

**RELATIONSHIP BETWEEN INCREASED STUDENT ENROLMENT AND
DELIVERY OF STUDENT WELFARE SERVICES IN PUBLIC BOARDING
SECONDARY SCHOOLS IN KISUMU WEST SUB- COUNTY, KENYA**

ONG'INJO ATIENO JACKLINE

**A Thesis Submitted to the Institute of Postgraduate Studies of Kabarak University
in Partial Fulfillment of the Requirements for the Award of Master of Education
(Management and Leadership)**

KABARAK UNIVERSITY

NOVEMBER, 2023

DECLARATION

1. I do here by declare that:
 - i. This thesis is my own work and to the best of my knowledge, it has not been presented for the award of a degree in any university or college.
 - ii. That the work has not incorporated material from other works or a paraphrase of such material without due and appropriate acknowledgement
 - iii. That the work has been subjected to processes of anti-plagiarism and has met the Kabarak University 15% similarity index threshold

2. I do understand that issues of academic integrity are paramount and therefore I may be suspended or expelled from the University or my degree may be recalled for academic dishonesty or any other related academic malpractices

Signed:.....

Date:.....

Ong'injo Atieno Jackline

GMEML/M/0466/05/19

RECOMMENDATION

The Institute of Postgraduate Studies and Research of Kabarak University:

This thesis is entitled “**Relationship between increased student enrolment and delivery of student welfare services in public boarding secondary schools in Kisumu West Sub- County, Kenya,**” written by **Ong’injo Atieno Jackline** is presented to the Institute of Postgraduate Studies of Kabarak University. We have reviewed the Thesis and recommend it be accepted in partial fulfillment of the requirements for the award of Master of Education (Management and Leadership) Degree.

Signature.....

Date.....

Prof Frederick B.J.A. Ngala, PhD, MBS, OGW

Department of Education (Arts)

School of Education, Humanities & Social Sciences

Kabarak University

Signature.....

Date.....

Prof Gladys Jerobon Kiptiony, PhD, FHEA

Department of Education (Arts)

School of Education, Humanities & Social Sciences

Kabarak University

COPYRIGHT

©2023

Ong'injo Atieno Jackline

All rights reserved. No part of this Thesis may be reproduced or transmitted in any form by means of either mechanical, including photocopying, recording or any other information storage or retrieval system without permission in writing from the author or Kabarak University.

ACKNOWLEDGEMENT

I am eternally grateful to the Almighty God for endowing me with the energy, resources and knowledge necessary to write this thesis. My gratitude goes to my dad, Rt. Rev. Charles Ochieng Ong'injo, for the support he has given me throughout my studies. I also acknowledge the assistance of my supervisors, Prof. Frederick B.J.A. Ngala PhD, MBS, OWG and Prof. Gladys Jerobon Kiptiony, PhD, fellow of higher Education Academy, for their guidance and supervision.

DEDICATION

I dedicate this thesis to my beloved family, who have been the backbone of my academic journey. First, I express my heartfelt gratitude to my late mother, Rev. Mary Njeri Nephath for her endless sacrifices and unconditional love. Your unwavering support and belief in me have been the driving force behind my success. Although you are no longer with us, your memories and lessons will always inspire me to strive for excellence.

To my father, Rt. Rev. Charles Ochieng Ong'injo, I owe you a debt of gratitude for your financial and moral support throughout my academic pursuit. Your unwavering faith in my abilities and encouragement to push harder, even during tough times, have been invaluable. Your sacrifices and dedication to our family have inspired me to become the best version of myself. I am honored to have you as a father. I love you.

To my siblings, Dickson Otieno, Miriam Achieng' and Robert Onyango, I am grateful for creating a conducive environment to pursue my academic goals. Your constant support, understanding, and encouragement to work harder have been the foundation of my success.

ABSTRACT

The issue of students' enrolment and student welfare has been the concern of education researchers around the globe. This study attempted to establish the relationship between increased student enrolment and delivery of student welfare services in public secondary schools in Kisumu West Sub- County, Kenya. The objectives of the study were to determine the relationship between increased student enrolment and delivery of accommodation services in public boarding schools. Examine the relationship between increased student enrolment and delivery of catering services in public boarding schools. Examine the relationship between increased student enrolment and delivery of health services in public boarding schools, and establish the relationship between increased student enrolment and delivery of guidance and counselling services in public boarding schools in Kisumu West Sub- County. Enrolment Management Theory by Doelence and Abraham Maslow's hierarchy of needs guided the study. The study adopted a descriptive survey design, which consisted of 357 students, 32 class teachers, 8 boarding mistresses/masters, 8 matrons/patrons, 8 nurses, 8 cateresses/caterers, 8 heads of guidance and counselling, from 8 public boarding secondary. Making a total of 429 sample size. The final sample size of 357 students was arrived at by using the Krejcie & Morgan table. A combination of census and proportionate sampling techniques was employed. Data for the study was collected through open ended and closed ended questionnaires. Pilot study was carried out in two schools outside the county. The instrument was evaluated for content validity while the reliability was established using the test-retest method that yield a coefficient value of 0.7 which was considered reliable. Qualitative data was analyzed based on the content of the responses while quantitative data was coded and entered in to SPSS and analyzed using inferential statistics. The study therefore concluded that increased student enrolment affects the welfare services in secondary boarding schools in Kisumu West Sub- County Kenya. The study therefore recommended school administrators find ways to increase the welfare services in the schools to reduce incidences of overcrowding in the dormitories, poor quality of food, inadequate bathrooms and toilets, inadequate guidance and counseling personnel among others.

Keywords: *Student Enrolment, Accommodation services, Catering services, Health services, Guidance and Counseling Services.*

TABLE OF CONTENTS

DECLARATION	ii
RECOMMENDATION	iii
COPYRIGHT	iv
ACKNOWLEDGEMENT	v
DEDICATION	vi
TABLE OF CONTENTS	viii
LIST OF TABLES	xii
LIST OF FIGURES	xiii
ABBREVIATIONS AND ACRONYMS	xiv
OPERATIONAL DEFINITION OF KEY TERMS	xv
CHAPTER ONE	1
INTRODUCTION	1
1.1 Overview	1
1.2 Background of the Study.....	1
1.3 Statement of the Problem.....	5
1.4 Purpose of the Study	7
1.5 Objectives of the Study	7
1.6 Research Hypotheses	7
1.7 Scope of the Study	8
1.8 Significance of the Study	8
1.9 Limitations of the Study.....	9
1.10 Assumptions of the Study	9
CHAPTER TWO	10
LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Increased Student Enrolment on Accommodation Services	10
2.3 Increased Student Enrolment on Catering Services	16
2.4 Increased Student Enrolment on Health Services	23
2.5 Increased Student Enrolment on Guidance and Counseling Services	29
2.6 Theoretical Framework	35
2.6.1 Enrollment Management Theory.....	35
2.6.2 Maslow’s Hierarchy of Needs Theory	36

2.7 Conceptual Framework	38
CHAPTER THREE.....	40
RESEARCH DESIGN AND METHODOLOGY	40
3.1 Introduction	40
3.2 Research Design.....	40
3.3 Study Location	41
3.4 Target Population.....	41
3.5 Sampling Technique	42
3.6 Sample Size.....	43
3.7 Research Instrument.....	45
3.8 Validity of the Research Instrument	46
3.9 Pilot Study.....	46
3.10 Reliability of Research Instrument	47
3.11 Data Collection Procedure	48
3.12 Data Analysis and Presentation.....	48
3.13 Ethical Considerations	52
CHAPTER FOUR	54
DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION	54
4.1 Introduction.....	54
4.2 Response Rates	55
4.3 General and Demographic Information	56
4.3.1 Characteristics of the Students.....	57
4.3.2 Characteristics of the Class Teachers	59
4.3.3 Characteristics of the Boarding Masters/Mistresses.....	61
4.3.4 Characteristics of Matrons/Patrons.....	62
4.3.5 Characteristics of Cateresses/Caterers	65
4.3.6 Characteristics of Nurses	67
4.3.7 Characteristics of Heads of Guidance and Counseling.....	68
4.4. Data on Students Enrolment	70
4.5 Data on Shared Facilities Available in the Schools in year 2022	72
4.6 Students' Descriptive Statistic on Delivery of Accommodation Services.....	72
4.6.1 Qualitative Data on Accommodation Services as Provided by Boarding Masters/Mistress; Matron/Patron	78

4.6.2 Relationship between Increased Enrolment and Delivery of Accommodation services	84
4.6.3 Hypothesis One Testing	85
4.7 Students' Descriptive Statistics on Catering Services	86
4.7.1 Qualitative Data on Catering Service Provided by Cateresses/Caterers	91
4.7.2 Relationship between Enrolment and Delivery of Catering Services (Analysis).....	95
4.7.3 Hypothesis Two Testing.....	96
4.8 Students' Descriptive Statistics on Health services	97
4.8.1 Qualitative Data provided by Nurses/Healthcare Providers.....	101
4.8.2 Relationship between Enrolment and Delivery of Health Services (Analysis).....	105
4.8.3 Hypothesis Three Testing.....	106
4.9 Students Descriptive Statistics on Guidance and Counselling services.....	106
4.9.1 Qualitative data from the Heads of Guidance and Counseling.....	110
4.9.2 Relationship between Enrolment and Delivery of G & C Services.....	112
4.9.3 Hypothesis Four Testing.....	113
4.10 Summary of Hypothesis Testing.....	114
CHAPTER FIVE	115
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	115
5.1 Introduction.....	115
5.2 Summary	115
5.2.1 Relationship between Increased Student Enrolment and Delivery of Accommodation Services in Public Boarding Secondary Schools in Kisumu West Sub- County, Kenya.....	115
5.2.2 Relationship between Increased Student Enrolment and Delivery of Catering Services in Public Boarding Secondary Schools in Kisumu West Sub- County, Kenya.....	116
5.2.3 Relationship between Increased Student Enrolment and Delivery of Health Services in Public Boarding Schools in Kisumu West Sub- County, Kenya	118
5.2.4 Relationship between Increased Student Enrolment and Delivery of Guidance and Counseling Services in Public Boarding Secondary Schools in Kisumu West Sub- County, Kenya.....	119

5.3 Conclusion	120
5.4 Recommendation	122
5.4.1 Recommendation for Policy.....	123
5.4.2 Recommendations for Further Research.....	123
REFERENCES	125
APPENDICES.....	141
Appendix I: Letter of Introduction	141
Appendix II: Letter of Consent	142
Appendix III: Questionnaire for Students.....	144
Appendix IV: Questionnaire for Class teachers	148
Appendix V: Questionnaire for Boarding Mistresses/Masters.....	152
Appendix VI: Questionnaire for Matrons/Patrons.....	154
Appendix VII: Questionnaire for Cateresses/Caterers.....	156
Appendix VIII: Questionnaire for Nurses.....	158
Appendix IX: Questionnaire for Heads of Guidance and Counseling	160
Appendix X: Table for Determining Sample Size.....	161
Appendix XI: Geographical Location (Map)	162
Appendix XII: KUREC Approval Letter	163
Appendix XIII: University Research Authorization Letter	164
Appendix XIV: NACOSTI Research Permit	165
Appendix XV: Permit from Sub-County Director of Education.....	166
Appendix XVI: List of Publication	167
Appendix XVII: Evidence of Conference Participation	168

LIST OF TABLES

Table 1: Total number of Students (2019-2022)	5
Table 2: The Target Population of the Study.....	42
Table 3: Sample Size for Class Teachers, Boarding Mistresses/Masters, Matrons/Patrons, Cateresses/caterers, Nurses, Heads of Guidance and Counselling	44
Table 4: Sample Size for Students per School using Proportionate Sampling Method (Sample size of 357)	44
Table 5: Showing Tests and Statistical Analyses for Quantitative Data	50
Table 6: Showing Tests and Statistical Analyses for Qualitative Data	51
Table 7: Return Rates for Questionnaires.....	55
Table 8: Characteristics of the Students	57
Table 9: Characteristics of the Class Teachers	59
Table 10: Characteristics of the Boarding Masters/Mistress	61
Table 11: Characteristics of Matrons/Patrons.....	63
Table 12: Characteristics of Cateresses/Caterers.....	65
Table 13: Characteristics of Nurses	67
Table 14: Characteristics of Heads of Guidance and Counseling	69
Table 16: Enrolment Data Provided by Class Teachers for the Year 2022	71
Table 17: Shared Facilities Available in the Respective Schools.....	72
Table 18: Students' Responses to Items on Accommodation Services	73
Table 19: Correlation Analysis	84
Table 20: Students' Responses to Items on Delivery of Catering Services.....	87
Table 21: Correlation Analysis	95
Table 23: Correlation Analysis	105
Table 24: Students' Responses to Items on Delivery of Guidance and Counseling services	107
Table 25: Correlation Analysis (G&C).....	113
Table 26: Summary of Hypothesis Testing	114

LIST OF FIGURES

Figure 1: Conceptual Framework	38
---	-----------

ABBREVIATIONS AND ACRONYMS

ASAL	Arid and Semi-Arid Land
EMIS	Education Management Information System
FDSE	Free Day School Education
FPE	Free Primary Education
MDGS	Millennium Development Goals
MOEST	Ministry of Education
MoEVT	Ministry of Education and Vocational Training
NACOSTI	National Commission for science, Technology and Innovation
PPMCC	Pearson Product-Moment Correlation Coefficient
SDGs	Sustainable Development Goals
UBE	Universal Basic Education
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund

OPERATIONAL DEFINITION OF KEY TERMS

Enrolment	The total number of learners registered in secondary schools in Kisumu West Sub- County, Kenya.
Students Welfare Services	Accommodation, catering, health, guidance, and counselling services delivered to students in public boarding secondary schools in Kisumu West Sub- County, Kenya.
Accommodation Services	Room spaces, water, sanitation, beds, tables, chairs, lighting, and in the dormitories in public boarding secondary schools in Kisumu West Sub- County, Kenya.
Catering Services	Food and related services delivered to students in public boarding secondary schools in Kisumu West Sub- County, Kenya.
Health Services	Access to medical services and resources, sickbays, consultation, and admission services in the public boarding secondary schools in Kisumu West Sub- County, Kenya.
Guidance and Counselling Services	Academic guidance, psychological counseling and career guidance given to students in the public boarding secondary schools in Kisumu West Sub- County, Kenya.
Public Boarding Schools	Schools owned by the government where students live within the premises in Kisumu West Sub- County, Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Overview

This section consists of background of the study. It also includes statement of problem, the significance of the study and the study's objectives, the research hypothesis, scope and significance of the study, assumptions of study and lastly, limitations of the study.

1.2 Background of the Study

Governments recognize education as an essential investment for the nation's future. By providing access to quality education, governments can help to build a more prosperous, equitable, and dynamic society capable of meeting the challenges of the 21st century (Abdul-Rahaman et al., 2020). According to Deb et al. (2020), schools must foster curiosity in young brains and provide students with tools to be better beings. The modern culture believes education is essential in forming an individual personality and dealing with life challenges (Little et al., 2014). Therefore, good welfare services are needed in educational institutions to keep students and staff motivated and keep the entire school community happy and productive (Mubita, 2016). Services for school well-being improve the physical and emotional well-being of teachers, pupils, and other staff members. It also promotes a healthy and conducive working/learning environment for everyone involved (Mubita, 2020).

According to Matthew (2020), in boarding schools, students' time is mainly spent in school, which influences how they learn depending on how well their well-being is managed (Maore, 2014). According to Maurice and Enose (2016), for a learning process to triumph, the institution should be amiable and avail needed curricular, co-curricular, and welfare services. Student welfare is services promoting students' physical, mental, social, and emotional well-being. All measures that ensure students' social well-being,

health, and economic needs are protected, provided for, and met. Downes et al. (2017) state that once these are in place, the learners will focus on education and personal growth. These services may differ from one school to another. This study focused on welfare services, accommodation, catering, health, and guidance and counseling services.

Countries with the Millennium Development Goals (MDGs) increase their efforts to achieve universal primary education, increasing secondary enrolment rates (UNESCO, 2015). When these development goals were declared in 2015, it first targeted educational goal four, focusing on fair and universal primary and secondary education on a global plate (United Nations, 2015). Other policies that have contributed to increased school enrolment include the introduction of partial government funding in schools and elimination of examinations at the end of the primary level, among others (Abdul-Rahaman et al., 2020). Because of Education for All and other initiatives to increase primary school enrollment, the demand for secondary education has grown significantly.

Globally, Indonesia triumphed in reaching high levels of enrolment and school attendance. Over the past twenty years, Indonesia has made drastic progress in increasing access to education (Beatty et al., 2018). Between 2000 and 2014, the number of students enrolled in Indonesia's lower secondary schools, which cover Grades 7 to 9, and upper secondary schools, which cover Grades 10 to 12, showed significant growth. By around the year 2014, higher than 93% of students had completed their level of schooling. Nevertheless, those gains in enrolment and attainment have yet to be accompanied by meaningful improvements in student learning.

Throughout Ghana's history, numerous governments have implemented policies such as partial funding, and, most recently, in 2015, it implemented a system that made

education in upper secondary schools free. In 2017, the free education policy of total financing was applied in Ghana (Republic of Ghana Ministry of Education, 2017). Scholars show that more resources are needed due to increased student enrolment.

Rukabu (2015) stated that Rwanda is one of the many African nations with a long tradition of having low enrolment rates among secondary school students over a number of years. Rwanda initiated free learning as one of the state policies to boost school admission, particularly for the deprived children's attendance rate. It is noted that the high increase in enrolment is attributed to the country's free education policy, leading to poor education (Rukabu, 2015). Nyirandikubwimana et al. (2019) report examines how free public education affects education in the Huye district. The study shows that high schools have increased student enrolment due to free education.

Nonetheless, free education caused schools to suffer from inadequate infrastructure due to high student enrolment. As a result, the number of education schools did reduce over time. This study by Nyirandikubwimana et al. (2019) focused on how education has been affected by free education for all in Rwanda.

In 2007, the government of Uganda initiated a program to make secondary education available to all students. It intended to increase the number of pupils attending secondary schools by a factor of two (Mamba, 2020). It was observed that the provision of free secondary education in Uganda led to a rise in the enrollment rate, reduced expenses, and expanded access to secondary education among most households. Based on information provided by the Ministry of Education and Sports (2017), secondary school enrollment increased by 13.5% between 2015 to 2016 and 2016 to 2017, from 1.3 to 1.5 million students. In Uganda, free secondary education was implemented with a number of challenges, including inadequate resources and carrying capacity for classrooms,

dormitories, labs, and sanitary facilities, as well as other instructional and learning materials (Mwangota, 2019). The study shows how school resources were affected by the introduction of free education policy.

Kenya's government has operationalized several initiatives and policies, resulting in a rapid expansion of the education sector and increased enrolment at the secondary level (MOEST, 2016). Primary education became free in 2003, and secondary education began to be subsidized in 2008. As a result, a 70% transition rate was recorded in 2008, and 80% was recorded in 2012 (Wanja, 2014). The transition shifted from 76.8% in 2013 to 84% in 2017 because of the introduction of Free Secondary Education (Mwikya et al., 2019). The current policy is the hundred percent transition policy of 2019, which states that all students who completed the primary level should join the secondary level. A report by EMIS (2019) registered a massive rise in secondary enrolment in almost all the public schools in Kenya. There were 2.8 million secondary school pupils in Kenya in 2019, up from 2.6 million in 2016.

Njenga (2019) investigated the determinants of implementing a 100 percent transition policy; it focused only on sanitation facilities, learning spaces, and sports facilities in secondary in Nyandarua County. The study findings show that most schools needed more learning and teaching spaces, sports, and sanitation facilities. In addition, there was overcrowding of students in the classrooms, laboratories, and libraries due to the government's 100% transition policy. Ngugi et al. (2015) research reveals that the Kenyan government has implemented policies leading to increased student enrolment. However, there has been no corresponding increase in resources in these schools. This lack of resources has been particularly felt in public boarding schools, where there is a shortage of infrastructure and personnel to cater to the increased number.

Information about providing student welfare services is scarce, particularly at public boarding schools. These studies failed to look at the following welfare services: accommodation, catering, health, guidance, and counseling. Increased student enrolment and welfare services are the focus of the present study. There has yet to be any study of this kind carried out in Kisumu West Sub-County, Kenya. Therefore, it was against this background that the present study established the relationship between increased student enrolment and delivery of student welfare services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

Table 1 shows the percentage increase in enrolment between 2019 and 2022. It shows that enrolment increased.

Table 1

Total number of Students (2019-2022)

No.	School	2019	2020	2021	2022	%increase
	School O	1550	1832	2003	2505	62%
	School P	480	595	761	852	78%
	School Q	512	608	710	806	57%
	School R	501	581	653	717	43%
	School S	238	382	526	621	161%
	School T	250	355	461	568	127%
	School U	2093	364	432	524	79%
	School V	195	291	387	488	150%
	Total	4019	5009	5933	7081	76%

Source: Kisumu Sub- County Education office (2022)

1.3 Statement of the Problem

This study addressed the problem of increased student enrolment in secondary schools in Kisumu West Sub- County, Kenya. As shown in Table 1, student enrolment significantly

increased from 2019 to 2022, and many schools were unprepared for the surge. Table 1 shows the average increase in enrolment in public boarding secondary schools in Kisumu West sub-county, Kenya. School O 62%, School P 78%, Q 57%, R 43%, S 161%, T 127%, U 79%, V 150%. This problem affects all the public boarding schools in Kisumu West Sub- County. If the over-enrollment problem is not addressed, the delivery of welfare services will be insufficient. Students are not likely to get good meals, accommodation problems will increase, health problems will be rampant, and guidance and counseling services will not be effective, with increased cases of indiscipline. A scenario in which the school administration fails to offer adequate essential welfare services to students would adversely affect students' mental health, increasing the likelihood of them becoming stressed and lacking motivation for learning. Students with access to adequate student welfare services have a more positive experience and are more engaged in school activities.

Over the years, the government of Kenya has implemented policies that have led to increased student enrolment in secondary schools. The recent policy on a hundred percent transition mandates that all students who have completed primary should join the secondary level of education. Furthermore, The Ministry of Education has issued directives to public secondary schools, instructing them to increase the number of enrolled students in order to accommodate the large influx of students entering the secondary level. However, the ministry has not correspondingly increased the resources available in these schools. As the population of students in secondary schools increases, the resources in those schools remain constant with little or no change.

1.4 Purpose of the Study

The purpose of this research study was to establish the relationship between increased student enrolment and delivery of student welfare services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

1.5 Objectives of the Study

The study was guided by the following objectives:

- i. To determine the relationship between increased student enrolment and delivery of accommodation services in public boarding secondary schools in Kisumu West Sub- County, Kenya.
- ii. To establish the relationship between increased student enrolment and delivery of catering services in public boarding secondary schools in Kisumu West Sub- County, Kenya.
- iii. To examine the relationship between increased student enrolment and delivery of health services in public boarding secondary schools in Kisumu West Sub- County, Kenya.
- iv. To establish the relationship between increased student enrolment and delivery of guidance and counselling services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

1.6 Research Hypotheses

The study sought to test null hypothesis as derived from the objectives above.

H₀₁: There is no statistically significant relationship between increased student enrollment and delivery of accommodation services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

H02: There is no statistically significant relationship between increased student enrolment and delivery of catering services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

H03: There is no statistically significant relationship between increased student enrolment and delivery of health services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

H04: There is no statistically significant relationship between increased student enrolment and delivery of guidance and counselling services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

1.7 Scope of the Study

The study was carried out only in Kisumu West Sub- County, Kenya. The research was limited to public boarding secondary schools. The study confined itself to accommodation services, catering services, health services, and guidance and counselling services. Enrolment is the independent variable, and delivery of student welfare service is the dependent variable. This study was carried out for a period of two weeks in 2022 in the month when students were in school after the holidays.

