement (including both strong disagreement and disagreement) and agreement (including both agree and strongly agree) were calculated.

According to the data displayed on Table 13, a substantial proportion of the students (55.7%), specifically 147, agreed that Home Science was presented in an engaging fashion. Students appeared to appreciate and have a positive attitude towards the efforts that teachers exerted to foster their interest in the subject. In relation to the influence of community role models on the choice of the Home Science course during secondary education, 156 students (59.3%) voiced dissent towards this proposition. This implies that despite academic institutions' efforts to raise awareness about the subject in the classroom, there was a dearth of community role models who could inspire and support learners regarding the topic at home.

Table 13

Students' Awareness of Home Science Related Career Opportunities

Statement	Rating: Frequency and Percent SD	D	NS	A	SA	Cumulative D	A	Total
Home Science was presented as an attractive and relevant subject	39 14.8%	50 19.0%	27 10.3%	81 30.8%	66 25.1%	89 33.8%	147 55.9%	263 100.0%
There are role models from the community that influence students' choice of Home Science	62 23.6%	94 35.7%	29 11.0%	36 13.7%	42 16.0%	156 59.3	78 29.7	263 100.0%
Home Science is not marketable in the job market	58 22.1%	83 31.6%	25 9.5%	52 19.8%	45 17.1%	141 53.6%	97 36.9%	263 100.0%
I can easily set up a business with the skills acquired in Home Science	32 12.7%	43 16.4%	29 11.0%	92 35.0%	67 25.5%	75 28.5%	159 60.5%	263 100.0%
I am aware of the careers that require Home Science as a subject	39 14.8%	60 22.8%	21 8.0%	86 32,7%	57 21.7%	99 37.6%	143 54.4%	263 100.0%
Mean (*M*) =3.06; Std. Deviation (*SD*) = 0.48								

Source: **Research Data (2022)**

The results, as presented on Table 13, demonstrate that a significant proportion of 141 students (53.6%) disagreed with the statement that Home Science is not a marketable subject in the job market. A proportion of 143 students, constituting 54.4% of the students, conveyed that they were aware of the careers that require Home Science as a

subject. Furthermore, a substantial majority of 159 students (60.5 percent) conveyed their assurance in their capacity to establish a business utilising the knowledge and abilities acquired in Home Science. As a result, the students perceived Home Science as providing opportunities for independent employment. Therefore, a considerable proportion of secondary school students held the belief that majoring in Home Science would afford them employment opportunities. This favourable incentive functions as a driving force for the learners to select Home Science.

After analysing the indicators that gauge students' cognizance of employment opportunities in Home Science, the study proceeded to classify the degree of students' knowledge as high or low. The mean score obtained for each student on the items assessing awareness of Home Science related career opportunities was computed and classified into one of three categories: Low, moderate, or high awareness. The levels of awareness were classified into the following categories: low criteria applied to a mean score of 1.0–2.49, moderate criteria applied to a score between 2.50–3.49, and high criteria applied to a mean score of 3.50–5.0. Table 14 contains the condensed findings.

Majority of the students 171 (65.0%) exhibited a moderate level of awareness concerning employment prospects in the domain of Home Science, according to the data presented in Table 14. Particularly with regard to occupations associated with the Home Science curriculum, the results indicate that schools may have needed to improve their career guidance services.

Table 14

Level of Students' Awareness of Home Science Related Career Opportunities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	39	14.8	15.0	15.0
	Moderate	171	65.0	65.8	80.8
	High	50	19.0	19.2	100.0
	Total	260	98.9	100.0	
Missing	System	3	1.1		
Total		263	100.0		

Source: **Research Data (2022)**

In order to corroborate the results obtained from the quantitative analysis of the students' data, the research investigated and deliberated upon the qualitative data concerning the students' perception of job prospects in the field of Home Science. In order to gauge the extent to which schools supported students in the process of selecting subjects for form three, the researcher interviewed the administrators and Home Science instructors regarding their provision of career guidance to students within their respective institutions. Prior to subject selection, all eight Instructors and five principals confirmed that students were, in fact, provided with career guidance.

When queried about the individuals engaged in the provision of career guidance to students at the school level, teachers named other teachers, senior students, parents, and guidance and counselling staff. In contrast, the principals cited community professionals, non-teaching school personnel, teachers, parents, guardians, and guidance and counselling personnel. Additionally, the opinion of the key informants was sought

regarding the extent to which students were exposed to the diverse range of career opportunities that await them upon choosing Home Science as their academic discipline. According to the results, a majority of Instructors (seven out of eight) held the belief that students were adequately knowledgeable about various career paths prior to choosing Home Science. Each of the five principals attested that the students were adequately informed regarding the professional opportunities available to those who elect to pursue Home Science. The Home Science teachers possessed extensive expertise in the discipline and consistently furnished students with career-relevant data, enabling them to make informed course selections. The findings corroborate the sentiments of the majority (83.27%) of secondary school Home Science students who acknowledged their cognizance of the myriad employment opportunities that followed with their completion of the programme. The following is an interview transcript from one of the Home Science teachers;

> *As students prepare to proceed to form three, many students get interested in knowing the subjects that would lead one to different career paths. Students that have done Home Science in form 1 and form 2 go to Home Science teachers to ask for details on the various pathways that Home Science can lead a student to at the end of schooling. Such awareness of Home Science related career opportunities enables students to make informed choices on selection of Home Science subject*.

The finding confirms that students were provided with adequate guidance and information regarding career options related to the subject of Home Science, thereby empowering them to make informed choices when selecting Home Science as their major. In response to an inquiry regarding the portrayal of Home Science in primary school as an appealing and pertinent subject in secondary education, the findings revealed

that four out of five principals and six out of the eight teachers agreed that Home Science was, in fact, portrayed as so in primary schools.

In response to the inquiry concerning the viewpoints of principals and teachers concerning the availability of community role models who could influence students' choices regarding Home Science, all the eight principals and five teachers agreed that the community does not have an adequate number of Home Science education role models to affect students' decisions to pursue Home Science. This is consistent with the students' perspective regarding the same inquiry. According to the results of the survey, five of the eight instructors were of the opinion that students did not view Home Science as a subject that would be advantageous in the job market. Additionally, three of the five principals were of this view. The statements provided by a principal constitute part of the qualitative findings.

> *For the reason that many students come from family backgrounds that may not have adequate resources to set up a venture such as a tailoring shop or a pastry shop, that are typically capital intensive, many students may perceive Home Science as not being marketable and may opt for other subjects that would lead to careers that are considerably cheaper to start. In selecting subjects, students put into consideration the kind of ventures that such subjects can lead to and the cost implication for setting up such ventures*.