1.8 Significance of the Study

The study findings may be helpful to many educational stakeholders, including the government, education administrators, policymakers, parents, and students. The information may be used to devise measures to ensure the welfare of all the students who join public boarding secondary schools are catered for. The study may also help achieve sustainable development goals in Vision 2030. The study's exploration may directly contribute to the achievement of SDG 4 (Quality Education), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships for the Goals) outlined in Vision 2030. It may help shape policies, programs, and resource allocation to ensure that education is

inclusive, equitable, and supportive of students' welfare. The findings of this investigation may be beneficial when deciding to develop educational resources or programs to ensure the students' welfare is prioritized. This study adds to the knowledge of delivery of student welfare services in boarding schools. The findings provide a basis for more research in other parts of the nation or on a global scale. The research provides up-to-date information on the relationship between increased enrolment and delivery of student welfare services in public boarding secondary schools in Kisumu West Sub-county, Kenya.

1.9 Limitations of the Study

The research was conducted in only eight public boarding secondary schools in Kisumu West Sub- County; therefore, it is difficult to generalize the results of the study. The researcher invested a great amount of time over the course of the investigation to ensure that sufficient and representative information was obtained. This was done so that the researcher could address the limits of generalizing the findings. This might help make the findings generalizable to schools in other counties. However, this generalization should be done with caution.

1.10 Assumptions of the Study

While filling out various questionnaire items, it was assumed that respondents in public boarding secondary schools in Kisumu West Sub- County provided accurate and truthful information.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This literature review sections encompass various aspects, such as student accommodation services, catering services, health services, and guidance and counseling services. It will also examine both theoretical and conceptual frameworks within these sub-topics.

2.2 Increased Student Enrolment on Accommodation Services

The core objective of any educational institution is to provide an environment that promotes effective learning, comprehensive knowledge, and healthy growth (Chiguvu & Ndoma, 2018). According to Chiguvu and Ndoma (2018), adequate accommodation is crucial for achieving these objectives, encompassing privacy, personal space, and territoriality.

However, the scarcity of resources, including beds and related amenities, becomes a pressing issue when schools experience an increase in population. This scarcity is further exacerbated by high student enrollment, resulting in students needing more bed space and room amenities. The accommodation challenge arises when the number of admitted students exceeds the available facilities in a school (Chiguvu & Ndoma, 2018). Jennifer (2011) identifies the rise in the student population at educational institutions as one of the various factors contributing to inadequate accommodations.

Ventilation is necessary for a healthy atmosphere since it is critical for maintaining constant fresh air free of bacterial pathogens (Lubis et al., 2018). According to Lubis et al. (2018), students in Indonesian schools need more room space and overcrowded rooms due to increased enrolment making it challenging to rest well. The survey also found that

students had sanitary issues, including dirty dorm water. The study's findings show that laundry rooms were rapidly overrun with odors due to a lack of mechanical ventilation systems, which prevent the steam or vapor from being promptly removed after bathing. This study by Lubis et al. (2018) conducted in Indonesian schools focused on how dormitories are affected by increased enrolment. It revealed insufficient accommodation, crowded rooms, and unclean dormitories because of increased student enrolment. However, the study was not conducted in Kenya; hence, its findings cannot be generalized to the local context.

The study conducted by Lee and Kim (2020) explored whether or not college students in the Seoul Metropolitan Area would prefer to live in shared housing compared to obtaining government housing aid. The research findings revealed that many students preferred shared housing due to various reasons, including affordability and convenience. The study provided insights into the housing preferences of college students and highlights the need to consider alternative housing options to meet the growing demand for accommodation services. However, the study focuses only on the Seoul Metropolitan Area, and therefore the findings may not be representative of other regions including Kenya.

According to Lim (2019), a research study was conducted to investigate how a specific public university in Malaysia manages the increase in student population and its impact on student housing administration. The findings of this study indicate that the university has faced challenges in meeting the growing demand for accommodation due to the rise in student enrollment. Consequently, educational institutions in Malaysia should implement effective strategies to address the escalating need for student housing. However, it should be noted that the findings of this study might not apply to other geographical regions (Lim, 2019).

This study examined how many students attend university in Iraq and how it relates to the number of rooms available to them. According to the research, there is a lack of available housing and unsatisfactory student support services due to the rising student population. Based on the findings, colleges in Iraq should prioritize the construction of high-quality student housing and the enhancement of existing facilities to accommodate the rising demand (Idris and Al-Obaidi, 2018).

Due to high enrolment in higher education institutions, there is an increased need for more facilities in learning institutions in Malaysia. In research cited by Ghani et al. (2020), there is no increase in accommodation facilities to equal the increasing student enrolment. According to Karpinski (2015), High Education Institutions Administrators have a challenge-addressing students housing considering the increased student enrolment, which exceeds the institutions capacity. Students enrolling each year outnumber the available student housing, which is a common occurrence in many countries around the world. The study highlights evidence of limited accommodation resources because of increased enrolment in Malaysia focusing on higher education in Malaysia. Therefore, the findings cannot be generalized in the context of secondary schools in Kenya. The current study was conducted in secondary schools in Kenya.

In Zambia, Isiteketo and Nakamba (2019) state that the vast majority of students voiced their dissatisfaction with the lack of available room for sleeping. Other issues, such as overcrowding and an absence of common facilities like lighting were also cited as causes for concern. Security concerns in schools also affect the well-being of the learners. Students in schools with appropriate facilities do better academically than those in schools with insufficient resources. The study shows that these problems negatively affect the students' academic performance. Joshua and Zachariah (2016) observed that

the students' performance is directly affected by the kind of environment under which they study. A noisy and overcrowded facility affects the concentration of learners. This study was conducted in weekly boarding schools in Zambia. Students participating in the weekly boarding program are not required to be full-time boarders; instead, they reside in rented housing during the week and return home on the weekends (Isiteketo & Nakamba, 2019). The researcher focused on assessing the challenges faced by weekly boarders on their academic performance in Zambia. However, it did not show if the challenges experienced by the weekly boarding students relate to increased student enrolment. The findings also may not be generalized to all the other boarding schools.

Chiguvi and Ndoma (2018) investigated to explore the effects of inadequate housing facilities on students' academic performance in Botswana's tertiary institutions. The study revealed that a significant factor contributing to the scarcity of available accommodation within educational institutions is the rise in student enrollment. This situation exacerbates the competition for essential resources such as water, electricity, and space. Furthermore, the research highlighted that substandard hostel accommodation leads to increased absenteeism and reduced focus on academic tasks. The study's primary objective was to assess the academic achievements of students enrolled in private educational institutions in Botswana, specifically concerning the poor living conditions experienced on campus. The study solely examined the impact of insufficient living amenities on overall student performance. Survey findings indicated that enrollment growth had played a role in these schools' accommodation challenges. However, it is essential to note that this research solely focused on tertiary institutions, not secondary schools. Consequently, the present sought to be conducted in secondary schools within Kenya.

Research conducted in Nigeria by Ogunode and Agwor (2021) found that inadequate school infrastructure facilities could be attributed to the increasing number of students enrolled in these institutions. According to most participants, the rise in the total student population is the leading cause of inadequate school amenities. The study results highlighted several contributing factors to the inadequate school facilities in public secondary schools in Gwagwalada, namely low financing for secondary education, ineffective planning of infrastructure, substandard infrastructural facilities, corruption, and ineffective evaluation and monitoring of infrastructure. However, the study only focused on classrooms, dining halls, and libraries without investigating the relationship between rising enrollment and accommodation. Consequently, this study aimed to address this research gap by including accommodation services as one of the variables examined.

The study by Ogungbe et al., (2018) provides a valuable framework for investigating the investment potential of private student hostels in tertiary institutions. The provision of accommodation services to students has become an essential aspect of the education sector. Accommodation services are necessary for students who study far away from home, particularly those in tertiary institutions. The standard for accommodation provided can have a notable impact on student fulfillment, academic performance, and mental health. Despite existing studies on how student enrollment affects accommodation services in higher education institutions, there is a scarcity of research on this subject within the scope of boarding secondary schools. This lack of research is especially significant in Kisumu West Sub- County, where there has been a recent upsurge in student enrollment within boarding schools.

In Tanzania, Nemes and Mzimya (2015) conducted a study focusing on the accessibility and utilization of girls' hostel facilities. The findings revealed that schools with

insufficient accommodation facilities provided substandard hostel services, subjecting the girls residing there to difficulties. Additionally, it was observed that the number of hostels available needed to be increased to accommodate all the enrolled female students (Iddy, 2018). While Nemes and Mzimya (2015) investigated the availability and usage of girls' hostel services in Tanzania, their research did not explore the correlation between enrollment and accommodation services in boarding schools for male and female students. Therefore, this study aimed to bridge this research gap by examining the relationship between enrollment and accommodation services in all boarding schools, encompassing both boys' and girls' schools, within the Kisumu West Sub- County in Kenya.

According to Kinton et al (2018), the commodification of student, housing is examined as a significant influence on urban transformation, with a particular focus on the emerging frontiers of studentification. A crucial factor in student welfare is the provision of accommodation services, which has been extensively researched and debated in recent years. One of the most significant developments in student accommodation is the increasing commodification of housing. The development may be attributed to the rise in the number of students coming from other countries as well as the growth of educational facilities. The study by Kinton et al. (2018) highlights the increasing number of private companies that are entering the student accommodation market, with the aim of making profits from the growing demand. The commodification of student housing has led to changes in the nature and provision of accommodation services, with students now being offered high-end, luxury accommodation options.

The Ministry of Education in Kenya (2020) has established the following guidelines to ensure students' safety while in school. They include; the facilities must be well ventilated, with beds being at least 1-meter distance from both sides. Dormitories should

be adapted to ensure no congestion. All the facilities and sections in the dormitories should have ventilation to ensure clean air circulation. To maintain good hygiene, it is advised that students avoid sharing personal belongings such as shoes, slippers, clothing, towels, toothbrushes, soap, shoe brushes, and beds.

In a study conducted by Kiruru and Ogola (2020), it was discovered that a significant number of the accommodation facilities in educational institutions were insufficient to cater to the increasing student population. In addition to mattresses, study desks, seats, and bookcases, other amenities such as sanitary facilities, water, and ventilation were also examined. According to the findings of the study, educational establishments should prioritize infrastructural improvements in areas with high student populations. The study focused on public universities; hence, these findings may not be generalized to secondary institutions.

It is apparent that most studies were conducted in tertiary institutions, with very few on the secondary institutions of learning. This created the need to do research in secondary schools. There is no research conducted in Kisumu West Sub- County on the relationship between increased student enrolment and delivery of accommodation services in public boarding secondary schools. Therefore, this current study sought to fill this gap.

2.3 Increased Student Enrolment on Catering Services

Schools worldwide typically provide daily meals to students, including boarding schools (Mensah & Appietu, 2020). In the United States, the Fresh Fruit and Vegetable Program (FFVP) was introduced in 2019 by the U.S. Department of Agriculture Food and Nutrition Service. This program aims to provide free fruits and vegetables to students from low-income households, promoting access to nutritious foods and healthy eating habits and addressing childhood obesity (Rida et al., 2019). The American School Food

Service Association published a report on school nutrition and food service practices, highlighting the implementation of the Smart Snack Standards for competitive foods and beverages.

In the United Kingdom, the Department of Education revised school food requirements, emphasizing government meal funding and discouraging the consumption of sugar-sweetened beverages (Micha et al., 2018). However, the impact of increased student enrollment on nutrition and food services in schools in the United States remains to be seen. Despite the significance of catering services in student well-being and academic performance, there needs to be more research regarding the influence of higher student enrollment on providing such services in public boarding secondary schools in Kenya. Therefore, the present study aimed at addressing this gap by investigating the relationship between student enrollment and the delivery of catering services in these institutions.

In Asia, Tam (2017) examined effects of increased student enrollment on university catering services in Thailand. The study found that as enrollment increased, it became increasingly difficult to provide adequate catering services, resulting in increased wait times, less food availability, and diminished student satisfaction. The researchers advise universities to invest in expanding their dining facilities in order to keep up with the rise. The study, unfortunately, failed to examine how the expansion of enrollment impacts the nutritional requirements and overall quality of food provided to students, creating a significant gap in the research.

On the other hand, in Norway, a similar initiative was introduced to provide all secondary school students with a piece of free fruit or vegetable every day (Hovdenak et al., 2021). Unfortunately, the implementation was revoked after a change of government.

It is now up to the various counties to set aside funds to do so. According to studies, just about 10% of counties provide fruit to school students (Prestbakmo, 2020). On the contrary, it did not consider the total number of students enrolled at the institutions. It is unclear why only 10% of the schools' provided fruits, and the rest did not.

The China National Health Commission (2017) established guidelines for school nutrition. These guidelines propose that students between the ages of 12 and 14 should have daily portions of various kinds of greens and at least one dairy product in order to achieve their daily requirements for energy and vitamins. These recommendations are intended to make certain that students consume a diet that is nutritionally sound and conducive to the growth of both their bodies and their minds. Many schools, on the other hand, did not adhere to these rules. Students in boarding houses are suffering from bad health because of poor nutrition. Due to the restricted space, the student canteen fed boarding students' dinner. At the same time, the cooks delivered food to the classes during lunch hours. In comparison to their non-boarding peers, these boarding students in rural China exhibited lower academic achievement. Students are at a greater risk of suffering from anxiety and malnutrition as a direct result of packed class schedules, insufficient facilities, and unsatisfactory service (Wan, 2021). The study investigated students' academic performance. However, this study in China was not clear on whether these challenges faced by the school were due to increased student enrolment in those schools.

Malaysian ministry of education and health has resulted in a policy on school healthy eating, where food and drinks provided in boarding schools must meet standards based on macronutrient and energy content (Nor et al., 2021). The study goal was to find out what it is like to implement a healthy eating policy in a boarding school foodservice setting and whether or not students adhere to it. School healthy eating policy includes a

list of menus served in the dining hall (Nor et al., 2021). Most principals agreed that the menus were healthy for their students. The findings show school-based healthy eating practices are still low because students prefer the canteen to the dining hall. The policy encourages students to eat healthily, but it is challenging to implement. However, the study did not relate the policy of healthy eating in boarding schools to student enrolment. Even though students pay fees, the government supports public boarding schools in Ghana. The 2015/16 academic year saw a GH71.9 million (US\$14,998,852) grant for senior high school (SHS) pupils (Government of Ghana, 2017). In addition, unlike university cafeterias where students pay for food, Ghana provides subsidized food services in public boarding schools. Breakfast, lunch, and dinner are all served in boarding school dining halls and are mandatory for all boarders. In addition, other available food sources are food stored in chop boxes and food vendors from outside (Ababio et al., 2016), cited by (Mensah & Appietu, 2020). According to Mensah and Appietu (2020), certain schools' food safety was jeopardized due to the lack of fly-proof doors and windows, which allowed flies and dust into food processing rooms. The majority of respondents were unaware of this approach (sanitization), indicating that it was not widely used. In addition, food storage and thawing were unfamiliar to the majority of the respondents.

According to the Food and Agriculture Organization (2020), food preservation should be done in a particular area dedicated to it. The preparation areas should be kept clean at all times and away from any source of contamination (such as garbage, wastewater, dust, flies, and domestic animals). The study conducted in Ghana did not establish a connection between increased student enrollment and catering services. Consequently, there is a need for further research to investigate the correlation between increased student enrollment and catering services, specifically in the context of Kenya. The Ghana

study also did not provide evidence regarding whether the deterioration of food hygiene practices in those schools was influenced by the rise in enrollment, which was the focus of the current study.

In a study conducted in Nigeria by Matthew (2020) inadequate food delivery has hindered the efficient management of public boarding institutions. Boarding school students require adequate nutritious food; food gives energy for various bodily functions, including schooling. Students may riot if there is insufficient food. The scholar avers that the high expense of food has an impact on managing of boarding schools. When both the price of the food items and the student population rises, it becomes difficult for management to acquire the appropriate quantity. As a result, it may resort to purchasing low-food items, endangering the students' health and nutrition (Mathew, 2020). Inadequate staff, such as cooks, is also a problem in schools. However, the survey only looked at the perceptions of teachers and principals, not the students, since it was on the management of schools. Hence, the current research aimed at exploring the correlation between an upsurge in student enrollment and the provision of catering services, encompassing both teachers and students as participants.

According to Nicholaus et al. (2020), the diet of secondary school students in Tanzania mainly consists of legumes and cereals, lacking adequate animal protein, vegetables, and fruits. Furthermore, essential nutrients such as zinc, vitamin C, iron, and calcium are insufficient in the food provided in most boarding schools. To address student malnutrition, the study recommended including a diverse range of foods in school diets, including nutrient-rich sources like animal products, fruits, and vegetables. However, the study conducted in Tanzania did not explore the potential impact of student enrollment on dietary practices. It focused on examining the students' dietary practices, nutrient intake, and nutritional status without considering student enrollment data. Hence, the

present research aimed to fill this gap by investigating the relationship between student enrollment and the provision of catering services in boarding schools.

The research undertaken by Bouterakos et al. (2021) underscores the critical role of school food programs in enhancing the nutritional well-being of schoolchildren, a matter of utmost importance during the COVID-19 pandemic. The study highlights the significance of school nutrition initiatives in ensuring that children, especially those from food-insecure households, have adequate access to nourishing meals. It has been acknowledged that school feeding programs are an effective means of enhancing children's health, nutrition, and educational outcomes. In addition, the study indicates that school nutrition programs can have positive effects on the local economy by bolstering local farmers and food producers. The study recommends governments and authorities to prioritize school food initiatives during the COVID-19 pandemic. The authors recommend that local culinary culture and tastes should be considered when designing school feeding programs. School feeding programs should be combined with other health and nutrition interventions like deworming and micronutrient supplementation to improve children's health and education, according to the study.

In Kenya, every child is entitled to sufficient adequate nutrition, health care, and primary education (Ramukumba et al., 2019). Amidst the peak of the COVID-19 pandemic, the Ministry of Education (2020) formulated safety protocols for the resumption of educational institutions, outlining specific guidelines and procedures. Tables and chairs in the dining hall must be at least 1 meter apart. To avoid, overcrowding in the dining hall, students per classes are required to eat at different times. Lunches to be served in the classes where possible. Sharing utensils or food is not allowed. The school should provide liquid soap and water for cleaning and disinfecting; shared canteens should

remain open, students should sit far apart, and differentiating times to be observed when serving food (Johansen et al., 2020).

Serrem et al. (2020) avert that adolescents require adequate nutrition for optimal growth, development, and overall wellbeing. It was determined that Kenyan high schools failed to feed students properly; many schools did not offer adequate healthy foods and did not meet all students' energy needs. Serrem et al. (2020) revealed that neither of the high schools properly satisfied the nutritional needs of the meals given to students. The menus were monotonous and simple, with limited food options. Fruits, proteins, and vegetables were the least popular foods in schools. On the other hand, githeri, a blend of maize and beans, was the preferred option, followed by starchy foods such as ugali and porridge. Serrem et al. (2020) mentioned that national schools consume more fibre and starch than other schools.

In contrast, Serrem et al. (2020) reported that fruits and veggies are eaten more frequently in rural classrooms. From the findings, learners in private schools consume more proteins during breakfast than in public schools. Most schools did not meet the correct nutrient requirements. At the same time, some exceeded them, such as dietary fibre, which is three times the recommended amount (Serrem et al., 2020). The findings point to the necessity of cooperation between the government of Kenya and other relevant parties in order to establish and put into practice a school food plan that compliance with the nutrition requirements of the nation. The previous study examined the nutritional requirements of students in 50 boarding schools across eight counties in Kenya, namely Uasin Gishu, Elgeyo Marakwet, Nandi, Nairobi, Kisumu, Kakamega, Nakuru, and Laikipia, but failed to explore any relationship between nutrition services and student enrollment, highlighting a significant gap in knowledge that the current study sought to address.

According to a report by Owino (2023), there were unfortunate fatalities at a school in Kakamega County, where three students and a teacher lost their lives. The authorities attributed these deaths to food poisoning. Some members of parliament expressed concerns that health officers, thus exposing learners to potentially deadly diseases, do not verify the safety of the food consumed by students in high schools. Various scholars argue that school staff should undergo training to ensure they are disease-free before handling food. The report also implicated principals accused of overcrowding their schools for higher funding, leading to compromises in sanitation standards. Disturbingly, it was observed that even after students displayed symptoms of a severe infection, the management kept them in the sick bay for days before eventually transferring them to a hospital. However, the report was done in Kakamega County and not Kisumu West Sub-County, Kenya.

It can be observed that various researchers did not establish the relationship between increased student enrolment and delivery of catering services, which was the focus of this study.

2.4 Increased Student Enrolment on Health Services

School health services may be essential in meeting students' daily needs. They may include preventive and curative services provided to students and faculty to improve their health. School health services (SHSs) are essential for school-age children's health promotion (Ranga & Majra, 2020). School health services are a type of healthcare delivery process that operates within a school; that helps children get the most out of their school learning experience (Alafin et al., 2019). The main goal of health services is to make sure that children are as healthy as possible to benefit from their education. Curative and preventive school health services are available to students. They offer parents and school officials information about the health state of schoolchildren. The

learning should offer a pre-entry medical test, a routine health check-up, school records, sickrooms, first aids, and referrals to other health care providers. Among the products and services offered are medical evaluations, the physical examinations of the behaviour, medical diagnoses, screening tests, and students' health records cited by (Kuponiyi et al., 2016). As part of national school health programs and efforts, the World Health Organization offers technical assistance to governments and partners to improve school health services (WHO, 2020).

Schools in the United States have school nurse consultants as part of their educational system. They have a model policy and procedure manuals from the health department (Salehi et al., 2018). As reported by the National Association of School Nurses; there are several different methods, through which school nurses might receive information and training (Skundberg-Kletthagen et al., 2017). The American School Health Association (ASHA) has investigated the limitations and advantages of delivering services and the roles of several health service providers through its interdisciplinary committees. The scholars looked at health providers in schools. However, the study did not show a clear association with student enrolment. Therefore, the present study sought to investigate the relationship between these school health services and increased student enrolment.

Lipson et al. (2019) conducted a research study to examine mental health service utilization patterns among college students in the United States over ten years. The researchers administered online surveys to college students between 2007 and 2017. The study's findings revealed a significant increase in the use of mental health services among college students during the ten years, with a threefold rise in reported service utilization. The study also observed increased use of psychiatric medication and psychotherapy. Despite the rise in service utilization, many college students with mental health concerns still did not receive treatment. The study's author's advocate for

enhanced investment in mental health services in colleges and universities, which includes expanding access to evidence-based treatments, augmenting the number of mental health professionals on campuses, and reducing the stigma surrounding mental health service utilization. Furthermore, they emphasize the importance of integrating mental health services into broader campus health initiatives and establishing collaborative partnerships with community mental health providers. While the study provides valuable insights into the trends of mental health service utilization among college students in the United States, it is worth noting that the reliance on self-reported data from a single survey limits the generalizability of the findings.

Read et al. (2023) examined the mental health treatments available in Canadian postsecondary institutions. The researchers conducted a thorough review of publicly accessible data, exploring the types of mental health services offered and the resources allocated to these services in terms of personnel and finances. Although there is a growing recognition of the significance of mental health services in postsecondary institutions, the study's findings reveal significant disparities in the availability of such services across different institutions. To promote students' academic success and well-being, the authors recommend that Canadian postsecondary institutions prioritize providing mental health services. They suggest that increased collaboration between institutions and government agencies and investments in mental health resources can help address the gaps in mental health services in postsecondary institutions (Jaworska, 2016). Overall, the study provides a comprehensive overview of the current state of mental health services in Canadian postsecondary institutions and underscores the ongoing need for efforts to prioritize and expand these services to better cater to the mental health needs of students. However, the study does not establish a direct link between these services and student enrollment that was the focus of the present study.

Ranga and Majra (2020) reported that in North India, many schools did not conduct periodic medical examinations on their students and that many schools had inadequate first aid kits. A large majority of schools, according to the study, do not conduct health and disability screenings before admission, which could be because of inadequate awareness of how vital the first exam is. So many schools were failing to provide essential school services. In addition, the schools were not tracking the services records; an excellent, well-maintained health record should provide comparable and consistent data. Teachers were also not adequately trained in health services. Ranga and Majra (2020) studied personal hygiene among schoolchildren in North India (grades 6 to 12). The scholars pointed out the health services offered in schools. However, it did not show whether the services that were not practiced in the selected schools relate to increased student enrolment in the respective schools. Therefore, the study did not bring out the relationship between health services and increased student enrolment. This study sought to fill this gap.

Shokri et al. (2018) reported that Iran schools lacked health care rooms. The authors aver that a health educator improves students' health in a school. Lack of healthcare room hinders students from being provided with urgent and emergency services. In contrast, schools without such rooms and staff have poorer health outcomes. Based on the study findings, most urban schools have good environmental health and safety records. Rural and urban schools alike had the best sanitary and safety conditions per health regulations. In addition, all laboratories had high safety status. However, 55% of rural schools and 26% of urban schools had an unhealthy cafeteria, and 79% of rural schools and 52% of urban schools had a filthy sanitization facility. The study recommended that authorities pay more attention to the issues of health in school (Shokri et al., 2018). However, the

study did not show any relationship between health services and increased student enrolment.

According to Maddocks et al. (2020), some South African urban schools provided hand-washing stations for students. However, rural schools lacked adequate soap supplies, hygienic equipment, as well as hand washing station. A country with a more similar circumstance is Ethiopia, where few students practiced good hand washing habits. In a different study, many students neglected to wash their hands after using the restroom (Eshetu et al., 2020). However, these findings cannot be generalized to all students because the research was limited to a single school in a single location.

During COVID-19, a Nigerian study by Wada and Oloruntoba (2021) found that all schools understudy had hand washing facilities. However, very few female restroom blocks had hand washing stations and soap, while some had no water. Almost every student knew how important it was to wash their hands using soap and water after using the restroom and before eating. This, however, did not translate into a healthy hand washing routine; very few students used soap and water. The authors stated that there is a need for improvement in the hand washing facilities in public schools. School facilities available are insufficient to provide enough protection against the spread of COVID-19 and other infections in school. Few schools lacked a first-aid kit. Approximately 33% had a sick bay or a room set aside for health. The research was cross-sectional, using both males and females. The scholars focused on hand washing practices in schools. However, Wada and Oloruntoba did not show any association between hand washing practices and student enrolment in the selected schools.

The Kenyan government issued the following directives to health services provided in schools through the World Health Organization (WHO, 2020). For learners' health-

related issues, institutions must have a qualified nurse on staff or make agreements with local health services to manage learners' health. In the case of a COVID-19 outbreak, sickrooms should be stocked with enough emergency medical supplies to aid students and staff. A minimum of one-meter social separation must be observed while in the sickbay. Before using any facilities, students should be able to wash their hands. The schools should provide safe water and plenty of washing stations. Provide drinking water and hand washing stations with enough water. Increased cleaning and disinfection exercises in schools must be observed regularly (Johansson et al., 2020). Hand washing stations should be distributed widely and effortlessly and accessible within the school grounds (Orscheln et al., 2020). Encouraging education regarding frequent usage of hand washing points should be prioritized (Ghate et al., 2020). The students and the institution staff should observe putting on masks at all times (Cohen et al., 2020).

Sugut (2020) conducted research on the management practices employed by principals of schools in the Nandi North sub-county to protect the safety of their children. Only two of the schools in the area had school clinics, leading the researcher to conclude that the majority of educational facilities are unprepared to deal with any type of medical emergency. Some were understaffed with qualified employees, while others lacked necessary medical supplies. The study concluded that schools need to be better equipped in terms of health. This study was carried out in Nandi North and not in Kisumu West. There is still an unanswered question on health services in boarding schools. Therefore, the current study aimed to fill the gap by investigating the relationship between increased student enrolment and delivery of health services in schools in Kisumu West Sub-County.

2.5 Increased Student Enrolment on Guidance and Counseling Services

According to Kanga (2017), guidance and counselling assist students in developing positive attitudes towards themselves and others, assisting in decision-making, developing educational aspirations, resolving problems, setting personal goals, and selecting appropriate courses based on individual interests and talents. Besides that, it teaches students how to take responsibility for their actions and decisions. All students should have access to the services of a counsellor (Weiss, 2020). According to Aldrup (2018), teachers are required to assist pupils in adapting to school and society in general.

Deslonde and Becerras (2018) examined how high school counselors influence college enrollment decisions for low-income students. The researchers contacted 290 low-income Southern high school graduates to see how counselors affected their college enrollment decisions. High school counselors significantly influenced low-income students' college enrollment choices. More assistance and support from counselors increased college enrollment. The authors suggest that high school counselors help low-income kids enroll in college. They recommend counseling these youngsters on financial aid, college applications, and advising. The authors also recommend tighter collaborations between secondary schools and universities to help low-income students succeed in college. The study shows how high school counselors affect low-income students' college enrollment decisions, emphasizing the need for more assistance and counseling. Due to its small sample size, the study's findings may need to be more generalizable, and further research is needed to determine the causes of student enrollment's effect on high school counselors.

According to Kanga (2017), students in Canada and the United States receive various information about education, personal matters, social aspects, and other factors to facilitate their self-organization and adjustment. In Canadian schools, guidance and

counseling services play a significant role in providing educational counseling to assist students in making academic decisions, such as selecting subjects, courses, and college options (Adoga, 2020). Providing educational counseling aims to broaden students' perspectives on available educational opportunities (Mathwasa & Sibanda, 2020). Extensive knowledge exists regarding learning styles, study methods, and the impact of attitudes, interests, and study habits on student's academic success. There may be a correlation between student enrolment and the provision of counselling and guidance services in schools, but additional evidence is needed to draw that conclusion. To fill this need, this research investigated how increasing student enrolment affects schools' ability to offer counselling and guidance services.

Finnish schools have school guidance and counselling services that provide community-based and individual interventions, supporting the well-being of students and the entire community (Parhiala et al., 2019). The authors further state that schools have school psychologists, and they fall under the category of school workers. Some schools have mental health professionals who focus on avoiding mental health issues among students. They also provide supportive treatment to students when needed. The mental health professionals also treat learners who are experiencing psychosocial problems. The study findings were based on a wide range of data from several schools. However, the researcher investigated only the availability of health care providers in schools.

Learners from four mixed-gender schools in Anuradhapura district were interviewed about their perceptions of the current school counselling program in Sri Lanka (Chaturika, 2015). The researcher applied the use of interview schedules and questionnaires in the collection of data. There was a consensus among 65 students; where the students had little faith in their school counsellors, especially when it came to individual counseling because the teachers were unreliable. The results indicate that a

majority of students express doubts regarding the qualifications of their guidance teachers. Certain students disclosed that their schools lacked a dedicated space for counseling, while others reported inadequate facilities due to poorly maintained rooms (Chaturika, 2015). The study was based on the students' perception of school counseling services. Students were the only ones who participated in the study.

Arfasa and Weldmeskel (2020) conducted a study to evaluate the practices and services related to guidance and counseling in secondary schools in Ethiopia. The findings revealed that only four of the assessed secondary schools had counselors who had received formal training, while the rest had counselors from various academic backgrounds. Insufficient facilities and a lack of trained counselors were identified as significant challenges in most secondary schools in Ethiopia, resulting in inadequate guidance and counseling services to students. The study highlighted the limited and challenging nature of service delivery in these schools. Nonetheless, the study's authors required to find evidence linking accessibility to guidance and counselling services to student enrolment. This study looks at how the availability of guidance and counselling services in Kenya's secondary boarding institutions relates to student enrolment.

Arfasa and Weldmeskel (2020) conducted a research study with the objective of examining the status of guidance and counseling programs in Ethiopian secondary schools. The study encompassed a diverse range of participants, including individuals fulfilling roles as school counselors, instructors, and students. The data collection process involved the administration of surveys and the conduct of in-depth interviews to gather valuable insights from these various stakeholders. The results of the study indicated that secondary schools faced significant challenges in delivering effective guidance and counseling services, despite the high demand for such support. The authors identified various obstacles that hindered the schools' ability to meet these needs

adequately. Key barriers highlighted in the research encompassed limited resources, including a scarcity of qualified personnel, financial constraints, and inadequate materials. Additionally, cultural and societal factors, such as the prevailing stigma associated with mental health and counseling services, posed additional barriers to individuals seeking the assistance they required. Despite these obstacles, the study indicated that students who received advice and counseling saw improvements in both their academic achievement and their personal growth. Findings from this study support the call for greater government support of secondary school guidance and counseling programs in Ethiopia. They also recommend that schools do things like raise awareness, educate students about mental health, and counseling services to help break down cultural and societal barriers to these resources. Finally, they suggest more studies be conducted on the efficiency of Ethiopia's secondary schools' guidance and counseling programs. This research sheds light on the successes and shortcomings of Ethiopia's secondary school guidance and counseling programs. Further research is needed to understand the efficacy of guidance and counseling services in other cultural and societal situations, as the study's small sample size restricts the generalizability of the findings.

Ishaka (2015) conducted a study in Uganda and found that implementing school information services can significantly improve students' discipline and behavior. The research also highlighted that school orientation services contribute greatly to enhancing student discipline, while school counseling services play a crucial role in developing positive character traits among learners. In spite of the myriad advantages linked to the provision of guidance and counseling services in educational institutions, the research uncovered a need for proper utilization of these services in schools located in the Mbale municipality of Uganda. The study primarily focused on evaluating the influence of guidance and counseling services on student discipline. However, it identified a crucial

research gap pertaining to the investigation of the relationship between these services and student enrollment. Hence, the present study aimed to bridge this gap by examining the correlation between the availability of guidance and counseling services and the enrollment of students in schools in Kenya.

In response to the Gachathi Report of 1976, secondary schools in Kenya incorporated guidance and counseling programs. These services enable students to develop a sense of self-awareness by acquiring knowledge about their abilities, limitations, and environment (Ruto et al., 2017). Peer assistance, career advice, academic counselling, individualized counselling, and mentoring are all examples of the types of assistance that fall under the umbrella of school guidance (Kanga, 2017). These services provide students with different forms of assistance and support to address their specific needs and enhance their overall well-being. Arumugam et al. (2021) emphasize that such services assist students in developing the necessary discipline and self-confidence to excel academically, socially, and physically. The Ministry of Education has also introduced a new subject called Social Skills, which is scheduled for weekly study in every class. The curriculum is designed to teach students how to regulate their emotions and behavior to reduce disciplinary issues. Regrettably, there is reluctance among many teachers to teach this subject (Grace & Teresa, 2015).

Otieno and Ochieng (2020) conducted a research study that focused on analyzing the outcomes of implementing a policy of universal enrollment in public secondary schools within Machakos Sub-County, Kenya. The study aimed to explore the effects and implications of a policy requiring 100 percent transition from primary to secondary education. The researchers thoroughly examined the consequences, implications, and impact of this policy on public secondary schools in the specified region. The study focused on identifying the coping strategies that schools must implement to

accommodate a large influx of students. The students in these schools comprised individuals from diverse backgrounds, each with unique challenges that required immediate support upon enrollment. In order to facilitate a smooth transition and enable students to focus on their studies, implementing learner support programs becomes crucial. The results of the study unveiled that most respondents reported a lack of mentorship programs for students as an effect of the 100 percent policy on student support initiatives. Moreover, according to the survey respondents, many students needing individualized support need to receive regular guidance and counseling services. However, certain educational institutions have made efforts to improve their counseling and guidance initiatives, aiming to provide students with moral and psychological support. It is crucial to highlight that the study aimed to establish a clear connection between enrollment figures and the availability of guidance and counseling services. Although the research explored various support programs, including guidance and counseling services, it did not specifically concentrate on examining the correlation between enrollment and these specific services. Furthermore, it is important to note that the study was conducted in Machakos sub-county, rather than Kisumu County, ensuring the distinction between the two locations.

Previous research endeavors have not adequately investigated the association between heightened student enrollment and the provision of guidance and counseling services. Consequently, the present study sought to address this research gap by examining the correlation between increased student enrollment and the delivery of guidance and counseling services within public boarding secondary schools situated in Kisumu West Sub- County, Kenya. Through this investigation, the study filled the existing void and contributed to unique insights to the field of education.

2.6 Theoretical Framework

2.6.1 Enrollment Management Theory

The first theory is the Enrollment Management Theory. However, this theory is still in its developmental stages with emerging new ideas and information. Dolence (1996) expanded on the enrollment management theory in strategic enrolment management (SEM). It is an all-encompassing method developed to aid schools in achieving and maintaining optimal enrollment, pupil retention, and success rates in graduation. The term “optimal” is used in the context of the school’s educational goals. Strategic Enrollment Management, according to Dolence, involves any factor that influences a student’s choice to enroll and continue attending school. A student’s development can be predicted or controlled using this theory. As a result, the theory can help institutions better understand and support students and better serve them.

Within this framework, various factors influence a student’s choice to enroll in an educational institution, including government policies that facilitate smooth transitions between different levels of education. For instance, the implementation of the 100 percent transition policy guarantees that all primary school graduates are admitted into secondary schools. The implementation of the 100 percent transition policy and other similar policies has resulted in a steady rise in the student population within secondary schools over the years. Moreover, factors such as the availability of welfare services significantly influence students to continue their enrollment in boarding secondary schools. These welfare services help in student development in schools. When services are provided adequately, students live comfortably and get encouraged to continue schooling in the same institutions. This study tackles accommodation services, catering services, health services, and guidance and counselling services. When the students’ enrollment is not matched up with school welfare services, it will interfere with their

school development. Hence, the administrators should strive to avail resources and services that support and serve all students adequately. This theory points out that if positive programs that support the students are implemented, and then the students will enroll and continue to study in the same school.

2.6.2 Maslow's Hierarchy of Needs Theory

Additionally, Maslow's Hierarchy of Needs was used to direct the study (1943). Human needs are divided into five categories, each of which is represented by a hierarchical pyramid. Some needs must be met before a person can reach their full potential. It starts with basic needs, then progresses to safety, love and belonging, and finally to self-actualization. This theory is appropriate for this study because students come to school to learn; however, their welfare also determines their performance in school.

In the hierarchy of needs, basic things like food, water, shelter or the physiological must first be met. Schools meet this basic level of needs by providing enough food and accommodation space, water among others. The principals in the boarding schools need to ensure that learners can access water in the school premises. The management should provide healthy and balanced food/diet to the learners. The school principals should also ensure enough beds and spaces in the dormitories and that the learners' sleeping area is of the required standard. When the following needs are unmet, students struggle. However, when all the basic needs are met, the students will feel satisfied and will concentrate on their academic work.

Safety is the next level. How secure are the schools? The students should feel safe in the learning institutions, mostly for the boarding schools. In the dormitories where they sleep, the students should feel safe at night. Safety concerns should be addressed. Administrators should be able to avail enough security measures that ensure students are

safe. For example, the school can evaluate the safety of the buildings in schools, remove anything/objects that can cause accidents in the school environment. The schools should provide enough security officers to curb external attacks among others.

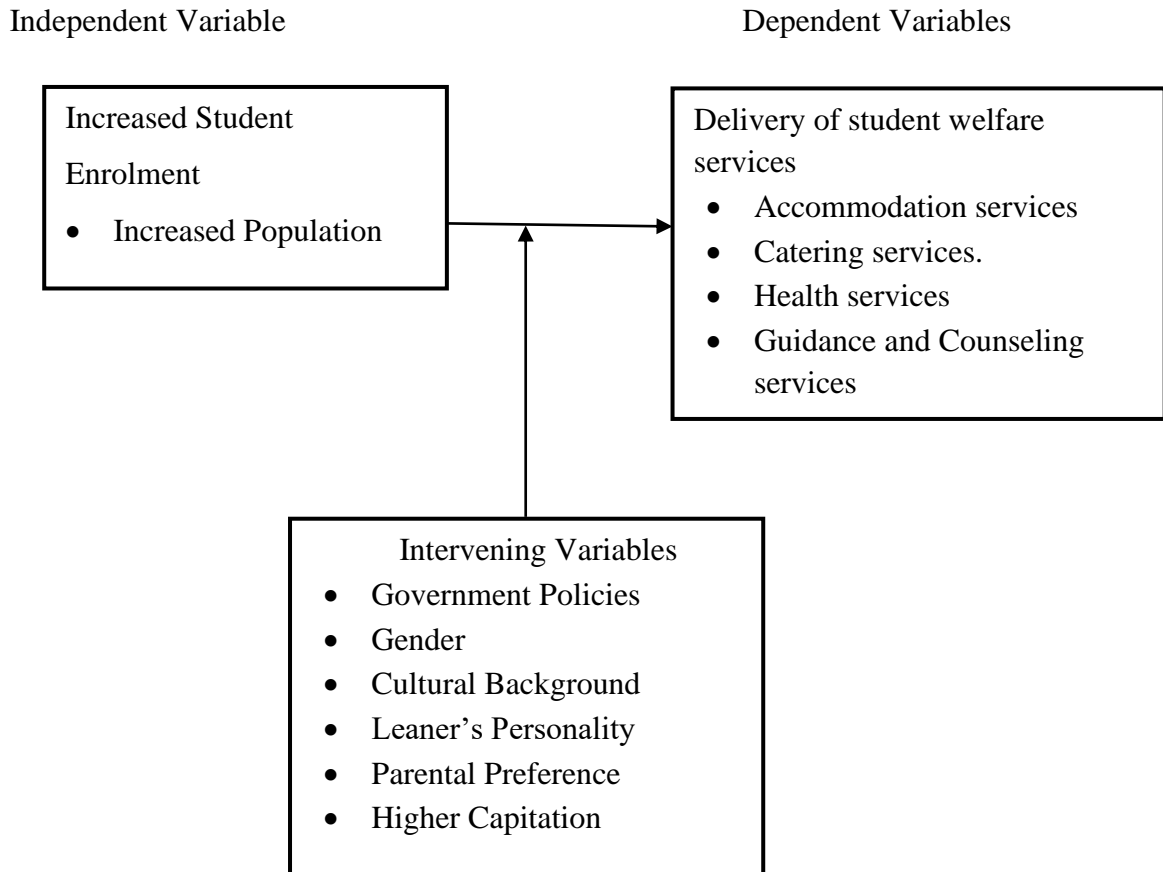
Love/belonging need is the next level. The eagerness to belong is extremely strong in adolescents/teens. The school management should constantly observe the climate of the school environment in order to reduce bullying in the school. This also helps in reducing indiscipline cases in the learning institutions through guidance and counselling services. To support the students' esteem needs, the school needs guidance and counselling to help students tackle their daily lives challenges such as self-esteem issues among others.

The top of the pyramid is self-actualization. When schools provide all the needs, starting from basic needs the learners can develop the tools needed to learn positively in school. Schools should be able to support students in all the above stages for the students to reach the self-actualization stage. This theory implies that if the well-being of the students is taken care of, students tend to perform at their best.

2.7 Conceptual Framework

Figure 1

Conceptual Framework



Source: Own Research (2023)

Drawing from the extensive literature reviewed in this chapter, the study successfully identified and examined the correlation between increased student enrolment and the provision of student welfare services in public boarding secondary schools located in Kisumu West Sub-County, Kenya. In this context, student enrolment is the independent variable, while the delivery of student welfare services is the dependent variable. Figure 1 visually depicts the interrelation between these two variables, with other intervening variables likely to affect the study outcomes. In the study, the dependent variables are welfare services, accommodation, catering, health and guidance, and counseling

services. For proper operation of programs, all dependent variables must be provided and be sufficient. Increased enrolment in schools because of new students' admissions calls for increased accommodation, catering, health, guidance, and counselling services. However, intervening variables define and complete the cycle between the variables. This includes government policies, such as the 100 percent transition government policies, gender, cultural background, learner's personality, and higher Capitation. According to Varpio et al. (2020), conceptual framework is a diagram that shows how different factors influence one another. The purpose of this framework is to show how the numerous variables at play in the research interact with one another, guiding researchers in their study design and data analysis. It helps organize and interpret research findings within a theoretical framework.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

In this chapter, the research design and methodology employed in this study are elucidated. The chapter outlines the chosen research design, the specific location of the study, the target population under investigation, the determined sample size, the techniques and procedures employed for sampling, the research instruments utilized, the validation and reliability of said instruments, the procedures employed for data collection, the techniques employed for data analysis, and finally, the ethical considerations taken into account.

3.2 Research Design

According to Leavy (2022), a research design refers to a structured plan or framework researchers employ to address research questions. In this study, a descriptive survey design was utilized to gather data by distributing questionnaires to a selected sample of participants. Descriptive research encompasses surveys and various fact-finding approaches (Mishra & Alok, 2022). The chosen design was considered suitable as it allowed for collecting, analyzing, and reporting information from the field without manipulating the variables under investigation. By employing questionnaires, the researcher obtained data regarding the attitudes and opinions of the respondents, recording it in its original form. This design facilitated the provision of an accurate and systematic description of the situation. Moreover, it offered the advantages of being relatively quick, straightforward, and cost-effective to implement (Mishra & Alok, 2022). The use of descriptive design also enabled the use of quantitative and qualitative data, allowing the researcher to gather a wide range of information.

3.3 Study Location

The research was undertaken within the geographical boundaries of Kisumu West Sub-County, Kisumu County. Kisumu County has seven sub-counties: Kisumu Central, Seme, Muhoroni, Nyakach, Kisumu East, Nyando, and Kisumu West. Kisumu West Sub-County comprises five wards: Kisumu North, South West Kisumu, West Kisumu, North West Kisumu, and Central Kisumu. The main occupation in the region is agriculture, with mixed farming being the prevalent practice. The population primarily consists of Luos and Luhyas, with Luos being the majority.

Kisumu West Sub-County has a population of 172,821 and covers an area of 209 square kilometers. The lines of latitude indicate the geographical location of the sub-county: 0° 14' 60.00" N and longitude: 34° 54' 59.99" E (Kisumu West Constituency, 2020). The choice to conduct the research in Kisumu West Sub-County was based on the indications of the problem in the area. Additionally, as shown in Table 1, there has been a significant increase in enrolment from 2019 to 2022 in the boarding schools of the region. Therefore, the study objectives and the researcher's investigation are greatly influenced by the boarding schools in the region.

3.4 Target Population

To generalize study results, researchers focus on a certain community of people or things known to have particular features (Siqueca et al., 2021). In this particular study, the target population comprised of all the 8 public boarding secondary schools in the area, encompassing 5945 students of form two, three, and four. Additionally, it included the class teachers of those respective classes, as well as boarding mistresses/masters, nurses, cateresses/caterers, matrons/patrons, and heads of guidance and counseling (County Director of Education Office, 2022).

The accessible population consisted of specific individuals within the research scope, including all students in grades two, three, and four, all class teachers in those respective grades, as well as all boarding mistresses/masters, nurses/healthcare providers, cateresses/caterers, matrons/patrons, and heads of guidance and counseling in the sub-county. These individuals were selected from the eight secondary boarding schools in Kisumu West Sub-county. Notably, students in grade one were excluded from the study. In contrast, those in grades two, three, and four were included due to their long stay in school, providing them with more experience that is extensive and the ability to offer more information that is accurate.

Table 2

The Target Population of the Study

Schools	Students	Class teachers	Boarding mistresses /masters	Matrons/Patrons	cateresses/ caterers	Nurses	Heads of G/C
O	1996	4	1	1	1	1	1
P	769	4	1	1	1	1	1
Q	717	4	1	1	1	1	1
R	655	4	1	1	1	1	1
S	529	4	1	1	1	1	1
T	462	4	1	1	1	1	1
U	433	4	1	1	1	1	1
V	384	4	1	1	1	1	1
Total	5945	32	8	8	8	8	8

3.5 Sampling Technique

The study employed purposive sampling to select the specific type of schools to be included, namely public boarding secondary schools. The study area consisted of only eight such schools, and the researcher employed a census method, including all eight

schools in Kisumu West Sub- County. To determine the sample size for students, the researcher used the Krejcie and Morgan table (1970) and employed a proportionate sampling technique to ensure an adequate representation from each school. A simple random sampling method was utilized to select the actual students to participate. Plain pieces of paper were marked with “yes” or “no,” and students in form 2, 3, and 4 were asked to choose. Those who selected “yes” were included in the study. Lastly, a census method was used to sample boarding mistresses/masters, matrons/patrons, cateresses/caterers, nurses, and heads of guidance and counseling.