This finding suggests that the financial implications linked to starting a business may influence students to perceive the Home Science subject as unattractive, consequently discouraging them from pursuing Home Science as a major. Concerning the students' perception of Home Science as an essential subject for self-employment, the main

informants were questioned. Consistent with the students, the eight Home Science instructors and five principals agreed that Home Science is an essential subject for those who wish to pursue self-employment.

The study compared the results with empirical studies regarding the effect of students' awareness of Home Science employment prospects on their selection of Home Science as a major. Nyangi (2012) identified several factors that deterred students from choosing Home Science as a major. These factors included inadequate knowledge regarding the numerous employment prospects that Home Science could offer, a lack of interest and enthusiasm for the subject, and the perception that Home Science demands excessive effort and commitment. Sygot (2013) asserts that a significant proportion of educational institutions neglected to furnish students with information regarding the numerous career opportunities linked to Home Science and failed to establish standardized criteria for students to select Home Science as a subject. As a result, Home Science is regarded unfavourably in the public secondary schools of Kenya. Additionally, the research investigated the relationship between students' knowledge regarding potential career paths in Home Science and their selection of Home Science as a subject matter in educational institutions.

4.6.2 Relationship Between Students' Awareness of Home Science Related Career Opportunities and Students' Selection of Home Science Subject

The study sough to resolve the following research hypothesis: **H_O3: There is no statistically significant relationship between students' awareness of Home Science related career opportunities and students' selection of Home Science subject in public Secondary Schools in Mumias Sub-County**.

The association was examined through the analysis of data pertaining to students' selection of Home Science in form three (via yes or no responses) and their levels of knowledge regarding Home Science career options (classified as low, moderate, or high). The examination entailed conducting a chi-square test and the results were as summarized on Table 15.

Table 15

Chi Square Test Results: Relationship Between Students' Awareness of Home Science Related Career Opportunities and Students' Selection of Home Science Subject

	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	4.395[a]	2	.111
Likelihood Ratio	4.281	2	.118
Linear-by-Linear Association	.472	1	.492
N of Valid Cases	260		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 10.95.

Source: **Research Data (2022)**

Students' awareness of employment opportunities in Home Science was not statistically and significantly related with their decision to pursue Home Science as a field of study, according to the data in Table 15. A sample size (n) of 263 and a chi-square test (x^2) comprising two degrees of freedom produced a test statistic of 4.395 and a p-value of .111. Based on the obtained p-value exceeding 0.05, the null hypothesis H_O3 was adopted. This hypothesis posits that there is no statistically significant correlation between students' knowledge of employment opportunities related to Home Science and their choice of Home Science as a secondary school subject in public schools located in Mumias Sub-County. As a result, the relationship between students' knowledge of Home

Science career opportunities and their selection of Home Science as a subject was not statistically significant. The level of knowledge or lack thereof regarding prospective employment prospects in the field of Home Science did not influence the selection of Home Science as a major by students attending public secondary schools in Mumias Sub County. The study results contradict the observations made by Nyangi (2012), who said that students were discouraged from selecting Home Science due to a lack of information about the several professional paths it may lead to. In addition, Sigot (2013) discovered that the subject of Home Science failed to attract outstanding students in public Secondary Schools due to a lack of awareness about work options and jobs in this field. In her study, she disclosed that the primary purpose of teaching Home Science in schools is to enhance and refine vocational, professional, and technical competencies. In the next part, the findings for the fourth objective of the study are presented and discussed.

4.7 Availability and Adequacy of Home Science Teaching Resources in Schools and Students' Selection of Home Science Subject

The relationship between the availability and adequacy of Home Science teaching materials in schools and the selection of Home Science by students in public secondary schools in Mumias sub-county, Kenya, was the fourth objective of the study. Before establishing the association, the research investigated students' assessments of various aspects pertaining to the availability and adequacy of Home Science instructional materials. The disclosure of the results occurs in the following section.

4.7.1 Availability and Adequacy of Home Science Teaching Resources

Students' perspectives regarding the adequacy and availability of Home Science instructional materials were collected via a Likert-type scale consisting of five points.

"1=strongly disagree (SD)" to "5=strongly agree (SA)" comprised the scale. The data utilized in this study consisted of the frequency and percentage of student ratings for each item that assessed their perceptions of the adequacy and availability of Home Science teaching resources. In order to ascertain the overall trend of responses for each question, the cumulative frequency and percentage of students who expressed disagreement (including both strong disagreement and disagreement) and agreement (including both agree and strongly agree) were calculated. The overall perceptions of students concerning the accessibility and adequacy of Home Science instructional resources were determined by calculating the composite mean of each item on the scale. Table 16 displays the findings.

According to the data presented in Table 16, a proportion of 158 students, constituting 57.4% of the sample, conveyed dissent regarding the availability of a completely furnished Home Science room at their educational institution. A cohort of 150 learners, constituting 57.0% of the total student sample, voiced their objection regarding the inadequate number of Home Science instructors in their educational institution. A proportion of 52.5% of the respondents, or 138 students in total, disagreed regarding the sufficiency of Home Science equipment at their educational institutions. In a similar vein, 147 respondents (or 55.9% of the students) expressed dissent towards the assertion that the educational institution possessed an adequate quantity of textbooks for the Home Science course. According to Aina and Adedo (2013), it is critical to utilize instructional materials of superior quality when instructing scientific courses. This is essential for fostering enthusiastic and productive learning among students.

Table 16

Students' Perceptions on Availability and Adequacy of Home Science Teaching Resources at School

	Rating: Frequency and Percent					Cumulative		
Statement	**SD**	**D**	**NS**	**A**	**SA**	**D**	**A**	**Total**
The school has a fully furnished Home Science room	35 13.3%	46 17.5%	31 11.8%	88 33.5%	63 24.0%	158 57.4%	81 31.3%	263 100.0%
The school has enough teachers of Home Science	55 20.9%	95 36.1%	16 6.1%	49 18.6%	48 18.3%	150 57.0%	97 36.9%	263 100.0%
The school has enough equipment and materials for Home Science subject	59 22.4%	79 30.0%	36 13.7%	49 18.6%	40 15.2%	138 52.5%	89 33.4%	263 100.0%
The school has enough text books for Home Science subject	65 24.7%	82 31.2%	18 6.8%	52 19.8%	46 17.5%	147 55.9%	98 37.3%	263 100.0%
Mean (*M*) =2.55; Std. Deviation (*SD*) = 0.48								