3.6 Sample Size

Sample size refers to a limited number of subjects selected from a target population to represent that population effectively (Etikan & Babtope, 2019). Arikunto (2013) defines the census technique as utilizing the entire population without drawing a research sample as the observation unit. This study's sample consisted of 32 class teachers, 8 nurses, 8 matrons/patrons, 8 heads of guidance and counseling, and 8 boarding mistresses/masters. The census method was used to arrive at these numbers, encompassing the entire population of each respective group.

To determine the sample size for the students, the researcher referred to the Krejcie and Morgan table (1970), which provides a convenient way to estimate the sample size for a given population. The sample size of 357 students was calculated using this table. Proportionate sampling was then applied to allocate the sample size for each school based on their population relative to the total number of students in all eight public boarding schools. A simple random sampling technique was used to select the actual students to participate in the study, considering students from forms two, three, and four. The students were asked to pick plain pieces of paper marked with "yes" or "no" to

express their willingness to participate. Those who chose "yes" were included in the study. Tables 3 and 4 illustrates the distribution of the sample size and participants.

Table 3

Sample Size for Class Teachers, Boarding Mistresses/Masters, Matrons/Patrons, Cateresses/caterers, Nurses, Heads of Guidance and Counselling

Sample	Sample size Census method
Class teachers	32
Boarding Mistresses/Masters	8
Matrons/Patrons	8
Cateresses/caterers	8
Nurses	8
Heads of guidance and counseling	8
Total	72

Table 4

Sample Size for Students per School using Proportionate Sampling Method (Sample size of 357)

Schools	Student population (N)	Sample size per school Proportionate method $N/TT \times \text{sample size}$ Student population of each school/Total $\times 357$)
School O	1996	120
School P	769	46
School Q	717	43
School R	655	39
School S	529	32
School T	462	28
School U	433	26
School V	384	23
Total	5945	357

3.7 Research Instrument

An instrument is a tool that measures a variable (Afolayan & Oniyinde, 2019). This study used questionnaires to collect data. Questionnaires were administered to students, class teachers, cateresses/caterers, nurses, matrons/patrons, boarding mistresses/masters, and heads of guidance and counselling. According to Brown and Coombe (2015), respondents were given a list of statements or questions. They either wrote out their answers or choose from a list of possible responses that were provided. Questionnaires are used to collect information within a short period. The researcher employed questionnaires because they are relatively easy and inexpensive (Anastacia, 2017). Participants were allotted a period of 10 to 15 minutes to respond to the questions, following which the questionnaires were collected. Closed-ended questionnaires were administered to students, while open-ended questionnaires to class teachers, cateresses/caterers, boarding mistresses/masters, nurses, matrons/patrons, and heads of guidance and counselling.

The questionnaires administered to the students consisted of five sections designed to gather information aligned with the research objectives. Section A included demographic questions to collect background information from each participant. Sections B-E comprised items derived from the study's objectives and were presented in a Likert scale format with four degrees of agreement. Each item in the questionnaire ranged from "strongly agree" to "strongly disagree." The Likert scale is a widely recognized and accepted method for assessing individuals' opinions and attitudes on specific matters. For class teachers, cateresses/caterers, boarding mistresses/masters, nurses, matrons/patrons, and heads of guidance and counseling, their questionnaires were divided into two sections. Section A gathered demographic information about their backgrounds, while Section B consisted of items based on the research objectives. All

respondents completed the questionnaires, making it an efficient method to reach many participants quickly.

3.8 Validity of the Research Instrument

According to Sürücü & Maslakci (2020), validity pertains to the reliability and credibility of a measurement procedure. It assesses the extent to which the results of data analysis accurately reflect the phenomenon under investigation. As described by Almanasreh et al. (2019), content validity refers to the truthfulness, accuracy, and relevance of the data and all the conclusions drawn from it. In this study, the instruments were evaluated for content validity. The supervisors played a crucial role in assessing the content validity of the questionnaire. They thoroughly examined the contents and clarity of the items. This evaluation process involved discussions, providing relevant suggestions, and determining whether the instrument precisely measures the intended concepts aligned with the study's objectives.

3.9 Pilot Study

The researcher conducted a pilot study in two public boarding secondary schools outside Kisumu West Sub-county. The sub-county where the piloting was carried out was selected because it had a similar problem. However, the two schools were not included in the final study. The respondents comprised 274 students, 2 class teachers, two matrons/patrons, two cateresses/caterers, two boarding mistresses/masters, two healthcare providers/nurses, and two heads of guidance and counseling. The primary purpose of the pilot study was to assess the questionnaire and enhance its validity and reliability. By conducting the pilot study, potential issues that may have otherwise gone unnoticed were identified. Ambiguous items were corrected, ensuring the accuracy of the

instruments. Any problematic items on the instruments were addressed, and necessary adjustments were made before collecting the data.

During the pilot study, the researcher reviewed incorrect responses, blank spaces, and inconsistencies, which provided insights into the weaknesses of the instruments. This allowed the researcher to improve and revise the research instruments, thereby increasing their reliability. Piloting the instruments helped determine whether the items needed to be clearer or more adequate, leading to necessary revisions and improvements.

3.10 Reliability of Research Instrument

According to Mellinger & Hanson (2020), research instrument reliability is determined by the number of times it produces the same results. Through piloting, reliability improves the instruments dependability, accuracy, appropriateness, and adequacy. To ensure the reliability of the research instruments, the researcher employed the test-retest method (Mugenda & Mugenda, 2012). This method involves administering the same questionnaire to the same group of subjects twice. The questionnaires were initially distributed to respondents in the piloting school. After a few weeks, the same process was repeated with the same group of participants. The scores obtained from both test administrations were then used to calculate the reliability coefficient using Pearson's product-moment correlation coefficient formula. A reliable instrument would yield a correlation coefficient approaching 1, indicating consistent responses between the two test administrations. This approach helps minimize errors and enhances the reliability of the research instruments.

The larger the number the stronger the reliability of the instrument (Puth & Ruxton, 2014). Whereas, if the results yield a coefficient approaching -1 it shows a negative connection, it will be considered unreliable. A calculated correlation coefficient of 0.72

was obtained from closed ended questionnaire and 0.81 from open-ended questionnaires. Therefore, the questionnaires are considered reliable.

3.11 Data Collection Procedure

The researcher followed the necessary ethical procedures before conducting the study. Firstly, permission was obtained from Kabarak University Institute of Postgraduate Studies. Ethical clearance was then sought from Kabarak University Research Ethics Committee. A permit from the National Commission for Science, Technology, and Innovation (NACOSTI) was also requested. Subsequently, consent was obtained from the Kisumu West Sub- County Education office before proceeding to the field for data collection. The researcher approached the principals of the schools involved in the study, explaining the purpose of the research and seeking their approval to conduct the study within their institutions. Before gathering data, a consent form was provided to all the respondents, ensuring they were fully informed about the research and voluntarily agreed to participate. These ethical steps were taken to uphold the participants' rights and welfare and maintain the research process's integrity.

After seeking consent from the respondents, the researcher personally distributed the questionnaires, explaining how they should be filled out. The researcher then requested the respondents to give honest answers. The items in the questionnaires were not many hence; the respondents filled the questionnaires in less than 10 minutes. Before collecting back, the questionnaires, the researcher ensured all the questions in the questionnaire are correctly answered. Then, the researcher personally collected the questionnaires that were issued to ensure that they were all handed in safely.

3.12 Data Analysis and Presentation

The data analysis process encompassed both qualitative and quantitative data. According to Kothari (2016), data analysis involves the entire process from data collection to

interpretation and processing. This study used closed-ended and open-ended questionnaires, yielding quantitative and qualitative data, respectively. Upon collecting the questionnaires from the field, the researcher checked for completeness and accuracy. Only complete questionnaires were considered valid. Qualitative data from open-ended questions were analyzed through content analysis, where responses were categorized based on common themes or patterns. The analysis was presented in narrative form. Quantitative data from closed-ended questionnaires were coded and entered into Statistical Packages for Social Scientists (SPSS) version 27.0.1 IF026. Inferential statistics were employed for analysis. Pearson Product Moment Correlation Coefficient was used to establish relationships between variables. The findings were then presented using tables and percentages. The researcher drew conclusions based on the statistical tests and analyses and made further research recommendations. Tables 5 and 6 displays the statistical tests, statistics, and quantitative and qualitative data analyses, respectively.

Table 5*Showing Tests and Statistical Analyses for Quantitative Data*

Research Objectives	Independent Variable	Dependent Variable	Statistics	Presentation
Objective 1 <i>Relationship between increased student enrolment and delivery of accommodation services</i>	Student enrolment	Delivery of accommodation Services.	Inferential statistics, PPMCC, Hypothesis Testing	Tables
Objective 2 <i>Relationship between increased student enrolment and delivery of catering services</i>	Student enrolment	Delivery of catering Services	Inferential statistics, PPMCC Hypothesis Testing	Tables
Objective 3 <i>Relationship between increased student enrolment and delivery of health services</i>	Student enrolment	Delivery of Health Services	Inferential statistics, PPMCC Hypothesis Testing	Tables
Objective 4 <i>Relationship between increased student enrolment and delivery of guidance and counselling services.</i>	Student enrolment	Delivery of guidance counselling services	Inferential statistics, PPMCC Hypothesis Testing	Tables

Table 6*Showing Tests and Statistical Analyses for Qualitative Data*

Research Objectives	Independent Variable	Dependent Variable	Analysis	Presentation
Objective 1 <i>Relationship between increased student enrolment and delivery of accommodation services</i>	Student enrolment	Delivery of accommodation Services.	Analysis of themes and content	Verbatim Reporting
Objective 2 <i>Relationship between increased student enrolment and delivery of catering services</i>	Student enrolment	Delivery of catering Services	Analysis of themes and content	Verbatim Reporting
Objective 3 <i>Relationship between increased student enrolment and delivery of health services</i>	Student enrolment	Delivery of Health Services	Analysis of themes and content	Verbatim Reporting
Objective 4 <i>Relationship between increased student enrolment and delivery of guidance and counselling service</i>	Student enrolment	Delivery of guidance and counselling services	Analysis of themes and content	Verbatim Reporting

Pearson correlation coefficient is used to determine the strength of the relationship between a dependent variable and a set of independent variables. The following formula was used to determine this coefficient.

$$r = \frac{N\Sigma xy - (\Sigma x)(\Sigma y)}{\sqrt{[N\Sigma x^2 - (\Sigma x)^2][N\Sigma y^2 - (\Sigma y)^2]}}$$

Where:

N = the number of pairs of scores

Σxy = the sum of the products of paired scores

Σx = the sum of x scores

Σy = the sum of y scores

Σx^2 = the sum of squared x scores

Σy^2 = the sum of squared y scores

The Pearson correlation coefficient was used in statistical analysis to measure the degree to which the two variables are related. When the coefficient value is negative, there is no relationship between the two variables. The strength of the correlation between the two variables was measured with this metric.

3.13 Ethical Considerations

Ethics are vital in scientific research, distinguishing between acceptable and undesirable behaviors (Fouka & Montzorou, 2021). In this study, the ethical requirements of the Republic of Kenya were adhered to, especially as it involved minors. Permission from school principals was considered sufficient due to their responsibility to the students.

No financial incentives were offered to any participants. To ensure informed consent and voluntary involvement, participants received a clear explanation of the study's goals through a consent letter (Appendix II). They were informed about the study's purpose,

privacy, anonymity, potential risks, and data handling. Participants were allowed to decline participation at any point.

Anonymity was maintained by not including names on questionnaires, and school names were replaced with codes throughout the study. Participants' responses were confidential, accessible only to the researcher, and securely stored. After data analysis, questionnaires were securely stored for one month before being shredded. The study posed no risks, as data collection occurred within the school compound. The data was used solely for academic purposes, but the findings could be shared with interested participants. Lastly, honest and transparent feedback was encouraged for accurate results.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the results of the study conducted to determine the relationship between increased student enrollment and the delivery of student welfare services in public boarding secondary schools in Kisumu West Sub- County, Kenya. The results are organized according to six themes, which include questionnaire return rates, characteristics of the respondents, and the relationship between increased student enrollment and the delivery of accommodation services, catering services, health services, and guidance and counselling services. The data was collected by administering open-ended and closed-ended questionnaires to the respondents. The findings, interpretations, and discussions of the study were based on the following research objectives:

- i. To determine the relationship between increased student enrolment and delivery of accommodation services in public boarding secondary schools in Kisumu West Sub- County, Kenya.
- ii. To establish the relationship between increased student enrolment and delivery of catering services in public boarding secondary schools in Kisumu West Sub- County, Kenya.
- iii. To examine the relationship between increased student enrolment and delivery of health services in public boarding schools in Kisumu West Sub- County, Kenya.
- iv. To establish the relationship between increased student enrolment and delivery of guidance and counseling services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

4.2 Response Rates

The study utilized seven instruments to gather data: questionnaires for students, questionnaires for class teachers, questionnaires for boarding masters or mistresses, questionnaires for matrons/patrons, questionnaires for nurses, and questionnaires for heads of guidance and counselling. As per Kothari (2004), the instrument return rate is the proportion of questionnaires brought back to the researcher after being filled out by respondents. The sample size comprised 357 students, 128 class teachers, 8 boarding masters/mistresses, 8 matrons/patrons, 8 cateresses/caterers, 8 nurses, and 8 heads of guidance and counselling. Consequently, an equal number of questionnaires were distributed to each sample group. The number of questionnaires filled out and returned for each sample group is summarized in Table 7.

Table 7

Return Rates for Questionnaires

Respondent	Number of administered questionnaires	Returned	Return rate (Percentage)
Students	357	294	82.4
Class teachers	32	30	94
Boarding master/mistress	8	5	62.5
Matrons/patrons	8	8	100.0
Cateress/Caterers	8	6	75.0
Nurses	8	5	62.5
Guidance & Counseling HODs	8	6	75.0

Questionnaires were administered to 357 student respondents, and 294 (82.4%) of the questionnaires were returned. The expected number of class teachers was also 32, but only 30 (94%) questionnaires were returned. The return rate by the matron/patron was (100%). The return rate by cateresses/caterers was six (75%) out of eight. The return rate

by nurses is five (62.5%) out of eight. Heads of Guidance and Counseling who returned their instruments were 6 out of the expected 8 (75%). The sample was deemed appropriate for analysis as its overall return rate was above (60.0%).

This indicates that the results provided a comprehensive overview of the study, as a significant number of participants responded. This aligns with the perspective shared by Mundy (2002), who stated that is no miracles when it comes to response rate figures. Researchers in the field of survey research have long held that having a large number of respondents is the best method for obtaining reliable data (Fosnacht et al., 2017). For the purposes of analysis and reporting, a 50% rate is deemed satisfactory (Mugenda & Mugenda, 2003). In this case, it was highly acceptable. The percentage of questionnaires that were given to respondents and later handed to the researcher having been filled out indicates the instrument return rate (Kothari, 2004). Creswell (2012) recommends that the return rate of questionnaire above 60% is acceptable.

4.3 General and Demographic Information

The researcher sought to establish the general and demographic information of the respondents who participated in this study to understand them fully in relation to the study variables. In general information, the researcher sought to know the background information of all the respondents. Prior to testing the study hypotheses, the characteristics of the respondents were analyzed as described in the subsequent sections. The researcher sought to establish the characteristics of the respondents who participated in this study in order to understand them fully in relation to the study variables.

4.3.1 Characteristics of the Students

This study collected data regarding the general characteristics of respondents. The information was grouped according to their gender, age bracket; class and the year they joined form one.

Table 8

Characteristics of the Students

Scale	Characteristic	Frequency	Percentage
Gender (n = 294)	Female	121	41.2
	Male	173	58.8
Age (n = 294)	Below 15 years	8	2.7
	15 to 18	261	88.8
	Above 18 years	25	8.5
Class (n = 294)	Form 2	77	26.2
	Form 3	83	28.2
	Form 4	134	45.6
Year joined form 1 (n = 294)	2021	75	25.5
	2020	96	32.7
	2019	120	40.8
	2018	3	1.0

Table 8 indicates that (2.7%) of students were below 15 years while (88.8%) were between the age of 15 to 18, and (8.5%) were above 18 years. The successful collection of data from minors within this study was made possible through the cooperation of school principals and teachers, who granted permission for their involvement (Appendix II). According to the study by Manti and Licari (2018), minors are not legally competent to consent to research activities that involve risks or may have long-term implications for their well-being. Therefore, obtaining informed consent from a parent or guardian for minors under 18 is necessary. The first ethical issue that needs to be considered is

informed consent. Informed consent requires that participants be informed about the study and give their permission to participate (Manti & Licari, 2018). Minors could not give informed consent due to lack of understanding of research and what it entails (Alderson & Morrow, 2020).

According to Table 8, men made up the vast majority (58.8%) while women represented the smallest fraction (41.2%). This indicates a gender imbalance, with a higher number of male students compared to female students. Thulani (2015) found that in sub-Saharan Africa, there is still a gender gap in terms of school enrollment and completion rates, with the system still skewed towards boys. Hence, girls were fewer in schools due to various factors such as dropping out. The study involved students from form two, three, and four, as they have had a longer experience in school and were considered more likely to provide accurate information. Specifically, (26.2%) of the students were from Form 4, (28.2%) form 3, and (45.6%) were form 4. According to George (2019), two primary aspects influence the accuracy of responses: the respondent's experience and expertise. The higher the respondent's experience with the task, the more precise their responses will be. However, to solve this, the researcher provided clear instructions and guidance to participants to ensure they understood the task and could provide accurate responses.

Among the student respondents, (25.5%) joined the school in 2021, (32.7%) joined in 2020, (40.8%) joined in 2019, and (1.0%) joined in 2018. This was due to introduction of a 100% transition policy in 2019. Implementing a 100 percent transition policy mandates that all students, regardless of their gender, be provided equal opportunities by being absorbed into the secondary level. The gender disparity, in this case, could be because the sampled schools were public boarding schools, and most schools in Kisumu West Sub- County are single-sex schools, each having a different number of students enrolled.

4.3.2 Characteristics of the Class Teachers

The information was grouped according to their gender, age bracket, school type, and years of service in the school.

Table 9

Characteristics of the Class Teachers

Scale	Characteristic	Frequency	Percentage
Gender (n=30)	Female	14	47
	Male	16	53
Age (n=30)	Below 40 years	29	97
	40 to 50	-	-
	Above 50 years	1	3
School type (n=30)	Girls	10	33
	Boys	17	57
	Mixed	3	10
Years of service in the school (n=30)	Below 5 years	9	30
	5 – 10 years	21	70
	11 – 15	-	-
	Above 15 years	-	-

In Table 9, (47.0%) of the respondents were female, while (53.0%) were male. The male teachers were more than the female teachers were. According to Bayeh (2016), the presence of women in educational settings helps to make it a safe place for young females to learn, which is why gender mainstreaming is necessary in the workplace.

According to Table 9, (33.0%) of teachers in Kisumu West Sub- County were in girls' schools, (57.0%) from boys' schools, and (10%) from mixed schools. This shows a significant gender disparity in the distribution of teachers in the public boarding schools in Kisumu West Sub- County. Female teachers were less represented even though most

schools were single-gender schools. The findings concur with Han and Leonard (2017) who noted that more male teachers are in leadership positions than female teachers. Results in Table 10 indicate that (97.0%) of the teachers in Kisumu West Sub- County were below 40, while (3.0%) were above 50 years. Teacher age distribution in Kisumu West Sub- County implies a generational shift within the teaching workforce. This shift can have implications for the delivery of student welfare services as younger teachers may bring fresh perspectives, innovative approaches, and familiarity with the evolving needs and preferences.

On the other hand, teachers above 50 years prove they are mature enough to deal with issues and obstacles to implementing 100% transition policies in schools. Nwosu et al. (2020) argues that there may be significant differences in outlook and perspective between age groups. According to Bauer et al. (2015), while the age of the respondents could influence their attitudes and perceptions, the inclusion of younger respondents in the study may not have affected the results if appropriate sampling methods, data analysis techniques, and measures to control for potential confounding variables were used.

According to Table 9, (30.0%) of the teachers had worked in the school for less than 5 years, while (70.0%) had worked there for 5-10 years. The early-career teachers could result in highly experienced teachers being promoted to other roles based on the qualifications of teacher service commission. However, these early-career teachers did not affect the study outcome. According to DeSimone and Harms (2022), researchers should avoid complex or technical questions that may be difficult for early-career respondents to answer. Hence, the questions were easy to understand and the items in the questionnaires were evaluated for content validity; it is unlikely to affect policy execution because more promotion leads to increased skills and knowledge that will aid

in dealing with future challenges. The early-career teachers will also be able to learn from the more experienced teachers in the schools. This is consistent with the findings of Gile and Handcock (2010) who found that highly experienced employees boost the development of excellent results.

4.3.3 Characteristics of the Boarding Masters/Mistresses

The study sought to find out the age bracket, school type and duration of services of the boarding masters/mistresses.

Table 10

Characteristics of the Boarding Masters/Mistress

Scale	Characteristic	Frequency	Percentage
Gender (n = 5)	Female	3	60.0
	Male	2	40.0
Age (n=5)	Below 40 years	4	80.0
	40 to 50	1	20.0
	Above 50 years	-	-
School type (n=5)	Girls	3	60.0
	Boys	2	40.0
	Mixed	-	-
Years of service in the school (n =5)	Below 5 years	1	20.0
	5 – 10 years	3	60.0
	11 – 15	1	20.0
	Above 15 years	-	-

Results in Table 10 show that (60.0%) of the boarding masters/mistresses were female, while (40.0%) were male. There are more female boarding mistresses than male boarding masters. Male boarding masters and female boarding mistresses may approach the delivery of welfare services differently. This points to the fact that most schools put

female teachers in charge of the boarding section, hence the higher percentage of boarding mistresses than boarding masters do. This may also result from having more girls boarding secondary schools than boys' boarding schools in Kisumu West Sub-County. This concurs with a study by Oxworth (2023) and the Kenya National Commission on Human Rights, which revealed that the number of female teachers in the country constantly increases.

According to the data in Table 10, (80.0%) of the respondents were under 40, while 20.0% were between the ages of 40 and 50. The majority of the respondents were younger than 40 years old. The age of the respondents does not affect the study outcome. The results also show that (20.0%) of the boarding mistresses/masters have served in the school for less than 5 years, which does not affect their eligibility to participate in the study. However, it is essential to consider how their experience level may influence their ability to handle the problems that come with higher student numbers successfully.

While (60.0%) served between 5-10 years and (20.0%) served between 11-15 years. The fact that a majority (60.0%) of the boarding mistresses/masters have served between 5-10 years suggests considerable experience in managing student welfare services in the context of the school's enrollment changes. These individuals may have better understood the needs of an expanding student population and gained valuable insights into implementing effective welfare programs to support student well-being. According to Desta et al. (2018), effective institution supervisors require extensive and continuous exposure to practical work to produce positive performance.

4.3.4 Characteristics of Matrons/Patrons

The information was grouped according to their gender, age bracket, school type, and years of service in the school.