Source: **Research Data (2022)**

Furthermore, Serem (2011) noted that effective instructional materials can stimulate learners' inquisitiveness, engross their attention, and foster deep reflection on the topic at hand. From this standpoint, it becomes apparent that offering high-quality educational materials could potentially enhance the academic performance of Home Science students in institutions. Quality instructional materials augment students' understanding of the matter hence increasing the probability of stimulating substantial student engagement. The findings revealed that, on a five-point Likert scale (where one denotes the lowest possible mean score and five represents the highest possible mean score), the majority of

institutions lacked adequate instructional materials for Home Science (M = 2.55, SD = 0.48). Sufficient resources are required for any significant transformation and improvement in education (Farrant, 2009). It is critical that instructors have access to suitable instructional resources, according to Shiundu and Omulando (2012). The aforementioned resources comprise tangible assets such as buildings and equipment, scholarly materials including manuals, and an adequate complement of competent personnel. According to findings of a study by Mwangi (2014), a significant proportion of instructors in Kenya failed to utilise authentic instructional materials when instructing Home Science. This was primarily attributable to the paucity of such resources in the majority of secondary institutions, which hindered the students' preference for the subject.

The results obtained from the students were cross checked with data obtained from principals and instructors of Home Science, who served as key informants. The interview centred on the impact of the sufficiency of Home Science teaching resources in public secondary schools in Mumias Sub-County on students' decisions to major in Home Science. The key informants were questioned regarding the availability of a Home Science laboratory that was adequately equipped to facilitate practical activities pertaining to the subject matter at their respective institutions. Six of the eight teachers and five principals thought their respective schools had a fully-equipped Home Science laboratory that supported the subject's instruction and learning. In contrast to the sentiments of the majority of pupils (57.4%), it was found that the school did not possess an adequately outfitted Home Science room. As a result, students, instructors and school

principals disagreed regarding the availability and adequacy of Home Science education materials.

In relation to the adequacy of resources at their respective schools for instructing the Home Science subject, each of the eight instructors and four out of five principals agreed that that schools had inadequate equipment and supplies to facilitate Home Science instruction. As a result, the majority of the students and the primary sources reached a consensus. In response to the question of whether or not schools conducted all required practical lessons on the subject of Home Science, participants indicated that acquiring adequate materials and apparatus for each practical lesson was a prevalent obstacle. Schools, as a result, did not fulfil the Home Science curriculum's prescribed number of practical exercises.

Additionally, the key informants were questioned regarding the potential impact of the availability and adequacy of Home Science instructional and learning resources on students' choice of the subject. A total of five principals and seven of the eight instructors concurred with the statement that the availability of resources encouraged students to pursue Home Science. Two instructors who held opposing views stated that despite lacking adequate resources, some students might elect to study Home Science due to their enthusiasm for the subject, adequate understanding of its benefits, and the influence of peers, instructors, and parents. The following is an interview transcript from a principal;

> *Students look at what those ahead of them are going through and any realization that students in the candidate class are struggling due to lack of materials and equipment would make many students not to select Home Science. During their informal meetings, students share more about the*

challenges and opportunities in various subjects and it is from this sharing that some students make a decision to take or not to take a subject.

The findings of this study indicate that students' selection of Home Science was most likely effected by the availability and adequacy of resources. Additionally, the degree to which the costs associated with financing the Home Science curriculum influenced students' decisions to enroll in Home Science was inquired about from the participants. All the eight Instructors and five administrators affirmed that indeed, cost of Home Science resources had a bearing on students' selection of the subject. This finding indicates that educational institutions with adequate resources exhibited a greater propensity to enroll a higher number of students in Home Science courses, as opposed to institutions with inadequate facilities and resources.

With respect to the inquiry concerning whether students were inclined to choose alternative options because the subjects did not require specialised resources, seven out of the eight Instructors and four out of the five principals came to the same conclusion. This indicates that the availability of teaching and learning materials was a key consideration in the selection of the Home Science subject. Also inquired from the key informants was whether, due to resource constraints, instructors discourage some students from pursuing the Home Science curriculum. Five principals and all eight instructors confirmed that lack of resources never prevented a teacher from encouraging a student to pursue Home Science. According to them, a number of schools were already experiencing low Home Science enrollment for a variety of reasons, and there was no indication that instructors discouraged students from enrolling in the course due to

resource constraints. The following is an interview transcript from one of the teachers interviewed:

> *I have never come across a teacher discouraging a student from taking Home Science due to inadequate resources for teaching the subject. We already have very small enrollment levels in the subject and it has not occurred to me that a teacher can go to the extent of discouraging students from taking Home Science. There have been discouragements from teachers to students not to take Home Science for other reasons such the subject being too involving and being predominantly feminine but not because of lack of resources*.

Also inquired about were respondents' opinions regarding the adequacy of Home Science instructors at their respective institutions. The schools were experiencing a severe shortage of Home Science teachers, according to the opinions of all eight Instructors and five principals who provided feedback. According to them, the scarcity of Home Science instructors holding certification discouraged some pupils from enrolling in those courses. As per the assertions of three principals, the system faces a dearth of youthful instructors who possess expertise in Home Science. This implies that a restricted proportion of students are enrolling in teacher education programmes that train Home Science teachers. The following is an interview transcript from one of the principals:

> *One of the reasons why there are gender disparities in the selection of Home Science among Secondary school students with more girls than boys selecting the subject is that boys lack role models among teachers of Home Science. Male Home Science teachers are very rare to come across not only in Mumias Sub-County but in Western region and the County as a whole. This is one of the reasons why male students perceive Home Science as a female subject*.

It is the critical duty of the instructors to advocate for the subjects that they instruct. As described, the present circumstances are detrimental to the development of Home Science as a technical field. As a result, there exists a potential for a future scarcity of experts in the domain of Home Science. Therefore, in order to resolve this issue, it is crucial to promote the subject in secondary schools.

Concerns were also raised by the principals and instructors with regard to the sufficiency of Home Science textbooks at their respective institutions. Five of the eight teachers reported that there was an inadequate supply of Home Science textbooks at their respective institutions. Likewise, three of every five principals shared the same viewpoint. Potentially discouraging certain students who completed their first and second years of Home Science coursework from pursuing the subject again in their third year was the insufficient availability of textbooks in their respective institutions.

The study compared the findings with existing empirical studies. Mwangi (2014) conducted research which unveiled that public secondary schools lacked adequate resources to instruct Home Science, thereby influencing students' selection of the Home Science curriculum. Moreover, the research findings indicated that the availability and adequacy of instructional resources in the field of Home Science would positively impact student enrollment and Home Science proficiency. Physical resources, including facilities and apparatus, textbooks, and human resources, are all components of appropriate teaching materials that teachers must have access to, according to Shiundu and Omulando (2012). Subsequent to verifying the availability and adequacy of instructional materials in schools, the research investigated the association between availability and adequacy of

Home Science teaching resources and students' selection of the subject. The presentation of the results follows in the following section.