Table 11*Characteristics of Matrons/Patrons*

Scale	Characteristic	Frequency	Percentage
Gender (n = 7)	Female	4	57.1
	Male	3	42.9
Age (n = 7)	Below 40 years	4	57.1
	40 to 50	2	28.6
	Above 50 years	1	14.3
School type (n = 7)	Girls	2	28.6
	Boys	4	57.1
	Mixed	1	14.3
Years of service in the school (n=7)	Below 5 years	5	71.4
	5 – 10 years	-	-
	11 – 15	2	28.6
	Above 15 years	-	-

The data from Table 11 indicates that there were more female respondents (57.1%) than male respondents (42.9%) in the public secondary boarding schools in Kisumu West Sub- County. According to Husband (2020), the gender distribution among the respondents is essential because it allows for a more comprehensive understanding of the male and female perspectives and experiences. By including diverse voices, the study can capture a broader representation of the population’s challenges and preferences. The gender distribution among matrons can shed light on the representation of female and male staff members responsible for student welfare. Understanding their perspectives, experiences, and approaches to addressing student welfare needs can help identify potential gender-related considerations and disparities in service delivery.

The majority of the respondents were below the age of 40 (57.1%); younger matrons may possess a higher level of reliability to the students' experiences, challenges, and aspirations. Simons (2014) avers that reliability can foster stronger empathetic connections, making it easier for patrons to understand and address the diverse needs of students in the context of increased enrollment. Their inclusion in the study provides valuable insights into the experiences and contributions of younger matrons, enriching the understanding of how student welfare services can be effectively provided in the context of increased student enrollment.

Respondents between 40 and 50 years were (28.6%) and (14.3%) above 50 years old. Including respondents from different age groups can contribute to a more comprehensive understanding of the research topic. The perspectives of those between 40 to 50 years old and above 50 may help inform policy and decision-making processes related to student enrollment and welfare services, as they may have experienced or been involved in educational systems and reforms over an extended period (McCreesh et al., 2012).

Boys' schools had the highest representation of respondents (57.1%), followed by girls' schools (28.6%) and mixed schools (14.3%). By including matrons from different schools, the study can compare and contrast matrons' experiences, practices, and challenges in coeducational settings (McCreesh et al., 2012).

Regarding work experience, (71.4%) of the respondents had worked in the school for less than 5 years, while (28.6%) had worked for more than 15 years. The distribution of work experience levels allows for an exploration of how different cohorts of staff adapt to changes. Few years of experience, matrons may provide insights into the challenges faced by schools in accommodating increasing enrollment; while more experienced,

matrons can offer perspectives on strategies and practices that have proven effective over time (Denscombe, 2017).

The study revealed that the matrons' experience level did not affect the study's outcome, and those with less experience could learn from their more experienced colleagues. According to Mummolo and Peterson (2019), the length of time a respondent has worked in a school has no bearing on the outcomes, as the information they provide is based on their personal experience and not the length of time they have worked in that particular location.

4.3.5 Characteristics of Cateresses/Caterers

The information was grouped according to their gender, age bracket, school type, and years of service in the school.

Table 12

Characteristics of Cateresses/Caterers

Scale	Characteristic	Frequency	Percentage
Gender (n = 6)	Female	4	67.0
	Male	2	33.0
Age (n = 6)	Below 40 years	1	17.0
	40 to 50	4	66.0
	Above 50 years	1	17.0
School type (n = 6)	Girls	2	33.3
	Boys	2	33.3
	Mixed	2	33.3
Years of service in the school (n = 6)	Below 5 years	0	-
	5 – 10 years	3	50.0
	11 – 15	1	17.0
	Above 15 years	2	33.0

Table 12 indicates that (67.0%) were female while (33.0%) were male. This means cateresses were more than caterers in the public boarding secondary schools in Kisumu West Sub- County. The fact that there is a higher percentage of female cateresses (67.0%) compared to male caterers (33.0%) indicates a gender imbalance in the catering staff within the schools (Husband, 2020). There is a possibility that the cateresses older than 40 working at public secondary boarding schools have been employed there longer. Due to the length of time, they have spent in their current positions; they may have gained a more in-depth knowledge of the operations of the school, the student welfare services, and the issues connected with rising student enrolment. Their extensive institutional expertise may help locate potential barriers and recommend relevant solutions.

The statistics in Table 12 show that Girls' schools provided (33.3%) of the cateresses/caterers, (33.3%) were from male schools, while (33.3%) of the respondents were from mixed schools. This shows a balance between respondents and responses to questionnaires received. The research findings indicate that many school caterers have worked in their respective schools for a considerable period. Specifically, (50.0%) have worked between 5 to 10 years, (17.0%) between 11 to 15 years, while (33.0%) have worked for more than 15 years. Therefore, it is evident that most of the caterers have worked for more than 5 years in their respective schools. Having respondents who have worked in the school for an extended period is crucial for ensuring the credibility of the information provided about catering services.

Experienced caterers have likely faced numerous challenges, and their responses will be based on their experiences, making them more reliable sources of information (Blomme et al., 2010). In contrast, new caterers may not have the breadth and depth of experience required to provide accurate information. As such, having respondents with more

extended service is crucial for obtaining credible information about catering services in schools (Ericsson, 2017).

4.3.6 Characteristics of Nurses

The information was grouped according to their gender, age bracket, school type, and years of service in the school.

Table 13

Characteristics of Nurses

Scale	Characteristic	Frequency	Percentage
Gender (n = 5)	Female	3	40.0
	Male	2	60.0
Age (n = 5)	Below 40 years	2	40.0
	40 to 50	3	60.0
	Above 50 years	-	-
School type (n = 5)	Girls	2	40.0
	Boys	2	40.0
	Mixed	1	20.0
Years of service in the school (n = 5)	Below 5 years	2	40.0
	5 – 10 years	1	20.0
	11 – 15	1	20.0
	Above 15 years	1	20.0

Table 13 shows that (40.0%) of the respondents were female, while (60.0%) were male. This means that there are more male nurses as compared to female nurses in public boarding secondary schools in Kisumu West Sub- County. The gender distribution among nurses may have implications for the delivery of student welfare services.

Different genders may bring different perspectives and approaches to their roles, which could influence the students' experiences and well-being. For instance, some students might feel more comfortable discussing specific issues or seeking support from nurses of a particular gender. Understanding these dynamics is crucial to ensuring comprehensive and inclusive student welfare services.

According to the table, (40.0%) of nurses were under 40. (60%) were between the ages of 40 and 50. This demonstrates that most nurses are above 40 and are more mature to overcome challenges that may arise due to implementing the hundred percent transition policies. There were also fewer nurses in mixed-gender schools than in single-gender schools, where (40.0%) of the nurses were from girls' schools while (40.0%) were from boys' schools, and (2.0%) were from mixed schools. The results suggest that there is a difference in the distribution of nurses across different types of schools (single-gender vs. mixed-gender). This finding may indicate a trend of gender segregation in educational settings, with nurses from single-gender schools being more prevalent than those from mixed-gender schools are. Gender-segregated boarding schools may offer different welfare services or provide them in varying capacities based on the gender-specific needs of the students. Gender-segregated boarding schools may offer different welfare services or provide them in varying capacities based on the gender-specific needs of the students. However, this gender segregation does not lead to disparities in accessing welfare services in the school. Therefore, it does not affect the findings.

4.3.7 Characteristics of Heads of Guidance and Counseling

The information was grouped according to their gender, age bracket, school type, and years of service in the school.

Table 14*Characteristics of Heads of Guidance and Counseling*

Scale	Characteristic	Frequency	Percentage
Gender (n = 5)	Female	5	100.0
	Male	-	-
Age (n = 5)	Below 40 years	-	-
	40 to 50	4	80.0
	Above 50 years	1	20.0
School type (n = 5)	Girls	-	-
	Boys	3	60.0
	Mixed	2	40.0
Years of service in the school (n = 5)	Below 5 years	2	40.0
	5 – 10 years	-	-
	11 – 15	3	60.0
	Above 15 years	-	-

Table 14 shows that all department heads were female (100.0%). Male teachers must be actively involved in the guidance and counseling services offered to students in schools. Hence, most guidance and counseling work is left out to female teachers. Gender was sought to determine whether males and females were equally represented in the guidance and counseling activities in the respective schools. Nyaga et al. (2019) pointed out that students are more prone to engage in antisocial behavior if every teacher, regardless of gender are concerned about their well-being. As a result, teachers must adjust their attitude towards student discipline by becoming involved in school discipline concerns.

The table also shows that the heads of Guidance and Counseling were between the age of 40 to 50 (80.0%), while (20.0%) were above 50 years. The fact that (80.0%) of the heads of guidance and counseling fall within the age range of 40 to 50 suggests that a significant proportion of them have accumulated considerable professional experience in their roles. This experience could be valuable in providing practical guidance and counseling services to students, especially in the context of increased student enrollment.

This means that more elderly and life-experienced individuals can guide students. Most respondents were from boys' schools (60.0%), while (40.0%) were from mixed schools. There were no respondents from girls' schools. The absence of respondents from girls' schools suggests a potential gender disparity in the representation of guidance and counseling personnel. This finding raises questions about whether girls' schools have adequate access to guidance and counseling services compared to boys' or mixed schools. It further revealed that (40.0%) served in their respective institutions for less than 5 years, while (60.0%) served between 11 and 15 years. Therefore, most heads of guidance and counseling have more than 5 years of experience. Most heads of guidance and counseling with 11 to 15 years of experience possess substantial institutional knowledge. This means they have gained a deep understanding of the specific challenges, needs, and dynamics within their respective institutions. These individuals may have valuable insights into the evolving needs of a growing student population and can contribute to developing effective strategies to meet those needs (Alvarez et al., 2019).

4.4. Data on Students Enrolment

The following table shows the enrolment trends in the enrolment of students from 2019-2022 in the sampled schools in Kisumu West Sub- County, Kenya.

Data on students' enrolment trends from 2019 to 2022 in boarding schools in Kisumu West Sub- County, Kenya.

Table 15

Enrolment Trends from 2019 to 2022 of Targeted School

Year	2019	2020	2021	2022
Enrolment	4019	5009	5933	7081

According to Table 15, enrolment trends indicate an increased number of students in the schools as the year progress from 2019 to 2022. It is evident that there was an increase in the number of students in schools when the 100% transition policy was introduced. This view was supported by Njenga (2019), noting that when the 100% transition policy was implemented in 2019, there was a more significant enrolment in secondary schools in Nyandarua sub-county. She pointed out a higher transition rate from primary to secondary schools in Nyandarua Central Sub County, Kenya.

Table 16

Enrolment Data Provided by Class Teachers for the Year 2022

School	O	P	Q	R	S	T	U	V
Enrolment	2505	852	806	717	621	568	524	488

Table 16 shows the form one enrolment of students per school in 2022. The enrolment went up from the year 2019 to 2022. This implies enrollment in all secondary schools, including public boarding secondary schools in Kisumu West Sub- County. Njenga (2019) avers that as the number of students in schools increases, so does the demand for additional space within schools.

4.5 Data on Shared Facilities Available in the Schools in year 2022

The following table shows data on shared facilities in the sampled Boarding schools in Kisumu West Sub- County, Kenya.

Table 17

Shared Facilities Available in the Respective Schools

Schools	O	P	Q	R	S	T	U	V
Dormitories	25	6	8	6	7	5	3	3
Classrooms	40	30	27	23	21	19	19	17
Toilets	19	11	13	6	10	10	11	9
Bathrooms	25	6	8	6	7	3	2	2
Dining halls	2	1	1	0	0	1	0	1
Water taps	12	8	7	8	6	4	6	5

Table 17, illustrates the shared facilities within the school compound that are utilized by the students. However, it also presents evidence of inadequate facilities in these schools, which directly affects the well-being of the students. The insufficiency becomes apparent when comparing the total number of students enrolled in the boarding schools of Kisumu West Sub- County to the number of available facilities. It is evident from the table that the number of students enrolled in these schools surpasses the capacity of the available facilities.

4.6 Students' Descriptive Statistic on Delivery of Accommodation Services

The students provided quantitative data on the delivery of accommodation services. It was gathered using a set of 10 closed-ended items. The items were based on the extent to which the respondents agreed with them (SD=4. D=3, A= 2, SA=1). The descriptive statistics of accommodation services was calculated from the students' response. Table 18 shows findings in percentage.

Table 18*Students' Responses to Items on Accommodation Services*

Item	N	SA (%)	A (%)	D (%)	SD (%)
Due to increased enrolment, there is crowding in the dormitory	294	41.3	24.6	22.2	11.9
Due to increased enrolment, there are fewer bed spaces in the dormitory	294	33.4	25.9	21.2	19.5
Due to increased enrolment, some students share beds	294	3.8	4.4	21.2	70.6
Due to increased enrolment, there are increased incidences of stealing in the dormitories	294	30.8	36.0	20.5	12.7
Due to increased enrolment, dormitories are often untidy.	294	34.6	36.7	9.2	19.5
Due to increased enrolment, there are increased cases of respiratory infections among students in the dormitories.	294	15.8	21.1	26.6	36.5
Due to increased enrolment, there is usually a lot of noise the dorm	294	32.8	32.4	20.6	14.2
The bathrooms in the dormitories are not enough for us	294	48.1	21.8	16.3	13.8
The toilets in the dormitories are not enough for us	294	46.6	23.6	12.7	17.1
Due to increased enrolment, there is inadequate supply of water in the dormitories.	294	40.0	23.6	16.1	20.3
Increased enrolment denies students privacy in the dormitories	294	25.3	19.8	29.2	25.7

Based on Table 18, the majority of respondents agreed and strongly agreed that an increase in enrolment leads to crowding in the dormitory (65.9%) while very few (34.1%) disagreed and strongly disagreed. The number of students enrolled in a boarding school directly affects the availability of accommodation services. As more students enroll, the demand for accommodation services increases, which can result in overcrowding in the dormitories. This concurs with Ngala (2018) that an increase in

student enrollment resulted in a dormitory facility shortage, leading to overcrowding and poor living conditions for students. The study's author recommends that institutions invest in upgrading and expanding their accommodation facilities to accommodate the growing student population.

Additionally, a significant percentage of respondents agreed that fewer bed spaces are available in the dormitory (59.3%). The fewer bed spaces result from too many beds in a small space. Most students agree that fewer bed spaces exist in the sleeping areas, resulting in cramped and uncomfortable living conditions. The findings resonate with Olagunju and Zubairu (2016) that students who lived in dormitories that are more crowded needed more space since the dormitories were packed to capacity. The authors suggest that crowding and inadequate bed spacing may increase the risk of transmission of respiratory infections in boarding schools. Jennifer (2011) also observed that students struggle over bed spaces and room accessories when schools have over-enrolment.

From the findings (8.2%) of the respondents agreed that they share beds. Sharing beds among boarders can cause discomfort and a lack of privacy among students, negatively affecting their academic performance and overall well-being. It is also worth noting that sharing a bed can compromise the quality of sleep for both students, leading to potential health risks, mainly if one student is ill. This resonates with a study by Laryea and Ibem (2017) in Ghana found that sharing beds was common in colleges, with up to 4 students sharing a single bed. The study found that sharing beds was associated with poor sleep quality and increased risk of infectious diseases.

The alarming increase in theft in the dorms was acknowledged by a significant percentage of respondents (66.8%) who agreed with this observation. Overcrowded dormitories can increase the risk of theft and other security-related issues, mainly if

inadequate supervision or security measures are in place. The findings highlight the need for institutions to ensure that their accommodation facilities can accommodate the growing number of students without compromising their safety and security. Therefore, institutions must invest in security cameras, alarms, and personnel to prevent theft and other security-related issues in overcrowded dormitories. Similar studies have been carried out, which concur with the findings above. For instance, a study by Grigg et al. (2018) on the safety and security of student accommodation found that overcrowded dormitories were more likely to experience theft and other security-related issues. The study recommended that institutions must invest in measures such as security cameras, locks, and security personnel to prevent such incidents. This finding is also consistent with Khajehzadeh and Vale (2016) that found that theft is more prevalent in crowded dormitories in Norwegian boarding schools.

The finding that (71.3%) of the respondents in the study agreed that the dormitories are frequently untidy is consistent with the challenges faced by migrant children in China. The study by Chen and Feng (2013) provides insights into the challenges of accommodating a growing number of students, particularly those from disadvantaged backgrounds. Therefore, institutions must prioritize investing in upgrading their accommodation facilities to promote students' well-being and academic success. Previous studies corroborate the anecdotal evidence that some students share beds due to a housing shortage. Many students had to share beds or put mattresses on the floor. This was due to excessive dorm congestion in public learning institutions in Australia (Herath & Bentley, 2018).

Due to increased enrolment, there are increased respiratory infections among students in the dormitories, supported by (36.9%) of the students. Overcrowding and poor hygiene

practices in the dormitories may contribute to the spreading of infections. Overcrowding can increase the risk of respiratory infections because it makes it easier for infections to spread from one person to another. Additionally, poor hygiene practices, such as inadequate ventilation, can accumulate airborne pathogens, increasing the risk of respiratory infections. This concurs with Ali et al. (2018) found that overcrowded living conditions in university dormitories contributed to the spread of respiratory infections among students. Another study by Kim et al. (2018) found that dormitory overcrowding was associated with an increased risk of respiratory infections among university students. These findings support the need for institutions to prioritize investment in adequate accommodation facilities to promote students' health and well-being.

The findings from the table further show that there is usually much noise in the dormitories, whereby (75.2%) of the respondents agree with this statement. Noise levels in dormitories can also affect students' mental and emotional well-being. Living in a noisy environment can cause stress, anxiety, and depression. These negative emotions can affect academic performance and overall quality of life. This is likely because more students mean more activities, increasing noise. This concurs with Erickson & Newman (2017) that the number of students in a dormitory significantly affected noise levels. The study found that noise levels also increased as the number of students in a dormitory increased. The study suggested that this was because more students meant activities that are more social and more people coming and going, leading to an increase in noise levels.

Most respondents (69.9%) agreed that more than bathrooms in the dormitories is needed. A study conducted by the United Nations Children's Fund (UNICEF) in 2015 concurs that inadequate bathroom facilities are a significant problem in public boarding schools

in developing countries. Furthermore, the study reported they had to queue long to access the bathrooms.

The finding that a significant majority of the respondents (70.2%) agreed that there need to be more toilets in dormitories reflects the challenges public boarding schools face in providing adequate accommodation services to their students. The findings resonate with Jasper and Bartram (2012) found that more toilets in dormitories in Kenyan public boarding schools were needed. The study identified that many schools had inadequate toilet facilities, leading to a high risk of sanitation-related diseases. Appiah-Effah (2019), by researchers at the University of Ghana, found that providing adequate toilet facilities was a significant challenge in public boarding schools in Ghana, particularly in rural areas.

The finding that a significant majority of respondents (63.6%) agrees and strongly agrees that there is an inadequate water supply in the dormitories is a matter of concern. Inadequate water supply can lead to poor hygiene and sanitation practices, increasing students' risk of infectious diseases. These findings align with Were (2014) finding that inadequate water supply was a significant challenge in public boarding schools in Kenya. The study identified that many schools had inadequate water supply, leading to poor hygiene and sanitation practices and an increased risk of infectious diseases among students. Another study conducted by Peprah et al. (2015) found that inadequate water supply was a significant challenge in public boarding schools in Ghana, particularly in rural areas.

Increased student enrolment denies students privacy in the dormitories (45.1%) of the students agreed. This finding suggests that the lack of adequate space and overcrowding in dormitories due to increased student enrolment compromises students' privacy. This

finding is consistent with a study by Nemes and Mzimya (2015), who reported that the overcrowding of dormitories in public boarding schools in Tanzania was a significant challenge that compromised students' privacy. The study found that the lack of adequate space in dormitories due to increased student enrolment resulted in students sleeping in cramped conditions, compromising their privacy and dignity. The study supports the finding that increased student enrolment denies students privacy in dormitories, suggesting that this is a significant challenge facing public boarding schools in many countries. As the number of students enrolling in boarding schools continues to increase, there is a need to ensure that adequate accommodation services are provided to meet the growing demand.

4.6.1 Qualitative Data on Accommodation Services as Provided by Boarding Masters/Mistress; Matron/Patron

According to an analysis of the information collected from the boarding masters and mistresses, (37.5%) of them agreed that they have an acceptable number of dorms. The remaining respondents, (62.5%) reported that increased student enrolment had caused dormitory overpopulation. Congestion and decreased space were evident symptoms of this situation. This implies that most participants saw a negative impact of growing enrolment on dormitory facilities, emphasizing the need to solve congestion. A school O respondent mentioned, "*The dormitories are very congested as compared to the previous years.*" Kiruru and Ogola (2020) observed similar findings, that nearly all accommodation providers felt expansion was necessary due to population growth. This includes furniture like mattresses, desks, chairs, bookcases, as well as amenities like bathrooms and running water. This is also in line with the qualitative data where (65.9%) of the respondents agreed and strongly agreed that the increase in enrolment led to crowding in the dormitories.

A substantial majority of the participants, accounting for (69.2%) of the respondents, expressed that the increased student enrollment had a direct impact on the availability of bed spaces within the dormitories. Those that were unaffected ascribed their good fortune to triple or double decker beds and some students who were day scholars (31.8%). A single participant from school Q provided the following input; “*There is not enough room for beds in the dorms.*” These findings align with the conclusions drawn by Isiteketo and Nakamba (2019), which discovered that a majority of students expressed dissatisfaction with insufficient sleeping space, along with other issues such as overcrowding and a lack of essential facilities. The dramatic growth in student enrolment in schools is directly responsible for these problems. This supports the notion that the problems identified in the present study were not isolated incidents, but rather a recurring theme observed across different research investigations. The quantitative data further corroborates this finding, indicating that a majority of respondents (59.3%) concurred with the notion that the surge in student enrollment directly resulted in a reduction of bed spaces within the dormitories. This statistical evidence strengthens the argument that the increase in student numbers has indeed led to limited bed spaces, aligning with the qualitative feedback provided by participants.

Respondents who agreed (15.4%) expressed dissatisfaction with the availability of sufficient beds in the dormitories, indicating a shortage. This finding suggests that a small percentage of participants perceived a lack of adequate sleeping arrangements within the dormitory facilities. However, this collaborate Jennifer (2011); increase in student enrollment is identified as one of several factors contributing to the inadequate availability of accommodation resources, specifically citing a shortage of beds in the sleeping areas. In contrast, an individual from school R provided input, stating, “*We did not have enough beds.*” This is in agreement with Chiguvi and Ndoma (2018), who

reported that a rise in student enrolment is one of the significant reasons for housing shortages in educational institutions with constant competition for beds and bed spaces in the sleeping areas. The quantitative data further supports this assertion, with a small percentage (8.2%) indicating the need for an increase in the number of beds within the dormitories to accommodate all students. This data strengthens the argument that there is a recognized necessity for additional beds to meet the accommodation needs of the student population.

Concerning the incidences of stealing in the dormitories, (58.3 %) agreed that reported cases have increased. These finding aligns with the conclusions drawn by Isiteketo and Nakamba (2019), who observed that a rise in security concerns in schools with the increased number of students. According to the study, weekly boarders encountered issues such as theft, immorality, poor housing, and absenteeism from class. Their academic performance was affected because of these issues. The findings also revealed that students no longer felt safe in school. A respondent from school O mentioned, *“Theft cases have increased.”* The quantitative data (66.8%) of the students also agree that with increased student enrolment, there have been rampant cases of stealing in the dormitories.

A majority (61.5%) of the respondents reported that increased enrolment affected the level of cleanliness/tidiness in the dormitories. A respondent from school P mentioned that; *“Without constant vigilance, cleanliness of the dormitories deteriorates.”* This concurs with Waweru (2011) cited that enrollment increased in public primary schools due to the introduction of free primary education, resulting in crowded and untidy compounds in the schools. The quantitative data further substantiate these findings, with a significant majority (71.3%) of the participants acknowledging the presence of untidy dormitories as a direct result of increased student enrollment. This statistical evidence

reinforces the notion that the rise in enrollment has contributed to the lack of cleanliness and tidiness within the dormitory premises.