4.7.2 Relationship Between Availability and Adequacy of Home Science Teaching Resources and Students' Selection of Home Science Subject

The study sough to resolve the following research hypothesis:

H_O4: There is no statistically significant relationship between availability and adequacy of Home Science teaching resources in schools and students' selection of Home Science in public Secondary Schools in Mumias Sub-County.

The association between the availability and appropriateness of Home Science teaching materials in schools and students' choice of Home Science in form three was assessed using a Chi-square test. The findings of this analysis are provided on Table 17.

Table 17

Chi Square Test Results: Relationship Between Availability and Adequacy of Home Science Teaching Resources and Students' Selection of Home Science Subject

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.249[a]	1	.618		
Continuity Correction[b]	.018	1	.893		
Likelihood Ratio	.245	1	.620		
Fisher's Exact Test				.722	.439
Linear-by-Linear Association	.248	1	.619		
N of Valid Cases	263				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.32.
b. Computed only for a 2x2 table

Source: Research Data (2022)

The results presented on Table 17 suggest that there is no statistically significant relationship between the quantity and accessibility of Home Science instructional resources in educational institutions and the selection of Home Science subject by students. A sample size (n) of 263 and a one-degree-of-freedom chi-square test (x^2) produced a test statistic of .249 and a p-value of .618. Considering the p-value exceeded 0.05, we affirm the null hypothesis H_O4, which posits that there is no statistically significant relationship between the adequacy and availability of Home Science teaching resources in schools and the way in which students choose to study Home Science in Mumias Sub-County's public secondary schools. As a result, the association between the availability and adequacy of Home Science instructional resources in schools and students' selection of Home Science as a subject matter is not statistically significant. Therefore, it can be deduced that the accessibility or limited availability of resources, including qualified instructors, textbooks, and other supplementary materials for Home Science coursework, did not have an influence on the decision of students attending public secondary schools in Mumias Sub County to major in Home Science. The results of this research contradict the findings by Oduh et al. (2020) which concluded that the adequacy of instructional materials affected students' interest in physics. Furthermore, among public senior secondary school students, the research revealed a significant correlation between the quality of instructional materials and their level of interest in the subject of physics.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a concise overview of the main discoveries of the study, the conclusions drawn from those findings, and recommendations regarding the relationship between perceived factors influencing students' choice of Home Science subject in public Secondary Schools in Mumias Sub-County, Kenya. Additionally, it emphasises significant suggestions for future research.

5.2 Summary of the Findings

The premise underlying this research was that the percentage of students enrolled in Home Science courses at public secondary schools in Mumias Sub-County was relatively low. In addition, the study sought to ascertain the factors that impacted the selection of the Home Science subject by students in these educational institutions. This research investigated the determinants that impact students' selection of Home Science as a secondary school subject in public institutions, drawing from both theoretical and empirical literature. Through a review of pertinent literature, a conceptual framework was formulated with the intention of conceptualising the relationship between the research's independent variables and dependent variable. Utilising a questionnaire to gather data from students and an interview schedule to interview instructors and principals, the research conducted this investigation in accordance with the conceptual framework and study objectives.

The first objective of this research was to investigate the association between students' perspectives on gender and their selection of Home Science as a subject. The results of the survey indicated that a considerable percentage of the student body, precisely 145 respondents (representing 55.1% of the total), maintained an impartial position regarding the gender-related stereotypes linked to Home Science. A total of 107 participants, constituting 40.7% of the students' sample, demonstrated positive gender attitudes in their selection of the Home Science subject matter. There was a statistically significant association [x^2 (2, n = 263) = 12.501, p = .002] between the students' gender-related perceptions towards Home Science and their selection of that subject matter. This indicates that students considered gender-related perspectives when deciding to major in Home Science. A reduction in student enrollment in the Home Science subject field within the academic domain is a consequence of the existence of harmful gender stereotypes.

The second objective of the study was to determine the relationship between students' attitudes towards the Home Science topic and their selection of the Home Science subject. The findings of the survey indicated that a substantial proportion of the student body, comprising 148 students or 56.3% of the students' sample, demonstrated a favourable attitude towards Home Science subject. The research findings indicated a significant association between the attitude of students towards Home Science and their selection of Home Science as a secondary school subject in public schools located in Mumias Sub-County [x^2 (2, n = 263) = 6.121, p =.047]. This indicates that students liking or dislike for the subject played a role in their selection of Home Science. There was a positive association between the development of a positive attitude towards Home

Science and the likelihood that a student would select the subject. Conversely, those who cultivated a negative attitude towards Home Science were less likely to select the subject.

The third objective of the study sought to establishing the relationship between students' knowledge of employment prospects in the field of Home Science and their selection of Home Science as a subject in Mumias Sub-County. Majority (171) students, or 65.0% of the total students' sample, had a reasonable level of knowledge regarding employment opportunities in the field of Home Science. The finding indicates that there was need for improved career guidance services in educational institutions, specifically concerning professions linked to the Home Science subject. There was no statistically significant correlation [(2, n = 263) = 4.395, p=.111] between students' knowledge of employment prospects in Home Science and their choice of Home Science as a subject in public secondary schools in Mumias Sub-County. Therefore, the level of awareness or ignorance among students attending public secondary schools in Mumias Sub County regarding prospective employment prospects in the domain of Home Science did not influence their choice of Home Science as a career path. Students who are well-informed regarding the employment opportunities in the field of Home Science may reconsider enrolling in the subject.

The fourth objective of the study was to establish the association between the availability and adequacy of Home Science teaching materials and the selection of Home Science as a subject by students in public secondary schools in Mumias Sub-County. With an average score of 2.54 and a standard deviation of 0.48, the survey findings indicated that a significant proportion of educational institutions did not have adequate instructional materials in the field of Home Science. In public secondary institutions in Mumias Sub-

County, there is no statistically significant correlation between the availability and sufficiency of Home Science teaching materials and the students' selection of Home Science [x^2 (1, n = 263) =.249, p =.618]. In public secondary schools in Mumias Sub-County, there was no association between the availability or scarcity of resources such as instructors, books, and other support materials for Home Science studies and students' decision to major in Home Science.