Two-thirds (66.7%) responded that increased enrolment affected the availability of toilets in the school. While (33%) disagreed and reported having enough toilets in the school despite the enrollment increase. A respondent from school T mentioned, *“It has affected the availability of toilets, but some pit latrines are being dug out to accommodate this large enrolment.”* Another respondent from school O stated, *“They are inadequate since the rate of their exhaustion has increased.”* This concurs with the findings of Egbinola and Amanambu (2015) in secondary schools in Ibadan, Nigeria; the study uncovered a considerable variation in the number of toilets available across the schools, ranging from zero to 14. This discrepancy resulted in a student-to-toilet ratio of 185:1 within the study area. Furthermore, the ratio varied significantly between different schools, with values ranging from 83:1 to 510:1. These findings highlight the notable disparity in toilet facilities and student access to sanitation infrastructure within the study region. The quantitative data collected from the students corroborate this observation, with a significant majority (70.2%) concurring that the availability of toilets is insufficient due to the impact of increased enrollment. This statistical evidence strengthens the argument that the rise in student numbers has led to a shortage of adequate toilet facilities, emphasizing the need for additional infrastructure to address this issue.

Less than half (46.2%) respondents disagreed that increased enrolment affected the frequency of respiratory infections among students. However, those who agreed (53.8%) attributed the increase in cases of respiratory infections to congestion. A Respondent from school Q stated, *“With increased enrolment, ventilation has been improved to curb this respiratory disease.”* A school P respondent stated, *“Common cold has become too*

rampant.” This is contrary to Lubis et al. (2018), who noted that students in Indonesian schools need more room space and overcrowded rooms due to increased enrolment making it challenging to rest well and raising cases of respiratory infection among students. However, (36.9%) of the student respondents in the quantitative data supports that respiratory infections were due to increased student enrolment.

Similarly, a majority (58.3%) agreed that the influx of more students had a direct impact on noise pollution within the sleeping premises. Those who disagreed (41.7%) attributed that position to strict school rules, effective prefects, and girls who tend to be less noisy. A respondent from school U mentioned, *“So much noise from the dormitories, especially at night.”* This resonates with the findings of Saggars (2015), which indicated that enormous number of registered students in Australian high schools, the presence of excessive classroom loudness, teachers raising their voices, and congested school environments can greatly increase students’ stress levels and provide problems for their coping strategies. These conditions might make it harder for kids to deal with stress and adjust to new situations at school. According to the quantitative data, a significant majority of participants (65.2%) concurred that the increase in student enrollment directly contributed to a surge in noise pollution.

Respondents indicated (70%) that the bathrooms needed more to accommodate all the students. In comparison, (30%) stated enough bathrooms in the dormitories. Some of the respondents from the various schools mentioned that; *“The number of bathrooms available is overwhelmed by the number, but the administration of the school has made more room for construction of more bathrooms with the increased number. Bathrooms are inadequate, but shift operations have been put in place. Too much pressure has been executed on the availability.”* This resonates with the findings of Jagero (2011), who reported the primary challenges encountered by students residing in boarding residence

include inadequate boarding facilities. These facilities include bathrooms, water, and toilets. The quantitative data from this study (69.9%) further indicates that due to the increased enrollment, more bathrooms must be needed to accommodate all the students adequately.

Similarly, most (58.3%) respondents believed increased enrolment affected the school water supply. They attributed this to the construction of additional facilities. Here are the sentiments of respondents from schools T, V, and U, respectively *“Too much pressure has been executed on the available facilities”*. *“Water supply is inadequate.”* This is in agreement with Jagero et al. (2010), who assert that inadequate water or regular water supply is one of the significant. The study examined the impact of environmental factors on academic performance among both male and female students in boarding secondary schools, with the aim of fostering educational excellence. This is also in line with the quantitative data where (72.5%) of the respondents supported, that insufficient water supply was due to increased student enrolment in the school.

A significant proportion (50.0%) of the participants acknowledged that the increased enrollment had a negative impact on the students' privacy within the dormitories. This finding implies that the rise in student numbers has compromised the level of privacy experienced by students in these shared living spaces. In contrast, the rest of the respondents held a contrary opinion. A respondent from school S mentioned, *“Students' privacy is limited because of congestion in the dormitories, and students sleep in open rooms.”* Furthermore, a study conducted by Kimwaga et al. (2014) found that girls in boarding schools encounter several challenges, including a lack of privacy in toilets, insufficient access to sanitary pads, and inadequate sleeping areas to attend to emergency needs. These qualitative observations align with the quantitative data from this study,

which also supports the concept that increased student enrollment negatively affects students' privacy, as indicated by (45.1%) of the respondents.

Ngala (2018) found that the condition of students' facilities significantly influences their academic performance and achievements. It is crucial to improve these facilities without burdening students with excessive fees. When deciding on a facility, students primarily consider the following criteria: safety, facilities, power and water availability, room diameter, number of inhabitants, ventilation, freedom, privacy, and closeness to lecture rooms, hostel administration, and drainage system. Privacy was also shown to be a crucial component in the study. Additionally, the report highlighted the need for better hostels in public tertiary colleges in Nakuru. Providing students with an ideal environment, including improved accommodation, fosters learning, enhances well-being, and improves living conditions.

4.6.2 Relationship between Increased Enrolment and Delivery of Accommodation services

The relationship between enrolment and accommodation services delivery was determined using the PPMCC. It involved correlating the number of enrolled students with the delivery of accommodation services overall mean. The results of the procedure are in Table 19.

Table 19

Correlation Analysis

Scale	Accommodation means scores	
Enrolment	Pearson Correlation	-.255
	p-value	.000
	N	294

The results indicates that relationship between student enrolment and delivery of accommodation services was negative and statistically significant at .05 confidence level, $r(294) = -.255, p = .000$.

The Pearson correlation coefficient was calculated to be -0.255. A correlation coefficient of -0.255 indicates a negative correlation between student enrollment and delivery of accommodation services. As student enrollment increases, the delivery of accommodation services tends to decrease, or vice versa. The results, therefore, show that as student enrolment increases in public secondary schools in Kisumu West Sub-County, Kenya, the delivery of accommodation services deteriorates. Aluko (2011) assessed the demand and supply of student accommodation in Nigerian universities and determined the relationship between student enrolment and accommodation supply. The results of the study showed that there was a high demand for student accommodation. The researchers attributed the deficit in accommodation to the increasing student enrolment, inadequate funding for hostel construction, and poor maintenance culture.

4.6.3 Hypothesis One Testing

The following criteria was used as the study's baseline for Hypothesis Testing: The null hypothesis would be rejected if the p-value were less than 5%, whereas the alternative hypothesis would be accepted. i.e.

Reject $H_0: \beta x = 0$; if $p < 0.05$,

Otherwise, accept the $H_0: \beta x = 0$

H₀₁ There is no statistically significant relationship between increased student enrollment and delivery of accommodation services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

To determine if this correlation is statistically significant, a p-value was calculated. The p-value of 0.000 indicates that the probability of obtaining a correlation coefficient of -0.255 or more extreme by chance alone is extremely low. Thus, strong evidence suggests that the observed correlation is not due to random chance. Since the obtained p-value is less than 0.05, we reject the null hypothesis. Therefore, we conclude that there is a statistically significant negative relationship between student enrollment and the delivery of accommodation services in public boarding secondary schools in Kisumu West Sub-County, Kenya. This finding corroborates with Asamba (2022), which established that classrooms, science laboratories, and playing fields needed to be improved due to the 100 percent transition policies in secondary schools. In addition, the researcher established that teaching and learning resources need to be improved to promote institutional success, and many students in the school are motivated to learn with the adequacy of learning materials.

According to Njenga (2019), the increase of students in secondary school due to the 100% transition policy has affected the availability of school facilities such as sanitation, teaching and learning space, sports facilities, and equipment. The study researcher indicated that increased student enrolment influences the increase in school facilities.

4.7 Students' Descriptive Statistics on Catering Services

Quantitative data on the delivery of catering services were provided by the students. It was gathered using a set of 9 closed-ended items. The items were based on the extent to which the respondents agreed with them (SD=4, D=3, A= 2, SA=1). The descriptive statistics was computed to analyze the relationship between increased student enrolment and delivery catering services. Table 20 presents the findings in percentages.

Table 20*Students' Responses to Items on Delivery of Catering Services*

Item	N	SA (%)	A (%)	D (%)	SD (%)
As a result of increased enrolment, sometimes we eat half-cooked meals.	294	33.2	30.7	15.3	20.7
As a result of increased enrolment, the school sometimes provides poor quality food.	294	31.8	37.0	14.7	16.5
Due to increased enrolment, we are sometimes served little food.	294	45.5	27.1	16.3	11.1
Due to increased enrolment, we spend a lot of time queuing to be served food.	294	37.8	22.0	13.4	26.8
As a result of increased enrolment, we often don't eat a balanced diet.	294	43.3	18.4	19.1	19.2
Due to increased enrolment, there is overcrowding in the dining halls.	294	57.2	21.4	9.3	12.1
Due to increased enrolment, there are fewer cooks in the school.	294	24.4	20.6	32.0	23.0
As a result of increased enrolment, there is competition for food among students.	294	43.8	28.1	13.0	15.1
Due to increased enrolment, sometimes students eat stale food.	294	19.8	15.7	29.7	34.8

According to Table 20, the data shows that (63.9%) of the students acknowledged consuming undercooked meals is linked to the rise in student enrollment. This concurs with Roqib (2021), who reported shortage of cooking staff caused by increased enrollment led to rushed meal preparation and undercooked meals. Moreover, half-cooked meals can pose a health risk to students, as they may lead to foodborne illnesses

such as salmonella and E. coli. In addition, undercooked meals may lack essential nutrients, potentially leading to malnutrition and its associated health consequences.

The data suggests that a significant proportion of respondents (68.8%) feel that the school sometimes provides poor-quality food. Poor quality food can have several negative consequences for students. Firstly, it may lack essential nutrients, leading to malnutrition and health problems. Secondly, it may harm students' academic performance and overall well-being, as poor-quality food can reduce concentration and energy levels. This resonates with Mathew (2020), who avers that when the cost of food items and the student population keeps rising, it resorts to purchasing low-food items. Mathew concurs with Mensah and Appietu (2019), who revealed that the respondents needed more knowledge regarding proper storage and food thawing. The absence of fly-proof doors and windows also encouraged the entry of flies and dust into food preparation areas. This reduces the amount meal that is offered to schoolchildren. The findings of the study led to the suggestion that food be preserved in a place far from contamination (Rubbish, wastewater, dust, flies, and domestic animals) and kept clean always.

Additionally, (72.6%) of those surveyed agreed they are sometimes served inadequate food. This concurs with Matthew (2020) on inadequate food delivery in schools. The scholar avers that the high expense of food has an impact on the governance of boarding schools. When both the price of the food items and the student population rises, it becomes difficult for management to acquire the appropriate quantity.

Almost three-quarters (72.6%) of respondents agreed they waited too long for lunch. According to Otieno and Ochieng (2020), the authors concur that, with the introduction of a 100% transition policy, schools have increased in population, forcing the

administration to adjust the timetable to ensure organized movements during meals to save time when serving meals. This helps in the long queuing when serving food.

One large proportion of those who participated in the survey, (61.7%) acknowledged that they do not consume a balanced diet. This finding coincides with the results of Nicholaus et al. (2020) that looked into what kind of food Tanzanian high school pupils ate. According to the results, these pupils' meals mostly composed of legumes and cereals, with limited consumption of animal protein, fruits, and vegetables.

Vast majority of participants (78.4%) indicated that there is overcrowding in the dining halls. This finding aligns with the observations made by Otieno and Ochieng (2020) in their study on the dining hall situation in schools. The author reported overcrowding during meal times in the dining halls, with some schools resorting to holding meals in open areas or under trees due to limited space caused by using the dining hall for other purposes, such as learning.

Fewer cooks in the school (45.0%) of the respondents agreed to this, which means that when the number of students increases, the number of cooks should also increase to prepare enough food on time for the whole population. This collaborates with Maki et al. (2015). In order for boarding students to be able to study effectively during prep time, schools should provide suitable facilities for them. In addition to having an inadequate meal for supper, the students needed a balanced diet and adequate cooks to prepare meals on time, which caused them to feel hungry. Those students were likely to have their attention distracted. The issue of overcrowding in dining halls can have several adverse effects, including compromising the quality of meals, creating an unsanitary environment, and making them more susceptible to sickness.

The data from the table indicates that a significant percentage of students (71.9%) agreed to experience competition for food. Students often have to line up to be served food, leading to long waiting times and food shortages. In some cases, students serve themselves more than twice in one meal, indicating that more than the food provided by the school may be needed to meet their dietary needs. A study by Beam (2020) found that public schools have higher prevalence of food insecurity and hunger among students. In addition, the study discovered that adolescents who are food insecure are more likely to report having to compete with their peers for food.

The polling indicated (35.5%) of participants agreed to eat stale food. In addition, students' food is only sometimes fresh, especially fruits and vegetables. Studies have revealed that students' consumption of stale and expired food is a widespread issue in schools. For instance, a study conducted by Finkelstein et al. (2008) found that 60% of middle and high school students purchased food from vending machines, and more than 80% of those students reported that the vending machines did not offer fresh fruits and vegetables. In a report by Owino (2023), it was stated that Members of Parliament in Kenya responded to the deaths of three students and a teacher at Sacred Heart Mukumu Girls High School by calling for urgent action. The incident, believed to have been caused by food poisoning, highlighted schools' absence of health inspections and medical staff. Consequently, the MPs demanded the establishment of clinics with nurses in all public schools and regular food inspections. They also emphasized the importance of training and health checks for food handlers. Furthermore, the issue of overcrowding and compromised sanitation standards in schools was raised, resulting in a request for a comprehensive report on disease outbreaks. Immediate measures to improve student welfare and safety were demanded.

4.7.1 Qualitative Data on Catering Service Provided by Cateresses/Caterers

A majority (80.0%) agreed that increased enrolment affected the preparation of meals for students, while the rest (20.0%) disagreed. The sectors affected over the years due to increased enrolment are increased workload, cooking mode, and preparation delays. School O's respondents stated, "*Food takes longer to be prepared.*" According to Powell et al. (2021), a study explored the impact of rising enrolment on the effectiveness of food preparation in higher education institutions. The researchers examined, via interviews and observations, how the increase in student enrollment has affected the kitchen staff's workload, the kind of cooking done, and the frequency of preparation delays. The research shows a strong link between rising enrolment and workload, shifting cooking styles, and late supper preparation. These findings demonstrate the necessity for preventative actions to address the difficulties of accommodating rising student numbers. The quantitative data (63.9%) of the respondents agreed that increased student enrolment has contributed to consuming half-cooked food. This supports the findings from the qualitative data.

Half (50.0%) of respondents agreed that food quality has reduced due to increased student enrolment, while the rest (50.0%) disagreed. This is included reducing the taste and delicacies like eggs and meat, among others. A respondent from school P mentioned, "*The quality has been reduced since the cooks have to prepare food for so many students.*" This concurs with Roothaert (2021), who found that large-scale meal production in schools often results in lower food quality due to limited resources and time constraints. The quantitative data collaborates with the findings (68.8%) of the students agreed and acknowledged eating poor quality food due to the rise in enrolment.

Two-thirds (66.7%) of the respondents reported a drop in the quantity of food, while (33.3%) disagreed that there was no drop in the quantity. This was in the form of a reduced ratio of food to students. Respondents from schools O and S mentioned that “*The ratio of meals has reduced to fit the large crowd of students. The quantity has slightly reduced.*” This view is collaborated by Mathew (2020), who maintains that the high expense of food and the high number of student enrolment has influenced the management of boarding schools in Nigeria. He notes that when both the price of food items and the student population rise, it becomes difficult for management to acquire appropriate foodstuff; they now resort to purchasing low-priced food items. The study further revealed that students riot due to the quantity of food during meals and inadequate food in schools. The students’ responses in the quantitative data (72.5%) asserted that food was insufficient.

A majority (66.7%) of the respondents agreed that increased enrolment affected the time set aside for meals, while (33.3%) disagreed. Various strategies were implemented to manage this issue, such as increasing the number of cooks and serving students on time. Respondents from schools O and P stated, “*Food is not served on time. There is usually a delay in the serving of food; hence the students are now eating in a shift. Serving takes time sometimes and overlaps into other events.*” This resonates with Otieno and Ochieng (2020), who found that many educational institutions had repurposed former dining halls, staff rooms, clinics, labs, shops, libraries, and abandoned buildings into classes and living quarters in order to house their large student bodies. Quantitative data from the students reinforce that much time is spent serving food during meals (72.6%) agreed.

All (100.0%) of the respondents agreed that increased enrolment affected providing a balanced diet to students. A respondent from school P mentioned: “*Students are not provided with a balanced diet in their everyday meals.*” According to Chan (2009), the

study results indicated that educators do not stress the importance of maintaining a healthy diet at school. Therefore, the primary responsibility for ensuring and encouraging the children to eat a healthy balanced diet rests with the parents. Terry-McElrath et al. (2015) found that the availability of healthy food options decreases as student enrollment increases. The study revealed that schools with higher enrollment were less likely to offer fruits and vegetables and more likely to offer unhealthy snacks and beverages. Quantitative data substantiated that (61.75) respondents agreed to not consuming a balanced diet in school.

A majority (80.0%) agreed that increased student enrolment affected crowding in the dining halls. However, (20%) of the respondents disagreed. Over the years, expansions have yet to be done to accommodate the additional student. Some respondents from schools T and U mentioned, respectively, *“Dining halls no longer exist, so the students serve outside. There is crowding in the dining hall.”* This concurs with the findings of Otieno and Ochieng (2020) that a 100 percent transition policy substantially impacted public secondary schools in Machakos County. This led to constraints on physical infrastructure such as dining halls. The study revealed that overcrowding makes students eat outside or under trees. A report by Ho & Madden-Hallett (2020) found that overcrowding in college dining halls may result in lower student satisfaction because they may have to wait longer for meals, struggle to locate a seat or feel rushed owing to time constraints.

Most schools do the table serving system. Respondents from schools O and Q stated, *“Students’ take their meal in the open air; the space in the dining hall is not enough to accommodate all of them. Students sit outside during meals.”* A study by Otieno and Ochieng (2020) stated that several schools had rearranged their schedules to

facilitate more orderly student movement during lunch by adopting a shift schedule. Some students said the dining hall was being used for educational purposes, so they ate outside, maybe beneath a tree. A prevalent number of the students in the quantitative data agreed (78.4) to overcrowding in the dining halls during meals.

Half (50.0%) of the respondents agreed that the number of cooks in their schools was insufficient due to increased student enrolment, while the other half disagreed. These are the statements from the caterers of schools O and V “*The cooks in schools are not enough to cater for the cooking services for all the meals during the day. Cooks are few hence having much workload.*” This collaborates with Shi et al. (2021) that inadequate cooks cause students to wait longer for meals, leading to malnutrition and health problems. In addition, this delay means that the students miss out on recess, which can impact their overall well-being. The findings are also collaborated by (45.0%) of the students who ratified that, the cooks in the schools were not enough.

Two-thirds (66.7%) of the respondents agreed that increased enrolment led to food competition among students during meals. This was evidenced by scrambling for food. The third who disagreed attributed that to proper arrangements of serving food with the assistance of teachers. Respondents from schools S and O stated, “*Competition has surged, and students are more unruly. Due to long queues, learners struggle to reach earlier than others.*” Galmiche et al. (2019) aver that adolescents frequently engage in disordered eating practices and have studied it. However, the prevalence of such disorders is growing. In this age group, students often fight over limited resources, including food. The quantitative data also agrees with these findings, where a majority (71.9%) of the respondents experienced competition for food amongst themselves.

Half (50.0%) of the respondents reported that increased enrolment affected the provision of fresh food to students, while the other half did not. Respondents from schools T and V stated, “*It is now difficult to provide fresh fruits and vegetables. Fresh food provision has reduced due to the high cost of the quantity being purchased by the school.*” This contradicts Ochieng (2023), who noted that most schools cultivated food crops on their school farms, providing fresh foods and vegetables. However, none of them reared animals of any sort on the farms. These findings are backed by the quantitative data where (35.5%) of the respondents identify that the school sometimes provides them with stale food.

4.7.2 Relationship between Enrolment and Delivery of Catering Services (Analysis)

The relationship between enrolment and delivery of catering services was determined using the Pearson Product-Moment Correlation Coefficient. It involved correlating the number of enrolled students with the delivery of catering services overall mean. The results of the procedure are in Table 21.

Table 21

Correlation Analysis

Scale	Catering services mean scores	
Enrolment	Pearson Correlation	-.205
	Sig. (2-tailed)	.000
	N	294

The relationship between student enrolment and delivery of catering services was negative and statistically significant at .05 confidence level, $r(294) = -0.205$, $p = .000$.

The overall mean was calculated to be -0.205. This negative value indicates a negative correlation between the two variables. Based on the correlation analysis and the observed

negative correlation between student enrollment and the delivery of catering services in public boarding secondary schools in Kisumu West Sub- County, Kenya, Otieno and Ochieng (2020) noted that several schools had redesigned their curriculum by changing the school schedule to enable organized activity during meals. Due to many pupils, some schools reported eating their meals outside, under trees, because the dining hall was used for studying.

4.7.3 Hypothesis Two Testing

H₀₂ There is no statistically significant relationship between increased student enrolment and delivery of catering services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

The null hypothesis assumes that there is no correlation between these two variables. The obtained correlation coefficient is -0.205, indicating a negative correlation between these two variables. Since the obtained p-value is less than 0.05, we reject the null hypothesis. Therefore, we conclude that there is a statistically significant negative relationship between student enrollment and the delivery of catering services. The high student enrollment has a detrimental effect on the provision of catering services. This implies that as the number of students' increases, the delivery of catering services tend to decrease in these schools.

In light of these findings, measures should be taken to enhance the delivery of catering services in response to the rising student population. This may involve increasing the resources allocated to catering, improving the kitchen sector, hiring additional staff, implementing meal that is more efficient planning and facilities among others. By addressing these issues, the boarding schools in Kisumu West Sub- County can better

accommodate the growing number of students and ensure that their catering needs are adequately met.

A study by Ohri-Vachaspati (2012) in the United States examined the relationship between school size (an indicator of enrolment) and the availability of healthy food options in school cafeterias. The study found that the availability of healthy food options decreased as school size increased. Specifically, the study found that larger schools were less likely to offer fresh fruit, whole-grain products, and vegetarian options and were more likely to offer fried foods, high-fat meats, and sugary drinks. These findings suggest a negative relationship between school size (enrolment) and the availability of healthy food options in school cafeterias, which may be related to the delivery of catering services. As enrolment increases, it may become more difficult for schools to provide healthy and nutritious meals to all students due to resource constraints, such as limited kitchen space, staff, and funding.

4.8 Students' Descriptive Statistics on Health services

The students provided quantitative data on the delivery of Health services. It was gathered using a set of closed-ended items. The items were based on the extent to which the respondents agreed with them (SD=1, D=2, A= 3, SA=4). The descriptive statistics of health services was calculated from the students' response. Table 23 shows findings in percentage.

Table 22*Students' Responses to Items on Delivery of Health Services*

Item	N	SA (%)	A (%)	D (%)	SD (%)
Due to increased student enrolment, the toilets are usually dirty	294	44.6	23.8	17.7	13.9
Due to increased enrolment, hand-washing points in the school are not enough.	294	38.1	29.6	18.7	13.6
As a result of increased student enrolment, there are inadequate toilet facilities in the school compound.	294	41.1	23.6	18.8	16.5
As a result of increased student enrolment, there is an inadequate supply of clean water in the school compound.	294	23.6	25.0	26.7	24.7
Due to increased student enrolment, there are more cases of infectious diseases.	294	19.7	23.5	30.6	26.2
As a result of increased student enrolment, there are cases of inadequate medicine in the school.	294	25.6	23.5	29.0	21.9
As a result of increased student enrolment, nurses in schools are not enough.	294	44.9	25.2	14.3	15.6
Due to increased student enrolment, there are delays in attending to sick students.	294	44.4	23.4	17.5	14.7

From Table 22, the majority (68.4%) of the students agreed and strongly agreed that the toilets are usually dirty, while (31.6%) disagreed. These findings agree with Abanyie (2021) that examined the relationship between school sanitation facilities and student absenteeism in Ghana. The authors found that inadequate sanitation facilities, including dirty and poorly maintained toilets, significantly contributed to student absenteeism.