5.3 Conclusions

Arising from the results of the study, the study makes the following conclusions:

1. The first objective of the study sought to investigate the students' gender related perceptions and students' selection of Home Science subject in public Secondary Schools in Mumias Sub-County. The study found that students' gender related perceptions towards Home Science and students' selection of Home Science were significantly related [x^2 (2, n= 263) = 12.501, p= .002].
2. The second objective examined the relationship between students' attitude towards Home Science subject and students' selection of Home Science subject. The study found that there is a significant relationship between students' attitude towards Home Science and students' selection of Home Science Subject in public Secondary Schools in Mumias Sub-County [x^2 (2, n = 263) = 6.121, p= .047].
3. The third objective of the study determined the relationship between students' awareness of Home Science related career opportunities and selection of Home Science subject by students in Mumias Sub-County. Results of the study revealed that there was no significant relationship between students' awareness of Home

Science related career opportunities and students' selection of Home Science subject in public Secondary Schools in Mumias Sub-County [(2, n = 263) = 4.395, p= .111].

4. The fourth objective of the study was to establish the relationship between availability and adequacy of Home Science teaching resources and selection of Home Science subject by students in public Secondary Schools in Mumias Sub-County. The study found that there is no significant relationship between availability and adequacy of Home Science teaching resources in schools and students' selection of Home Science in public Secondary Schools in Mumias Sub-County (1, N = 263) = .249, p= .618].

5.4 Recommendations

Considering the findings and conclusions of the study, the following recommendations are made;

i. The learner, teachers and members of the community are core actors in the environments that influence gender stereotypes towards Home Science education. Consequently, the Ministry of Education, industry and media should partner in demystifying perceptions among the core actors that Home Science is a feminine subject and demonstrate its relevance in facilitating the acquisition of employable skills for all learners in the 21st Century.

ii. Although children start gaining early insights on gender stereotypes from the interactions in the home microsystem, schools have a role in managing negative gender stereotypes acquired at home especially in Early Years Education. The

Ministry of Education and the Teachers' Service Commission should therefore develop a training module on integration of gender transformative strategies in Early Years Education in order to confront gender stereotypes and biases at the formative stages.

iii. Students' attitude has been found to affect selection of Home Science. This calls for deliberate efforts to create positive attitude change in students, teachers and community members to avoid misconceptions and passing on the wrong concepts about Home Science to potential students and this will ultimately increase the number of students taking Home Science in Secondary Schools in Mumias Sub-County.

5.5 Suggestions for Further Research

This study investigated relationship between perceived determinants of subject selection and students' selection of Home Science subject in public Secondary Schools in Mumias Sub-County. In light of the findings of the study, the following suggestions are made for further research;

i. A study may be conducted on determinants of public Secondary Schools subjects' selection in general and findings compared to those of this study. This will create more knowledge which factors affect the selection of subjects in Public Secondary Schools generally.

ii. Another study may be undertaken on determinants of Home Science selection by students in other study areas away from Mumias Sub-County and findings compared to those of this study. This will stretch the frontiers of knowledge on

what exactly are the factors that affect Home Science Subject selection by students.

iii. A study may also be conducted on how school management support towards Home Science subject affects students' selection of Home Science.

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APPENDICES

APPENDIX I

LETTER OF INTRODUCTION TO THE RESPONDENTS

Dear Respondent,

I am a student at Maasai Mara University pursuing a Master Degree in Education - Curriculum, Instruction and Media. As part of the requirements for the completion of my programme, I am undertaking a study on **'DETERMINANTS OF STUDENTS' SELECTION OF HOMESCIENCE IN PUBLIC SECONDARY SCHOOLS IN MUMIAS SUB COUNTY, KENYA'**

You have been identified as a respondent in the study, kindly respond as objectively as possible to the questions. All the information provided will be treated with utmost confidentiality and no respondent will be victimized on the basis of their participation in this study.

Yours Faithfully,

SEBBY SEFU

APPENDIX II

QUESTIONNAIRE FOR STUDENTS

Section A: Background Characteristics

1. Please indicate your gender: Male [ ] Female [ ]
2. Please indicate your age: _____
3. Have you been taking Home Science in form 1 and 2? Yes [ ] No [ ]
4. If your answer is No in question 3, please list the reasons for not taking Home Science

   _____

   _____
5. Are you taking Home Science subject in Form Three? Yes [ ] No [ ]

Section B: Gender and Selection of Home Science Subject

6. Please choose your opinion on each of the following statements guided by the following key: SD = Strongly Disagree; D = Disagree; NS = Not Sure; A = Agree; and SA = Strongly Agree. Use a tick (√)

	Statement	**SD**	**D**	**NS**	**A**	**SA**
G1	Home Science is all about cooking and sewing					
G2	Home Science subject is mostly regarded as a female subject					
G3	Boys are discouraged from taking Home Science Subject					
G4	The society regards Home Science subject activities as feminine					
G5	Boys should enroll in more challenging subjects like engineering, commerce and accounting.					

Section C: Students' Attitude Towards Home Science Subject

7. Kindly indicate your level of agreement or disagreement with the each of the following statements guided by the following key: SD = Strongly Disagree; D = Disagree; NS = Not Sure; A = Agree; and SA = Strongly Agree. Use a tick (√)

	Statement	**SD**	**D**	**NS**	**A**	**SA**
A1	Home Science is not one of the most useful subjects					
A2	Everybody should have the basic Home Science knowledge					
A3	It is very easy to study and pass Home Science					
A4	Home Science is a very interesting subject					
A5	Home Science is more demanding in terms of time and money					
A6	Generally people look down on students taking Home Science					
A7	Home Science is for those who are academically weak					
A8	Home Science should be scrapped off from the syllabus					

Section D: Awareness on Home Science Related Careers

8. i) Have you been guided on careers as you prepare to choose your subjects in form three? Yes [ ] No [ ]

   ii) If yes, who are the people involved in guiding you? Tick all that applies.

   Guidance counsellors [ ] teachers [ ] Parents [ ] Friends [ ] Professionals [ ]

   iii) Are you aware of career opportunities one can venture into after studying Home Science subject? Yes [ ] No [ ]

9. Kindly indicate your level of agreement or disagreement with the each of the following statements guided by the following key: SD = Strongly Disagree; D = Disagree; NS = Not Sure; A = Agree; and SA = Strongly Agree. Use a tick (√)

	Statement	**SD**	**D**	**NS**	**A**	**SA**
C1	Home Science was presented as an attractive and relevant subject in primary education					
C2	There are role models from the community/surrounding that influence student's choice of Home Science subject					
C3	Home Science is not marketable in the job market					
C4	I can easily set up a business with the skills acquired in Home Science					
C5	I am aware of the careers that require Home Science as a subject					

Section E: Availability of Home Science Teaching and Learning Resources at School

10. Kindly indicate your level of agreement or disagreement with the each of the following statements guided by the following key: SD = Strongly Disagree; D = Disagree; NS = Not Sure; A = Agree; and SA = Strongly Agree. Use a tick (√)

	Statement	**SD**	**D**	**NS**	**A**	**SA**
F1	My school has a fully furnished Home Science room					
F2	My school has enough teachers of Home Science					
F3	My school has enough equipment and materials for Home Science subject					
F4	My school has enough text books for Home Science subject					

Thank you for your Participation

APPENDIX III

INTERVIEW GUIDE FOR TEACHERS OF HOME SCIENCE

Section A: Background Characteristics

1. Gender (Tick as appropriate) Male [ ] Female [ ]
2. For how many years have you been a teacher of Home Science? _____
3. Is Home Science compulsory in form 1 and 2? Yes [ ] No [ ]
4. If your answer is No in question 3. Please list the reasons.
5. What is your opinion with regard to teaching of Home Science in Public Secondary Schools?
6. Is Home Science a popular subject in your school? Elaborate.

Section B: Gender and Selection of Home Science

7. How would you explain that most of the students taking Home Science are female?
8. Do you feel boys are discouraged more than girls from taking Home Science subject at school, home and the society in general?
9. Would you say that boys are encouraged to enroll in more challenging subjects like commerce, agriculture, accounting and not Home Science which is an easy subject?
10. Would you say that there are enough number of both male and teachers as to encourage both male and female students to choose Home Science Subject?

Section C: Students' Attitude Towards Home Science

11. Generally, what is the attitude of your students towards Home Science subject?
12. Which are the various reasons for the students' attitude towards Home Science subject?
13. Generally, would you say that other students look down on students taking Home Science?

14. Do students not taking Home Science feel that it a subject for those who are academically weak?
15. Do students view Home Science as more demanding in terms of time and money?

Section D: Students' Awareness on Home Science Related Careers

16. Are students guided on careers as to prepare them to choose subjects in form three?
17. Who are involved in guiding students on careers at school?
18. Would you say that students are adequately exposed to possible careers that are available to them upon choosing Home Science Subject?
19. Would you say that Home Science was presented as an attractive and relevant subject in primary education?
20. What is your opinion regarding availability of role models from the community/surrounding who can influence student's choice of Home Science subject?
21. Would you say that students perceive Home Science as a marketable subject in the job market?
22. Would you that students perceive Home Science as an essential subject for self-employment?

Section E: Availability of Home Science Teaching and Learning Resources at School

23. Would you say that your school has a fully furnished Home Science room to adequately facilitate teaching and learning in the subject?
24. Does your school have enough equipment and materials for teaching Home Science subject?
25. Does your school undertake all the required practicals in Home Science subject? Elaborate.
26. Which are the various areas of improvement in the Home Science room?
27. Would you say that more students are encouraged to take Home Science subject because of the available resources?
28. Would you say that due to costs involved in financing Home Science subject directly influence enrolment level in Home Science?

29. Would you say that students are encouraged to choose other options because they do not require specialized kinds of resources?
30. Would you say that teachers discourage some students from taking Home Science subject because the available resources are only meant for certain number of students?
31. In your opinion, would you say that the school has enough number of Home Science teachers to encourage students to enroll in the subject?
32. Does your school have enough textbooks for teaching Home Science subject?

Thank You for Your Participation

APPENDIX IV

INTERVIEW GUIDE FOR PRINCIPALS

Section A: Background Characteristics

1. Gender (Tick as appropriate) Male [ ] Female [ ]
2. For how many years have you been a teacher and a school principal? _____
3. Is Home Science compulsory in form 1 and 2 in your school? Yes [ ] No [ ]
4. If your answer is 'No' in question 3. Please provide the reasons.
5. What is your opinion with regard to teaching of Home Science in Public Secondary Schools?
6. Is Home Science a popular subject in your school? Please elaborate.

Section B: Gender and Selection of Home Science

7. How would you explain that most of the students taking Home Science are female?
8. Do you feel boys are discouraged more than girls from taking Home Science subject at school, home and the society in general?
9. Would you say that boys are encouraged to enroll in more challenging subjects like commerce, agriculture, accounting and not Home Science which is an easy subject?
10. Would you say that there are enough number of both male and teachers as to encourage both male and female students to choose Home Science Subject?

Section C: Students' Attitude Towards Home Science

11. Generally, what is the attitude of your students towards Home Science subject?
12. Which are the various reasons for the students' attitude towards Home Science subject?
13. Generally, would you say that other students look down on students taking Home Science?

14. Do students not taking Home Science feel that it a subject for those who are academically weak?
15. Do students view Home Science as more demanding in terms of time and money?

Section D: Students' Awareness on Home Science Related Careers

16. Are students guided on careers as to prepare them to choose subjects in form three?
17. Who are involved in guiding students on careers at school?
18. Would you say that students are adequately exposed to possible careers that are available to them upon choosing Home Science Subject?
19. Would you say that Home Science was presented as an attractive and relevant subject in primary education?
20. What is your opinion regarding availability of role models from the community/surrounding who can influence student's choice of Home Science subject?
21. Would you say that students perceive Home Science as a marketable subject in the job market?
22. Would you say that students perceive Home Science as an essential subject for self-employment?

Section E: Availability of Home Science Teaching and Learning Resources at School

23. Would you say that your school has a fully furnished Home Science room to adequately facilitate teaching and learning in the subject?
24. Does your school have enough equipment and materials for teaching Home Science subject?
25. Does your school undertake all the required practicals in Home Science subject? Elaborate.
26. Would you say that more students are encouraged to take Home Science subject because of the available resources?
27. Would you say that due to costs involved in financing Home Science subject directly influence enrolment level in Home Science?

28. Would you say that students are encouraged to choose other options because they do not require specialized kinds of resources?
29. Would you say that teachers discourage some students from taking Home Science subject because the available resources are only meant for certain number of students?
30. In your opinion, would you say that the school has enough number of Home Science teachers to encourage students to enroll in the subject?
31. Does your school have enough textbooks for teaching Home Science subject?

Thank You for Your Participation

APPENDIX V

RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **612977**

Date of Issue: **19/October/2022**

RESEARCH LICENSE

This is to Certify that Ms.. SEBBY AUMA SEFU of Maasai Mara University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kakamega on the topic: DETERMINANTS OF STUDENTS\' SELECTION OF HOME SCIENCE IN PUBLIC SECONDARY SCHOOLS IN MUMIAS SUB-COUNTY, KENYA for the period ending : 19/October/2023.