More than hand-washing points in the school are needed due to increased enrolment, and (67.7%) of the respondents agreed to this, while (32.3%) disagreed. Wada and Oloruntoba (2021) concur with the findings. The authors found that the availability of hand hygiene facilities in schools needed to be improved in many countries, including low-income countries with high enrollment rates. The study emphasized the need to improve hand hygiene infrastructure in schools to reduce the risk of infectious diseases.

From the data in Table 22, (64.7%) of the respondents agreed that the school compound has inadequate toilet facilities as per Ministry of Education (MOE) guidelines. Reeves et al. (2012) found that the availability of hand hygiene facilities in schools needed improvement in many countries, including low-income countries with high enrollment rates. The study emphasized the need to improve hand hygiene infrastructure in schools to reduce the risk of infectious diseases.

There is an inadequate supply of clean water in the school compound due to the increase in enrolment (48.6%) of the respondents agreed with this statement. While (51.4%) disagreed with this statement. The inadequate clean water supply is a significant problem in many schools, especially in developing countries. A study by the United Nations Children's Fund (UNICEF) in 2019 found that over one-third of schools worldwide lack access to safe drinking water and adequate sanitation facilities. The study also revealed that up to 60% of schools still need basic hand-washing facilities in some countries.

More infectious diseases are due to increased student enrolment (43.2%) of the respondents agreed; according to a World Health Organization (WHO) report published in 2019, overcrowding in classrooms increases the spread of infectious diseases, such as respiratory illnesses like the flu and tuberculosis. The study also discovered that under

nutrition is more prevalent among kids in overcrowded classrooms, which might weaken their immune systems and make them more vulnerable to infectious infections.

According to the data, (49.1%) of the respondents agreed that there are cases of inadequate medicine in the school due to increased enrolment. McMaughan et al. (2020) concur that economics indicates that enrollment increases the need for medicine in schools. The study also discovered a greater likelihood of a drug shortage in schools in regions with a higher disease burden and lower socioeconomic level. Additionally, the Sustainable Development Goals (SDGs) for health and education were not being met due to a lack of good medicine, according to a UNICEF report published in 2018. The report suggested that to ensure the health and well-being of children and staff, schools should prioritize the distribution of necessary medications. Particularly in regions with a high disease burden and a lower socioeconomic status, schools must make sure they have enough medical resources to fulfill demand. The health and wellness of students and staff can be considerably improved by providing access to necessary medications, which will also help accomplish the SDGs for health and education.

Nurses in schools are not enough due to increased enrolment (70.1%) agreed. This collaborates with Best et al. (2021), who discovered a significant connection between the nurse-to-student ratio and school health outcomes. According to the study, academic achievement was higher in schools with higher nurse-to-student ratios, fewer emergency department visits, and absenteeism rates. In addition, Schroeder et al. (2018) concur that there is a global deficit of school nurses in several nations. The report stressed the necessity of addressing the school nurse shortage and the significance of school nurses in boosting students' health and wellness. To address the healthcare needs of students and staff, schools must make sure they have a sufficient number of nurses on staff. Access to

high-quality healthcare services can help students' health and well-being significantly and can boost their academic progress.

Due to increased student enrolment, there are delays in attending to sick students, (67.8%) of the respondents agreed to this. Ugalde et al. (2018) concur that school nurses frequently feel overburdened by the number of pupils they must look for. According to the study, school nurses in the US frequently have higher caseloads than the advised ratios, which can cause delays in providing sick pupils with care. In addition, Murphey & Sacks (2019) discovered that neglecting unwell pupils could have various detrimental health effects. According to the study, students who had to wait longer to see a school nurse were more likely to have their symptoms worsen, miss more school days, and do worse academically. This also concurs with Wada and Oloruntoba (2021), who observed that there needed to be more hand-washing facilities and adequate water and soap for students to wash their hands after visiting the restrooms. It further established that a few schools needed a first-aid kit, and only a few schools had sickbays or dedicated rooms for sick students.

Sugut (2020) points out that in Nandi North sub-county, Kenya, schools have an insufficient, usually dirty, limited number of hand-washing points; most students indicated inadequate toilet facilities. Most students agree that there are increased infectious diseases, increased cases of inadequate medicine and medical providers in schools and medical supplies, and the need to be adequately staffed with trained healthcare providers. The study further revealed that most schools lacked clean water.

4.8.1 Qualitative Data provided by Nurses/Healthcare Providers

A majority (60%) of the respondents agreed that increased enrolment affected the hygiene levels in the school, while the rest (40.0%) disagreed. This was attributed to

congestion, waste, and reduced personal hygiene. The hygiene levels are lowered due to increased enrolment, leading to an influx of students and a subsequent increase in waste. A school V respondent stated, *“The hygiene level is lowered. Since managing many students has been difficult, the hygiene level in schools has decreased.”* This resonates with Mwirigi and Muthaa (2015) that rising enrollment rates in primary schools correlated to deteriorating proper sanitation. As enrolment increases, monitoring who is responsible for cleaning the restrooms and how often they are being cleaned has become more challenging. These findings collaborate with the quantitative data, (68.4%) agreed that the toilets in the schools are usually dirty because of increased enrolment in those schools.

Regarding the number of washing points due to increased enrolment (80.0%), the respondents agreed that it affected them, as they frequently broke down, causing crowding and wastage. Other respondents (20%) disagreed. A respondent from school U stated that they have a limited number of washing points due to the increased enrolment. A respondent from the same school mentioned, *“We have a limited number of washing points.”* This resonates with Campbell et al. (2021), aver that in 2019, fifteen percent of schools worldwide either used an unimproved water source or lacked access to water altogether. More than half of the 18 countries, with over 33 percent of schools lacking safe drinking water, were in sub-Saharan Africa. These findings are backed by the quantitative data where (67.7%) of the students acknowledged the existence of very few hand washing points in schools.

Most respondents (80%) agreed that more toilets facilities are needed in schools due to high enrolment. All additional facilities had yet to be constructed, even with increased student school admission. A respondent from School U stated that there were sufficient sanitation facilities for boys but not for girls. A respondent mentioned, *“The school*

needs more toilets to accommodate the girls.” This concurs with Didier (2011) on health education, stating policies should be put in place that will ensure high teaching and learning, good condition of service for the education sector, such as washrooms, dormitories, and classrooms will go a long way to improve not only the quantity but also the of education. These findings are also bolstered by the quantitative data on the students’ responses (64.7%), indicating they had very few toilets.

A majority (40.0%) of the respondents agreed that increased enrolment affected the provision of clean water as they had additional storage facilities. Those with a contrary view (60.0%) disagreed. A respondent from school T stated, *“Water supply has been affected since the water facilities are insufficient and accessible to all students.”* This was done in collaboration with Jagero (2011) research on examining environmental factors affecting student performance in boarding schools. According to the study’s findings, there needed to be more student facilities, including bathrooms, toilets, and sufficient water. In line with the quantitative data, (48.6%) of the students noted that they experienced a shortage in clean water availability. Most schools had constructed water boreholes and tank that were provided by both the government and non-governmental organizations, while in some schools, the water provided was only adequate for some.

A high percentage (60.0%) of the respondents agreed that increased enrolment led to the frequent spread of infectious diseases among students. This was due to congestion and overstretched facilities. The rest (40.0%) disagreed. For example, a respondent from R stated, *“The spread of infectious diseases has gone high.”* This is supported by the findings of Fan et al. (2019) found that overcrowding in schools was a risk factor for the spread of infectious diseases. The study showed that schools with high enrolment had a higher incidence of infectious diseases, such as influenza and tuberculosis. These findings are also supported by the quantitative data where (43.2%) agreed.

More than a half (60.0%) of the respondents agreed that increased enrolment affected the provision of medicine to sick students due to shortages in supply, while the rest (40.0%) disagreed. A respondent from school Q stated, *“Medicine supply has been in high demand due to the large population, which is prone to several ailments.”* This concurs with a study conducted by Baum & Riley (2019) that avers that the provision of medicine to sick students’ needs to be improved due to shortages in supply. The study showed that schools lacked essential medicines, such as painkillers, antipyretics, and antibiotics, necessary for treating common illnesses among students. Quantitative data upholds the findings that (49.1%) indicated cases of inadequate medicine.

A high percentage (80.0%) of the respondents agreed that increased enrolment affected the availability of nurses in schools, while (20%) disagreed. Such schools also faced supply shortages, and their nurses were overloaded with work. A respondent from school S mentioned, *“It has forced the available nurse to stay in school till late at night to curb any possible emergency.”* This finding coincides with Dibakwane and Peu (2018) that a shortage of nurses in schools affected the quality of healthcare services provided to students. The study further revealed that the high student-to-nurse ratio contributed to increased workload and reduced time spent on individual students. According to the quantitative data (70.1%), the nurses available in schools are insufficient because of the increase in enrolment.

Regarding attending to sick students in schools, (80.0%) agreed that the increase in enrolment had negatively affected them, particularly the timely delivery of services and provision of care due to inadequate supplies, while (20%) disagreed. A respondent from school U mentioned, *“Due to increased enrollment, management has been forced to collaborate with the nearest health facility in the event of an emergency since the school lacks enough medical facilities.”* A study by Umeh (2018) concurred that inadequate

healthcare facilities and services were significant challenges in schools with high enrollment in Nigeria. The study reported that schools lacked essential medicines, basic medical equipment, and qualified healthcare personnel, leading to poor student health outcomes. As signified by the quantitative data (67.8%), the students agreed to uphold that there is so much delay in attending to sick individuals in schools.

4.8.2 Relationship between Enrolment and Delivery of Health Services (Analysis)

The relationship between enrolment and delivery of health services was determined using the PPMCC. It involved correlating the number of enrolled students with the delivery of health services overall mean. The results of the procedure are in Table 23.

Table 23

Correlation Analysis

Scale		Delivery of health services mean scores
Enrolment	Pearson Correlation	-.292
	Sig. (2-tailed)	.000
	N	294

The correlation analysis in Table 23 shows that the relationship between student enrolment and delivery of health services was negative and statistically significant, $r(294) = -0.292$, $p = .000$.

The overall mean was calculated to be -0.292. This negative value indicates a negative correlation between the two variables. This means that the delivery of health services declines as student enrolment increases in the public boarding secondary schools in Kisumu West Sub- County, Kenya. These results could also be influenced by the fact that some schools have nearby hospitals where sick students are taken and attended. The outcomes may also be influenced by the proximity of most schools to hospitals and

prompt attention. However, both the frequency of students requiring hospital visits and the school's proactive approach to seeking medical care remain valid concerns. This finding is consistent with Tabong et al. (2018) study conducted in Ghana where, student enrolment was associated with poor delivery of health services in schools, including inadequate staffing, equipment, and facilities. Another study conducted in Pakistan by Irfan (2019) found that large class sizes and high student enrolment were associated with decreased school access to health services.

4.8.3 Hypothesis Three Testing

H₀₃ There is no statistically significant relationship between increased student enrolment and delivery of health services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

The correlation coefficient obtained was -0.292. In this case, the p-value is reported as 0.000, which is less than the significance level of 0.05. This indicates that the correlation coefficient of -0.292 is statistically significant, meaning it is unlikely to have occurred by chance alone if the null hypothesis were true, hence, the rejection of the null hypothesis. Since the obtained p-value is smaller than the significance level, the researcher rejected the null hypothesis. It was reported by Cheruiyot (2019) that teachers share toilets with students in schools in the Sigowet sub-county in Kericho. Some toilets sank due to swampy conditions in the region, while in other schools; the toilets were not enough to fit all the students.

4.9 Students Descriptive Statistics on Guidance and Counselling services

The students provided data on the delivery of Guidance and Counselling services. It was gathered using a set of closed-ended items. The items were based on the extent to which the respondents agreed with them (SD=1, D=2, A= 3, SA=4). The descriptive statistics

of health services was calculated from the students' response. Table 24 shows findings in percentage.

Table 24

Students' Responses to Items on Delivery of Guidance and Counseling services

Item	N	SA (%)	A (%)	D (%)	SD (%)
Due to increased enrolment, there are limited guidance and counselling services in schools	294	16.2	22.5	33.5	27.8
Due to increased enrolment, there are few face-to-face counselling sessions for students	294	23.4	30.1	28.7	17.8
As a result of increased student enrolment, there are limited spaces in school where guidance and counselling sessions can take place.	294	23.5	22.5	33.3	20.7
Due to increased student enrolment, indiscipline cases have increased in the school.	294	17.6	24.3	35.9	22.2
Due to increased student enrolment, time set aside for guidance and counselling is not enough.	294	20.6	29.5	29.4	20.5
Due to increased student enrolment, there are inadequate guidance and counselling facilities in the school.	294	19.1	29.2	29.4	22.3
Due to increased enrolment, guidance and counseling personnel are not enough	294	21.7	30.1	25.2	23.0

According to Table 24, (38.7%) agreed that due to increased enrolment, there are limited guidance and counseling services in schools, while (61.3%) disagreed. This contradicts a study conducted by Arfasa and Weldmeskel (2020) found that student enrolment was negatively associated with the availability of guidance and counseling services in schools, with overcrowded schools having limited resources to provide adequate guidance and counseling services. Similarly, a study conducted in Zimbabwe by Maupa

(2020) found that high student enrolment negatively affected the quality of school guidance and counseling services.

There are few face-to-face counseling sessions for students due to increased student enrolment, (53.5%) agreed, while (46.5%) disagreed. This concurs with a study conducted in the United States that revealed that high student-to-counselor ratios were associated with reduced availability of counseling services and increased workload for school counselors, leading to limited opportunities for face-to-face counseling sessions.

There are limited spaces in school where guidance and counseling sessions can occur, (46.0%) agreed, while (54.0%) disagreed. A study in Nigeria reported that limited physical space and resources negatively affected their ability to deliver counseling services to students. Another study in the United States found that school counselors reported inadequate physical spaces for counseling sessions, leading to difficulties in maintaining student privacy and confidentiality.

Indiscipline cases have increased in the school, (41.9%) agreed, while (58.1%) disagreed. In a comparison study, Maphoso and Mahlo (2014) conducted a study between boarding schools and non-boarding; they found that bullying, as a form of indiscipline, was another issue that affected boys and male students more than in female schools.

Time set aside for guidance and counseling is enough, (50.1%) agreed, while (49.9%) disagreed. Chandler et al. (2018) found that school counselors reported limited time as a significant barrier to delivering counseling services, with counselors expressing a need for more time to address student needs. Another study by Kim and Lambie (2018) found that school counselors reported insufficient time as a challenge to meeting student needs, with counselors needing help balancing administrative responsibilities and directing

student services. There are inadequate guidance and counseling facilities in the school, (48.3%) agreed, while (51.7%) disagreed. A study by Cheruiyot and Orodho (2015) on guidance and counseling in Kenyan public secondary schools found that inadequate facilities, including counseling rooms, qualified personnel, and reference materials, were major hindrances to effective counseling services.

More than guidance and counseling personnel are needed due to increased enrolment (51.8%) agreed while (48.2%) disagreed. The findings concurred with Suleiman (2019), that more than guidance and counseling personnel in their schools were needed to meet the increased enrolment. The study also found a significant relationship between the adequacy of guidance and counseling personnel and the size of the school. Furthermore, the study highlighted the adverse effects of inadequate guidance and counseling personnel on students' academic performance and behavior. The researchers recommended that schools employ more guidance and counseling personnel to meet the increasing service demand.

Gatua (2012) reaffirmed the need for comprehensive guidance and counseling services in all secondary schools, noting that today's adolescents face many challenges due to the growing complexity of their lives. Many personal, intellectual, social, and emotional demands and challenges are facing these kids, which, if left addressed, might lead to various negative behavioral patterns.

From the findings, few students indicated that increased enrolment affected the provision of guidance and counseling in schools. Waithaka (2017) points out that school overpopulation triggers indiscipline among students, and it becomes difficult to manage and control many students. Neglect of students' welfare by school authorities and

negative peer pressure from other students were also noted as contributing causes to indiscipline occurrences.

4.9.1 Qualitative data from the Heads of Guidance and Counseling

Three-quarters (75.0%) of the respondents agreed that increased enrolment limited the provision of G&C, while the rest disagreed. All the H.O.D.s indicated that students have one G&C session a week. More than half of the respondents (80%) believed the increased population reduced student face-to-face counseling sessions. The other (20%) noted an increase in the number of face-to-face counseling sessions, an observation they attributed to pressure on students due to overcrowding. A respondent from school O mentioned, *“The personnel have been increased that has enabled the face-to-face counseling.”* The quantitative data supports these findings by demonstrating that a significant portion of students (38.7%) reported receiving minimal guidance and counseling sessions. Additionally, a majority of students (53.5%) indicated that there were only a limited number of face-to-face guidance and counseling sessions available to them.

Most (60.0%) of the H.O.D.s reported that increased enrolment affected facilities for providing guidance and counseling services. The other 40.0% reported that the facilities were adequate. A respondent from school V stated that, *“Sessions take place in open places unless a student is uncomfortable. The G&C office is available.”* Namai and Manyasi (2019) recommended that secondary school principals put guidance and counseling services in place and provide an office where privacy is prioritized. This will encourage more students to visit the office. The student respondents in the quantitative analysis indicated (46.0%) experiences limited spaces for guidance and counseling services.

Two-thirds (66.7%) of the H.O.D.s agreed that increased enrolment negatively affected students' discipline. They attributed this to peer pressure and reduced face-to-face contact with students. However, a minority (33.3%) believed that discipline has not been affected. A respondent from school Q indicated that, "*Indiscipline cases have increased, but the disciplinary committee has been put in place to curb this.*" Jagero (2011) states that boarders are likely to have bad company that can lead to bad influence; the students are likely to experience bullying, with prefects being given many powers by the school authorities to control other students. The quantitative data provided by the students indicated that 41.9% of them agreed with the qualitative data, which highlighted the presence of indiscipline cases in schools as a result of increased enrollment. This convergence between the quantitative and qualitative findings suggests that a significant proportion of students perceive a correlation between the rise in school enrollment and the occurrence of disciplinary issues.

Half (50.0%) of the respondents attributed the reduced time allocated to G&C not to increased numbers but to the congested syllabus and other activities (games, manual work). A respondent from school S mentioned, "*The time is still the same but spread throughout the week.*" Hortsch (2021) avers that students have many social and personal issues; most are still maturing and changing, and guidance and counseling sessions must offer these students sufficient time and attention. However, more than half of the students (50.1%) in the quantitative data denote that the time set aside for the counseling sessions is insufficient.

Regarding facilities, most (66.7%) of the H.O.D.s agreed they were overstretched. However, a few H.O.D.s (33.3%) indicated they had adequate facilities. A school R respondent stated "*No, the school needs more facilities.*" According to Fathoni et al. (2021) on Guidance and Counseling facilities. This study investigated the effects of

insufficient guidance and counseling resources in secondary schools on students' mental health, emotional well-being, and general academic performance. According to the data, most service providers felt overworked due to insufficient resources, which affected support for students facing diverse difficulties. In order to meet the requirements of students in an efficient way, the study recognized the need for more facilities. From the quantitative data, only (48.3%) agreed that there are limited G&C facilities in schools.

Two-thirds (66.7%) of the H.O.D.s believed schools needed more personnel for guidance and counseling, while the rest (33.3%) felt the numbers available were adequate. A respondent from school T mentioned, "*Not enough; more personnel are needed.*" Otieno and Ochieng (2020) assign individual students' mentors, particularly older students, to support and direct them in their academic endeavors. This form of mentoring cultivates students' mutual accountability. Since most students were late to class, the schedule was altered to allow remedial instruction, particularly for weaker kids. These findings are collaborated by the quantitative data (51.8%), indicating the need for more guidance and counseling services.

4.9.2 Relationship between Enrolment and Delivery of G & C Services

The relationship between enrolment and delivery of guidance and counseling services was determined using the PPMCC. It involved correlating the number of enrolled students with the delivery of guidance and counseling services overall mean. The results of the procedure are in Table 25.

Table 25*Correlation Analysis (G&C)*

Scale	Delivery of G&C services mean scores	
Enrolment	Pearson Correlation	.060
	Sig. (2-tailed)	.308
	N	294

The correlation analysis presented in Table 25 indicates that relationship between enrolment and accommodation was positive but not statistically significant, $r(294) = .060$, $p = .308$.

The Pearson Correlation Coefficient between enrolment and the delivery of G&C services overall mean was calculated to be 0.060. The correlation coefficient 0.060 indicates that any relationship between these variables is minimal. Arfasa and Weldmeskel (2020) the study showed insufficient counselling centers and a lack of trained counsellors in most secondary schools in Ethiopia, making schools unable to provide adequate guidance and counselling services for learners.

4.9.3 Hypothesis Four Testing

The null hypothesis, denoted as **H₀₄**, states there is no statistically significant relationship between increased student enrolment and delivery of guidance and counselling services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

The p-value is reported as 0.308, greater than the significance level of 0.05. This suggests that the correlation coefficient of 0.060 is not statistically significant, meaning observing such a relationship by chance is plausible if the null hypothesis were true. Indicating that, in case of an observed relationship between enrolment and delivery of G&C services, it could be due to chance. Since the obtained p-value is greater than the significance level, the researcher failed to reject the null hypothesis (**H₀₄**). Indicating that

no statistically significant relationship exists between student enrolment and guidance and counseling services delivery in public boarding secondary schools in Kisumu West Sub- County, Kenya. Further research or a larger sample size may be needed to explore this relationship comprehensively. Mckenna (2018) reported that when the student population is increasing, proper resource allocation and usage in schools can maintain student discipline and keep pupils on track reported it.

4.10 Summary of Hypothesis Testing

Table 26

Summary of Hypothesis Testing

Hypothesis	P-Value	Decision rule
		Reject H ₀ : $\beta_x = 0$; if $p < 0.05$, Otherwise, accept the H ₀ : $\beta_x = 0$
H₀₁: <i>There is no statistically significant relationship between increased student enrollment and delivery of accommodation services in public boarding secondary schools in Kisumu West Sub- County, Kenya.</i>	P = 0.000 correlation coefficient of -0.255	$P = 0.000 \leq p = 0.05$ The null hypothesis was rejected
H₀₂: <i>There is no statistically significant relationship between increased student enrolment and delivery of catering services in public boarding secondary schools in Kisumu West Sub- County, Kenya.</i>	Pearson Correlation -.205 P = 0.000	$P = 0.000 \leq p = 0.05$ The null hypothesis was rejected
H₀₃: <i>There is no statistically significant relationship between increased student enrolment and delivery of health services in public boarding secondary schools in Kisumu West sub county, Kenya.</i>	Pearson Correlation -.292 P = 0.000	$P = 0.000 \leq p = 0.05$ The null hypothesis was rejected
H₀₄: <i>There is no statistically significant relationship between increased student enrolment and delivery of guidance and counselling services in public boarding secondary schools in Kisumu West Sub- County, Kenya</i>	Pearson Correlation .060 P = 0.308	$P = 0.308 > p = 0.05$ The null hypothesis was accepted

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a synopsis of the significant findings, conclusions, and recommendations made throughout the study.

5.2 Summary

The following section provides an overview of the key findings. It highlights the findings based on the data collected, analyzed, and presented in the previous chapter based on the different respondents.