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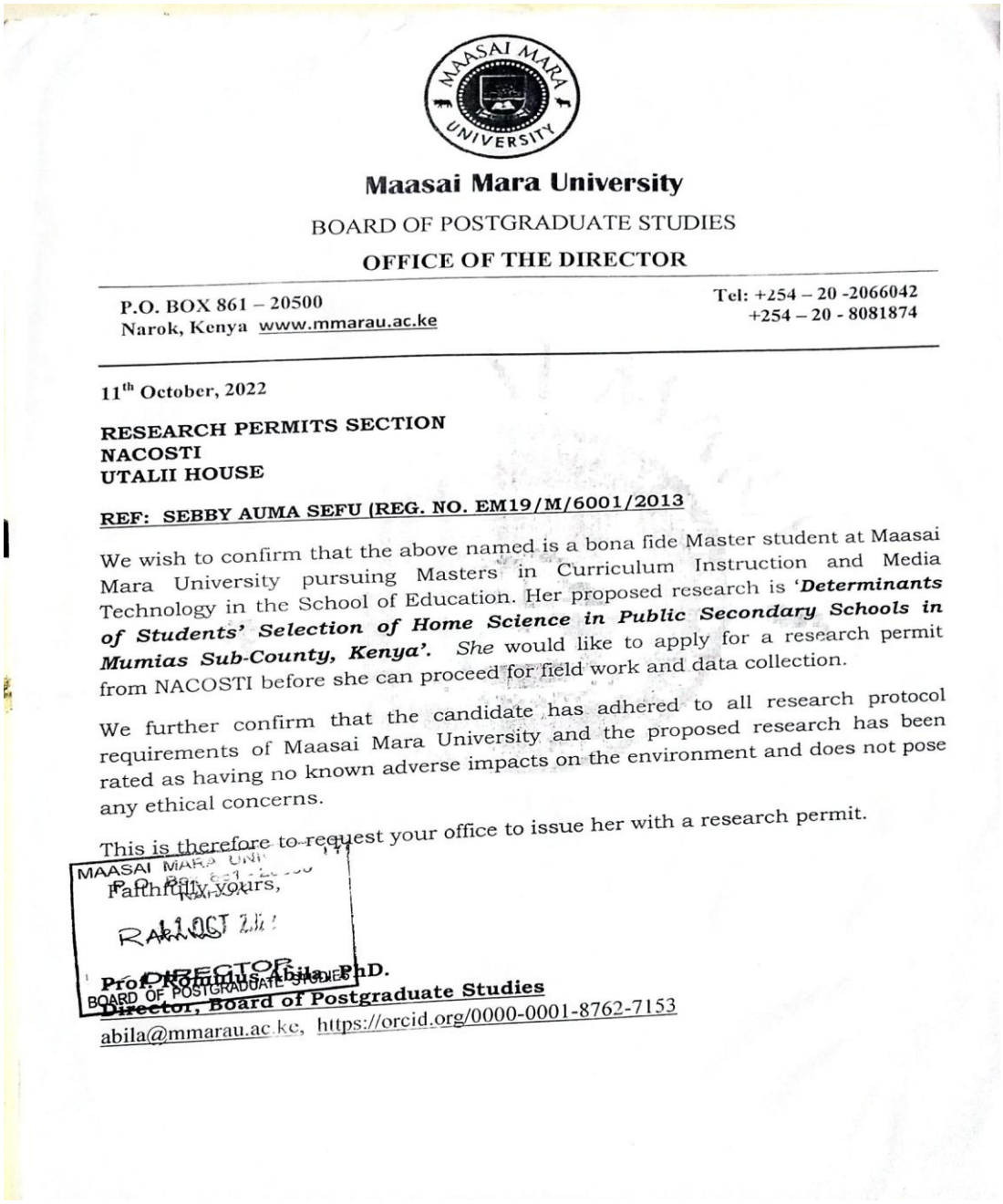
APPENDIX VI : LETTER OF INTRODUCTION TO NACOSTI



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REF: SEBBY AUMA SEFU (REG. NO. EM19/M/6001/2013

We wish to confirm that the above named is a bona fide Master student at Maasai Mara University pursuing Masters in Curriculum Instruction and Media Technology in the School of Education. Her proposed research is '***Determinants of Students' Selection of Home Science in Public Secondary Schools in Mumias Sub-County, Kenya'.*** *She* would like to apply for a research permit from NACOSTI before she can proceed for field work and data collection.

We further confirm that the candidate has adhered to all research protocol requirements of Maasai Mara University and the proposed research has been rated as having no known adverse impacts on the environment and does not pose any ethical concerns.

This is therefore to request your office to issue her with a research permit.

MAASAI MARA UNI
P. O. Box 861 - 20500
Narok

Faithfully yours,

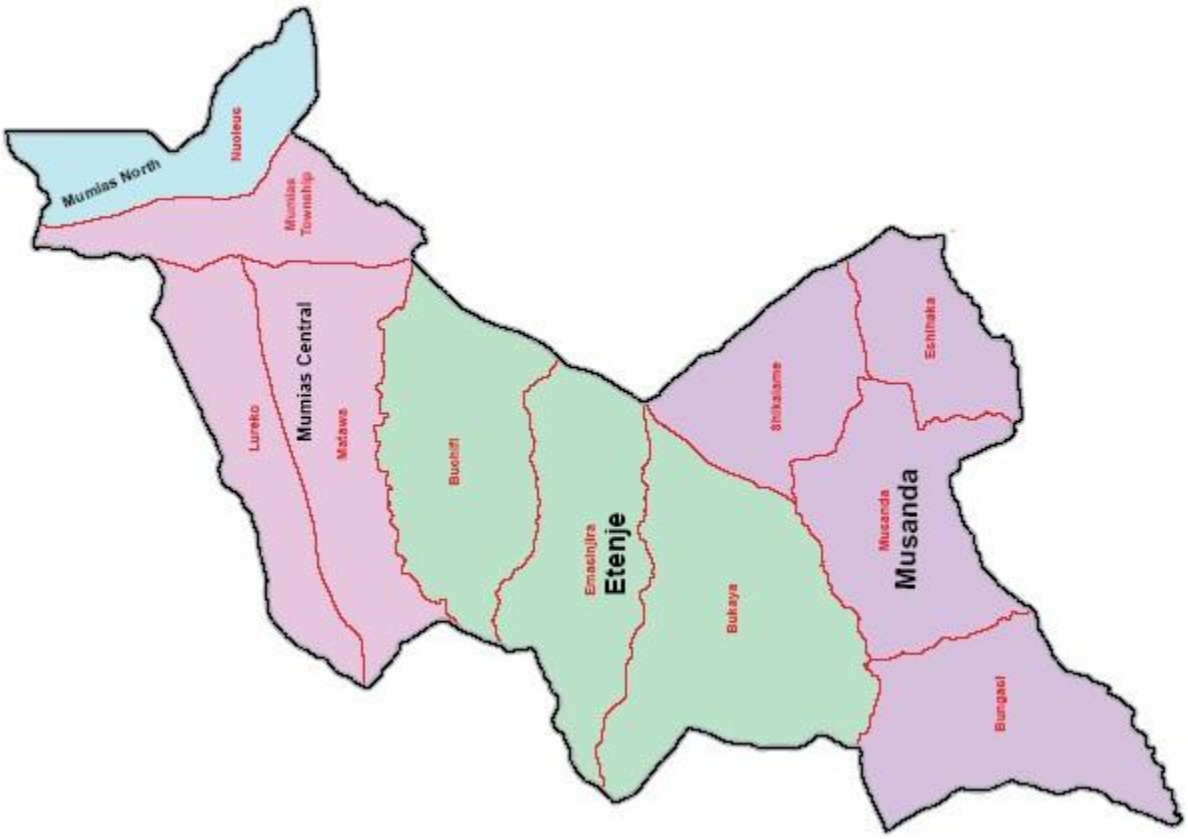
11 OCT 2022

DIRECTOR
BOARD OF POSTGRADUATE STUDIES

Prof. Romulus Abila, PhD.
Director, Board of Postgraduate Studies
abila@mmarau.ac.ke, https://orcid.org/0000-0001-8762-7153

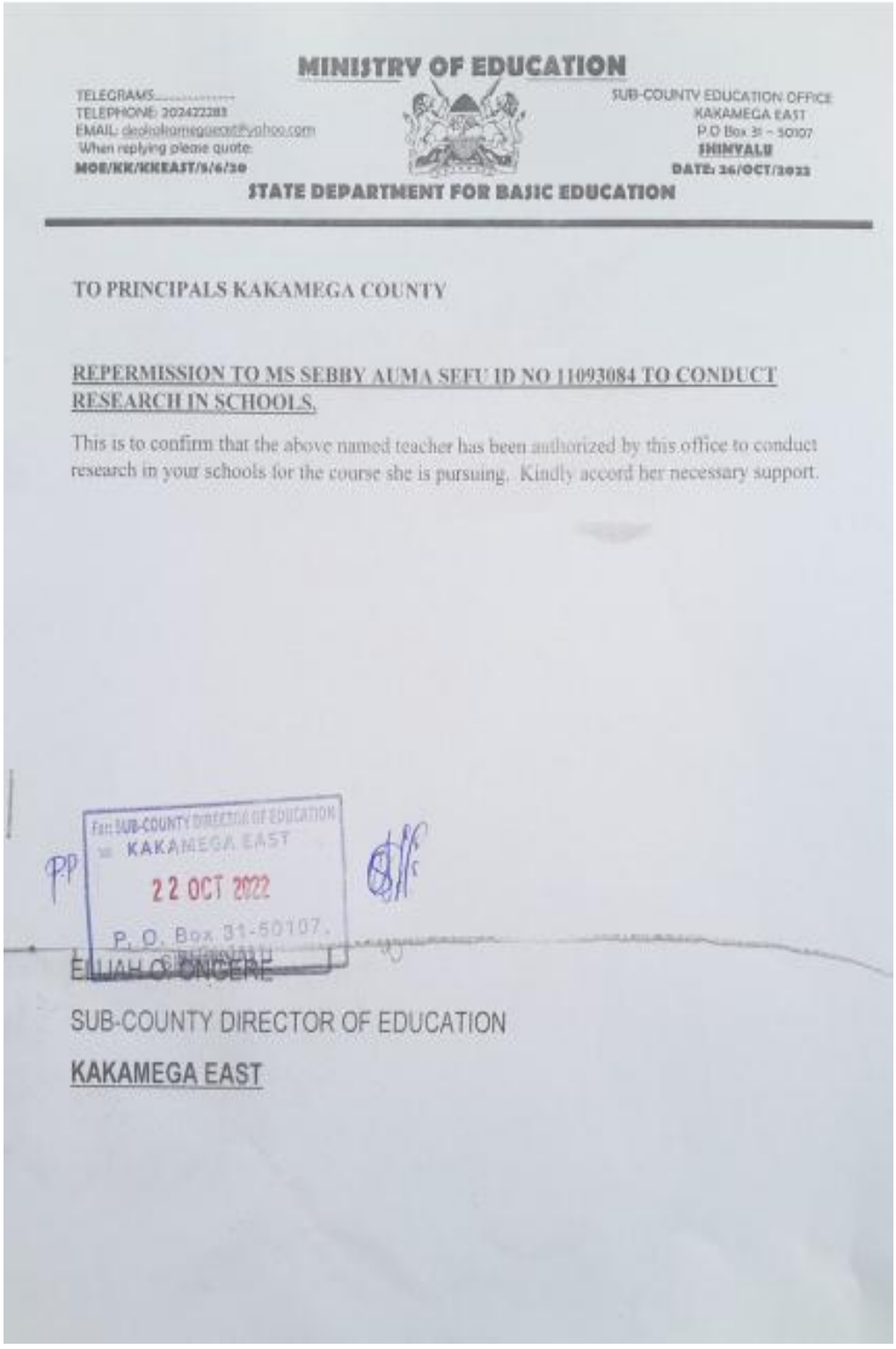
APPENDIX VII

MAP OF THE STUDY AREA



APPENDIX VIII

PERMISSION BY SUB COUNTY DIRECTOR OF EDUCATION



MINISTRY OF EDUCATION

TELEGRAMS.....
TELEPHONE: 202422283
EMAIL: deokakamegaeast@yahoo.com
When replying please quote:
MOE/KK/KKEAST/9/6/30

SUB-COUNTY EDUCATION OFFICE
KAKAMEGA EAST
P.O Box 31 - 50107
SHINYALU
DATE: 26/OCT/2022

STATE DEPARTMENT FOR BASIC EDUCATION

TO PRINCIPALS KAKAMEGA COUNTY

REPERMISSION TO MS SEBBY AUMA SEFU ID NO 11093084 TO CONDUCT RESEARCH IN SCHOOLS.

This is to confirm that the above named teacher has been authorized by this office to conduct research in your schools for the course she is pursuing. Kindly accord her necessary support.

For: SUB-COUNTY DIRECTOR OF EDUCATION
KAKAMEGA EAST
22 OCT 2022
P. O. Box 31-50107,

P.P

ELIJAH O. ONGERE

SUB-COUNTY DIRECTOR OF EDUCATION

KAKAMEGA EAST