5.2.1 Relationship between Increased Student Enrolment and Delivery of Accommodation Services in Public Boarding Secondary Schools in Kisumu West Sub- County, Kenya

The findings revealed that increased student enrolment contributed to poor delivery of welfare services in the public secondary schools in Kisumu West Sub- County, Kenya. The data collected from closed-ended items were analyzed, and the descriptive statistics of accommodation services were calculated from the students' responses. The quantitative data was also obtained from the boarding masters/mistress. The majority of respondents agreed and strongly agreed that an increase in enrolment leads to crowding in the dormitory, fewer bed spaces, increased theft, and untidy living conditions. Moreover, sharing beds and inadequate supply of bathrooms, toilets, and water in the dormitories were also reported. The findings indicate that overcrowding in dormitories can negatively affect students' well-being. Schools must invest in upgrading and expanding their accommodation facilities to accommodate the growing student population and ensure their safety and security.

The study recommends that measures such as security cameras, locks, and security personnel should be put in place to prevent theft and other security-related issues in overcrowded dormitories. The study reveals that schools' initiatives are not sufficient to cater to the needs of the enrolled number of students. This can have serious implications on the health and wellbeing of students, and may affect their overall satisfaction with the school.

A negative correlation was found in the relationship between increased student enrolment and the delivery of accommodation services, suggesting that when the number of students increases, the accommodation services in the respective schools decrease. This means that schools need to be proactive in ensuring that they have adequate resources to cater to the growing number of students. To address the challenges highlighted in the study, schools can take several steps. One approach could be to invest in the construction of additional accommodation facilities to cater to the increasing number of students. Schools can also consider implementing measures to enhance hygiene and cleanliness in dormitories to prevent the spread of infections. Furthermore, schools can provide students with training on personal hygiene practices and encourage them to maintain cleanliness in their living spaces.

5.2.2 Relationship between Increased Student Enrolment and Delivery of Catering Services in Public Boarding Secondary Schools in Kisumu West Sub- County, Kenya

According to the study, respondents from both the students and the Cateresses/caterers revealed that the delivery of catering services in secondary schools is affected by increased student enrolment. In addition, the findings revealed that sometimes students eat half-cooked meals. The school sometimes provides poor food. Students spend much time queuing to be served food. Students often do not eat a balanced diet. There is

overcrowding in the dining halls. There are fewer cooks in the school, there is competition for food among students, and sometimes students eat stale food.

There was evidence that increased enrollment has led to crowding in the dining hall, forcing students to eat outside beneath trees and shades and even in the classrooms, an inadequate number of cooks in a few schools, a decrease in food and quantity, and an increase in time required to serve meals. However, a few schools have extended their dining halls to handle the additional enrollment, but most still need to put new initiative to handle this issue.

It emerged that there is a negative and statistically significant relationship between the increased student enrolment and the delivery of student catering services. The negative correlation found between increased student enrolment and the delivery of catering services indicates that schools need to take proactive measures to address these challenges. One approach could be to invest in improving dining facilities, such as constructing larger dining halls or extending existing ones, to accommodate the growing number of students. Schools can also hire additional cooks or kitchen staff to cater to the increasing number of students, ensuring that meals are served on time and are of high quality. Another important step that schools can take is to prioritize food hygiene and safety, to prevent the spread of foodborne illnesses. Implementing strict food handling and storage protocols, ensuring that food is properly cooked and served at the right temperature, and conducting regular inspections of the kitchen and dining facilities can achieve this.

5.2.3 Relationship between Increased Student Enrolment and Delivery of Health Services in Public Boarding Schools in Kisumu West Sub- County, Kenya

The data was obtained from the responses of students using a set of closed-ended items, and descriptive statistics were calculated. Qualitative data was also obtained from the healthcare providers in the respective schools. The findings on this objective revealed that increased student enrolment is negative and statistically significant to delivering health services in public boarding schools in Kisumu West Sub- County, Kenya. Among these factors, the most prominent were that the toilets usually dirty. Hand-washing points in the school are not enough. There are inadequate toilet facilities in the school compound. There is an inadequate supply of clean water in the school compound. There are more cases of infectious diseases. There are cases of inadequate medicine in the school. Nurses in schools are not enough and there are delays in attending to sick students. Several schools have engaged in collaborations with hospitals to ensure that unwell students receive necessary care. However, there remain uncertainties regarding the prompt access of these students to medical care upon reaching the hospitals. Further research is required to investigate the procedures and quality of care provided to secondary school students upon their arrival at these hospitals.

Based on these findings, the researcher concluded that it is important and necessary to develop strategies in order to solve these issues. The study further revealed that increased enrolment has led to the employment of extra nurses of health officials in some schools. The inadequate provision of health services can have a significant impact on students' health and wellbeing. The schools can address these challenges by developing strategies to improve the delivery of health services. One approach could be to invest in upgrading existing health facilities or constructing new ones to accommodate the growing number of students. Schools can also ensure that there are sufficient hand-washing points, toilets,

and clean water sources to maintain a hygienic environment. Schools can hire additional healthcare professionals or collaborate with local healthcare providers to provide medical support to students. This can help to ensure that sick students are attended to promptly. This can lead to overall satisfaction among students.

Nonetheless, the study discovered a statistically significant relationship between student enrollment and the provision of health services in Kisumu West Sub- County, Kenya. This implied that changes in the enrolment rate could cause a change in the delivery of healthcare services in secondary schools. High increased enrolment leads to increased provision of health care services to match the increased number of students.

5.2.4 Relationship between Increased Student Enrolment and Delivery of Guidance and Counseling Services in Public Boarding Secondary Schools in Kisumu West Sub- County, Kenya

According to the study, it was revealed that the relationship between enrolment and accommodation was positive but not statistically significant. The results show that enrolment has not affected guidance and counseling services in schools, limited spaces where counseling sessions can take place, time set aside for guidance and counseling, and guidance and counseling facilities in the school. However, the study found that increased enrollment has resulted in increased cases of indiscipline in schools and a need for more guidance and counseling personnel. This suggests that when there is an increased number of students in schools, more guidance and counseling personnel should be in place to reach the large number.

Qualitative data also supported these findings, with a majority of the respondents agreeing that increased enrolment negatively affected the provision of guidance and counseling services. The Heads of Departments (H.O.D.s) agreed that increased

enrolment affected the facilities for providing guidance and counseling services, with two-thirds of them noting that the facilities were overstretched. Additionally, two-thirds of the H.O.D.s believed that schools needed more personnel for guidance and counseling.

The study discovered that the relationship between enrolment and guidance and counseling was positive but not statistically significant, $r(294) = .060$, $p = .308$. These results imply that enrolment is weakly related to the delivery of G&C services. This was because most sessions were in groups. While enrolment may not significantly affect the delivery of guidance and counseling services, other factors such as limited resources and increased cases of indiscipline may have an impact. As such, it is essential to address these factors and provide adequate resources and personnel to ensure that students receive adequate guidance and counseling services. The study further revealed that the provision of guidance and counseling services was limited by factors such as inadequate facilities, limited time set aside for counseling, and inadequate personnel.

5.3 Conclusion

On the relationship between increased student enrollment and accommodation services in public boarding schools in Kisumu West Sub- County, Kenya. The findings reveal a statistically significant negative correlation. The study concludes, that increased student enrollment leads to inadequate accommodation facilities, such as overcrowding in dormitories, lack of beds, and limited space for students to study. The situation is more severe in public boarding schools. This highlights the need for more investment in public school infrastructure to cater to the growing student population.

Similarly, on the relationship between increased student enrollment and catering services in public boarding secondary school in Kisumu West Sub- County, the study shows a

statistically significant negative correlation. The study concludes that increased student enrollment leads to inadequate catering services, such as limited food supply, poor quality food, and long queues during meal times. Schools should invest in better catering facilities and increase the number of catering staff to improve the quality of food and services provided to students.

Concerning the relationship between increased student enrollment and health services, the study found a statistically significant negative correlation. The study concludes that increased student enrollment leads to inadequate health services, such as inadequate medicine supplies, inadequate health personnel, long waiting times, and more cases of infectious diseases. Schools to increase the number of health personnel, invest in better health facilities, and prioritize hygiene practices to reduce the spread of infectious diseases.

On the relationship between increased student enrollment and guidance and counseling services, the studies found a weak positive correlation. The study concludes that increased student enrollment leads to more cases of indiscipline and a need for more guidance and counseling personnel. Most guidance and counseling sessions were conducted in groups, and therefore, increased enrollment did not significantly affect the delivery of guidance and counseling services.

In conclusion, the study highlights the need for public boarding secondary schools to invest in better infrastructure, facilities, and personnel in accommodation, catering, health and guidance and counseling to cater to the growing student population adequately.

5.4 Recommendation

It was evident from the findings that delivery of accommodation services, catering services, and health services were the weightier variables compared to guidance and counseling. The study recommends that:

- i. Schools' administrators find ways of increasing the welfare services in the schools to reduce incidences of students sharing beds, overcrowded dormitories, increased cases of respiratory infections, small portions of food, inadequate bathrooms and toilets, inadequate clean water and guidance and counseling personnel, and increased cases of indiscipline in schools.
- ii. The government to use this information to find ways of eliminating over enrolment in secondary schools and come up with ways of coping with over enrolment in schools where the population is high.
- iii. The government should consider increasing the per-student funding allocation to public boarding secondary schools. This would help cover the cost of accommodation, catering, and health services more effectively.
- iv. The principals, board members, or other school officials use the information to decide on the development of educational resources or programs to ensure the students' welfare are prioritized.
- v. The school and the surrounding communities should work together actively. This can entail offering assistance for the development of resources and infrastructure.

5.4.1 Recommendation for Policy

Boarding school policymakers should uphold and enforce strict welfare and safety laws. These precautions include keeping the dormitory clean, ensuring enough staff to supervise students, and doing routine health and safety checks.

According to the study, secondary boarding schools ought to implement quality assurance policies that establish reasonable standards for food, housing, and medical services while guaranteeing that every student can access them.

The government capitation system must be amended, which gives each student a set amount of money. Over time, however, it has not sufficiently funded the expenses of welfare services. As a result, this study recommends that boarding schools adopt a dynamic funding strategy. This entails creating a flexible finance model that considers every school's unique requirements and modifies financial distributions to guarantee sufficient housing, food, and medical care.

Additionally, this study recommends that principals be permitted to obtain money from students for development. A transparent fund utilization policy should be implemented to guarantee that development funds are utilized only for facility improvements and that their allocation and utilization are visible and subject to routine audits.

5.4.2 Recommendations for Further Research

The study recommends that:

- i. Conduct comparative studies in a comparative approach between schools in the rural and urban areas.
- ii. Future research on a similar objective should be conducted to examine the same elements across Kenya and ASAL regions.

- iii. A study should be conducted to establish how the increased student enrolment has affected other institutional factors in secondary and primary schools.
- iv. A study should be conducted on the relationship between increased student enrolment and delivery of guidance and counseling services using different research approaches.
- v. There is need to carry out the same study in primary or secondary schools in Kisumu West Sub- County or other regions in Kenya, to institute whether the same results apply in different context.

REFERENCES

- Ababio, P. F., Taylor, K. D. A., Swainson, M., & Daramola, B. A. (2016). Impact of food hazards in school meals on students' health, academic work and finance-Senior High School students' report from Ashanti Region of Ghana. *Food Control*. <https://doi.org/10.1016/j.foodcont.2015.10.017>
- Abanyie, S. K., Amuah, E. E. Y., Douti, N. B., Owusu, G., Amadu, C. C., & Alhassan, B. (2021). WASH in selected basic schools and possible implications on health and academics: an example of the Wa municipality of Ghana, West Africa. *American Journal of Environmental Science and Engineering*, 5(1), 15-20. <https://doi.org/10.11648/j.ajese.20210501.13>
- Abdul-Rahaman, N., Rongting, Z., Wan, M., Iddrisu, I., Rahaman, A. B. A., & Amadu, L. (2020). The impact of government funding on senior high enrolment in Ghana. *South African Journal of Education*, 40(4). <https://doi.org/10.15700/saje.v40n4a1648>
- Adoga, R. O. (2020). The newness of guidance and counselling practices in schools. *International Journal of Educational Research and Policy Making*. Retrieved from; https://www.academia.edu/44013559/GUIDANCE_AND_COUNSELLING_NEEDS_FOR_SUSTAINABLE_CAREER_DECISION_MAKING_AMONG_SENIOR_SECONDARY_SCHOOL_STUDENTS_IN_ABUJA_NIGERIA
- Afolayan, M. S., & Oniyinde, O. A. (2019). Interviews and questionnaires as legal research instruments. *JL Pol'y & Globalization*, 83, 51.
- Alafin, B., Oluwaseyitan, A., Izang, A. J. A., & Alausa, K. O. (2019). An appraisal of the School Health Programme in primary schools in a rural community in Nigeria. *Ethiopian Journal of Health Development*, 33(3). Retrieved from; <https://www.ajol.info/index.php/ejhd/article/view/190124>
- Alderson, P., & Morrow, V. (2020). *The ethics of research with children and young people: A practical handbook*. Sage.
- Aldrup, K., Klusmann, U., Lüdtke, O., Göllner, R., & Trautwein, U. (2018). Social support and classroom management are related to secondary students' general school adjustment: A multilevel structural equation model using student and teacher ratings. *Journal of Educational Psychology*, 110(8), 1066. <https://doi.org/10.1037/edu0000256>
- Ali, S. H., Foster, T., & Hall, N. L. (2018). The relationship between infectious diseases and housing maintenance in Indigenous Australian households. *International Journal of Environmental Research and Public Health*, 15(12), 2827. <https://doi.org/10.3390/ijerph15122827>
- Almanasreh, E., Moles, R., & Chen, T. F. (2019). Evaluation of methods used for estimating content validity. *Research in social and administrative pharmacy*, 15(2), 214-221.
- Aluko, O. E. (2011). The assessment of housing situation among students in the University of Lagos. *African Research Review*, 5(3). <https://doi.org/10.4314/afrrrev.v5i3.67345>

- Alvarez, R. M., Atkeson, L. R., Levin, I., & Li, Y. (2019). Paying attention to inattentive survey respondents. *Political Analysis*, 27(2), 145-162. <https://doi.org/10.1017/pan.2018.57>
- Anastacia. (2017). *Overview of Qualitative and Quantitative Data Collection Methods*. Cleverism. <https://www.cleverism.com/qualitative-and-quantitative-data-collection-method/>
- Appiah-Effah, E., Duku, G. A., Azangbego, N. Y., Aggrey, R. K. A., Gyapong-Korsah, B., & Nyarko, K. B. (2019). Ghana's post-MDGs sanitation situation: an overview. *Journal of Water, Sanitation and Hygiene for Development*, 9(3), 397-415. <https://doi.org/10.2166/washdev.2019.031>
- Appietu, M. E. (2017). *Food safety in selected senior high schools in the Ho Municipality, Volta region* (Doctoral dissertation, University of Cape Coast. <http://hdl.handle.net/123456789/3186>
- Arfasa, A. J., & Weldmeskel, F. M. (2020). Practices and challenges of guidance and counselling services in secondary schools. *Emerg. Sci. J*, 4(3), 183-191. <https://doi.org/10.28991/esj-2020-01222>
- Arikunto, S. (2013). *Management Research* (12th ed.). Rineka Reserved.
- Arumugam, A., Shanmugavelu, G., Balakrishnan, A., Parasuraman, L., Sathya, F. J., Kannan, B. & Singh, J. S. A. (2021). Importance of guidance and counselling in the school educational system: An overview. *International Journal of Multidisciplinary Research*. <https://doi.org/10.36713/epra8153>
- Ary, D., Jacobs. L. C., & Sorensen, C. (2010). *Introduction to Research in Education*. (8th ed). California: Wadsworth.
- Asamba, V. L. (2022). *Influence of Principals' Management of Institutional Facilities on Implementation of 100 Percent Transition Policy in Public Secondary Schools in Hamisi Sub County, Kenya* (Doctoral dissertation, University of Nairobi). <http://erepository.uonbi.ac.ke/handle/11295/161607>
- Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: a respondent driven sampling study in Ontario, Canada. *BMC public health*, 15(1), 1-15. <https://doi.org/10.1186/s12889-015-1867-2>
- Baum, D. R., & Riley, I. (2019). The relative effectiveness of private and public schools: evidence from Kenya. *School Effectiveness and School Improvement*, 30(2), 104-130. <https://doi.org/10.1080/09243453.2018.1520132>
- Bayeh, E. (2016). The role of empowering women and achieving gender equality to the sustainable development of Ethiopia. *Pacific Science Review B: Humanities and Social Sciences*, 2(1), 37-42. <https://doi.org/10.1016/j.psrb.2016.09.013>
- Beam, M. (2020). Nontraditional students' experiences with food insecurity: A qualitative study of undergraduate students. *The Journal of Continuing Higher Education*, 68(3), 141-163. <https://doi.org/10.1080/07377363.2020.1792254>
- Beatty, A., Berkhout, E., Bima, L., Coen, T., Pradhan, M., & Suryadarma, D. (2018). Indonesia Got Schooled: 15 Years of Rising Enrolment and Flat Learning Profiles. *Jakarta: RISE Programme in Indonesia*. https://doi.org/10.35489/bsg-rise-wp_2018/026

- Best J. W & Kahn V. (2006). *Education Research an Introduction* (3rd Ed.) New York.
- Best, N. C., Nichols, A. O., Waller, A. E., Zomorodi, M., Pierre-Louis, B., Oppewal, S., & Travers, D. (2021). Impact of school nurse ratios and health services on selected student health and education outcomes: North Carolina, 2011-2016. *Journal of School Health, 91*(6), 473-481. <https://doi.org/10.1111/josh.13025>
- Blomme, R. J., Van Rheede, A., & Tromp, D. M. (2010). The use of the psychological contract to explain turnover intentions in the hospitality industry: A research study on the impact of gender on the turnover intentions of highly educated employees. *The International Journal of Human Resource Management, 21*(1), 144-162. <https://doi.org/10.1080/09585190903466954>
- Bouterakos, M., Doura, M., Hambayi, M., & Bundy, D. (2021). The importance of school feeding programmes to support the nutrition of school-age children, particularly during the COVID-19 pandemic. *Field Exchange 66*, 12.
- Brown, J.D & Coombe, C.(2015). *The Cambridge Guide to Research in Language Teaching and Learning*. United Kingdom: Cambridge University Press.
- Campbell, C., & MacPhail, C. (2002). Peer education, gender and the development of critical consciousness: participatory HIV prevention by South African youth. *Social science & medicine, 55*(2), 331-345. [https://doi.org/10.1016/S0277-9536\(01\)00289-1](https://doi.org/10.1016/S0277-9536(01)00289-1)
- Campbell, K., Weingart, R., Ashta, J., Cronin, T., & Gazmararian, J. (2021). COVID-19 knowledge and behavior change among high school students in semi-rural Georgia. *Journal of School Health, 91*(7), 526-534. <https://doi.org/10.1111/josh.13029>
- Chan, K., Prendergast, G., Grønhøj, A., & Bech-Larsen, T. (2009). Communicating healthy eating to adolescents. *Journal of Consumer Marketing. https://doi.org/10.1108/07363760910927000*
- Chandler, J. W., Burnham, J. J., Riechel, M. E. K., Dahir, C. A., Stone, C. B., Oliver, D. F., & Bledsoe, K. G. (2018). Assessing the Counseling and Non-Counseling Roles of School Counselors. *Journal of School Counseling, 16*(7), n7.
- Chathurika P.R.D. (2015). *Student perception on current school counselling service in Sri Lanka* (regarding Anuradapura zone). 3rd Global Summit on Education GSE. Malaysia, Kuala Lumpur, 9-10 March, pp.381-389.
- Chen, Y., & Feng, S. (2013). Access to public schools and the education of migrant children in China. *China Economic Review, 26*, 75-88. <https://doi.org/10.1016/j.chieco.2013.04.007>
- Cheruiyot, D. K., & Orodho, J. A. (2015). Guidance and Counselling: What Is the Level of Human and Physical Resource Preparedness in Providing Effective Services in Secondary Schools in Bureti Sub County, Kericho County, Kenya. *Journal of Education and Practice, 6*(23), 132-143. <http://iiste.org/Journals/index.php/JEP>
- Cheruiyot, K. F. (2019). *Secondary Schools' Readiness on a Hundred Percent Transition Rate of Pupils from Primary Level in Sigowet Sub-county, Kericho County* (Doctoral dissertation, University of Nairobi). <http://erepository.uonbi.ac.ke/handle/11295/107439>

- Chiguvi, D., & Ndoma, J. T. (2018). The Effects of Shortage of Accommodation on Students' Performance in Private Tertiary Institutions in Botswana. *Journal of Economics and Sustainable Development*, 9(4), 97-104.
- Cohen, J. A., Mistry, D., Kerr, C. C., & Klein, D. J. (2020). Schools are not islands: Balancing COVID-19 risk and educational benefits using structural and temporal countermeasures. *MedRxiv*, 2020-09. <https://doi.org/10.1101/2020.09.08.20190942>
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
- Deb, S., Gao, X. Z., Tammi, K., Kalita, K., & Mahanta, P. (2020). *Recent studies on chicken swarm optimization algorithm Artificial Intelligence Review*, (A review (2014–2018.)). 1737–1765.
- Denscombe, M. (2017). EBOOK: *The good research guide: For small-scale social research projects*. McGraw-Hill Education (UK).
- DeSimone, J. A., & Harms, P. D. (2022). Dirty data: The effects of screening respondents who provide low-quality data in survey research. In *Key Topics in Psychological Methods* (pp. 73-91). Cham: Springer Nature Switzerland.
- Deslonde, V. L., & Becerra, M. D. (2018). High School Counselors' Influence on Low Socioeconomic Students' College Enrollment. *Journal of School Counseling*, 16(24), 24.
- Desta, M., Ayenew, T., Sitotaw, N., Tegegne, N., Dires, M., & Getie, M. (2018). Knowledge, practice and associated factors of infection prevention among healthcare workers in Debre Markos referral hospital, Northwest Ethiopia. *BMC health services research*, 18(1), 1-10.
- Dibakwane, S. T., & Peu, M. D. (2018). Experiences of school health nurses regarding the provision of the school health service delivery in the Tshwane district. *African Journal of Primary Health Care & Family Medicine*, 10(1), 1-8.
- Didier, J. (2011). *Health education in schools the challenge of teacher training*. National Institute for Prevention and Health Education.
- Dolence, M. G. (1996). *AACRAO Strategic Enrollment Management Casebook: Cases from the Field*. Washington, DC: American Association of Collegiate Registrars & Admissions Officers.
- Downes, P., Nairz-Wirth, E., & Rusinaite, V. (2017). Structural indicators for inclusive systems in and around schools. Analytical Report. Luxembourg: *Publications Office of the European Union*. Online verfügbar. <http://nesetweb.Eu/wpcontent/uploads/2015/08/Structural-Indicators-.pdf>, zuletzt geprüft am, 26, 2017.
- Egbinola, C. N., & Amanambu, A. C. (2015). Water supply, sanitation and hygiene education in secondary schools in Ibadan, Nigeria. *Bulletin of Geography. Socio-economic Series*, (29), 31-46. <https://doi.org/10.1515/bog-2015-0023>
- EMIS. (2019). Ministry of Education, Arts, and culture. *Ministry Of Education*.
- Erickson, L. C., & Newman, R. S. (2017). Influences of background noise on infants and children. *Current directions in psychological science*, 26(5), 451-457. <https://doi.org/10.1177/0963721417709087>

- Ericsson, K. A. (2017). Protocol analysis. *A companion to cognitive science*, 425-432. <https://doi.org/10.1002/9781405164535.ch33>
- Eshetu, D., Kifle, T., & Hirigo, A. T. (2020). Knowledge, attitudes, and practices of handwashing among Aderash primary schoolchildren in Yirgalem Town, Southern Ethiopia. *Journal of Multidisciplinary Healthcare*, 13, 759. <https://doi.org/10.2147/idr.s245518>
- Etikan, I., & Babtope, O. (2019). A basic approach in sampling methodology and sample size calculation. *Med Life Clin*, 1(2), 1006.
- Fan, C. K., Chuang, T. W., Huang, Y. C., Yin, A. W., Chou, C. M., Hsu, Y. T., ... & Tu, C. Y. (2019). Enterobius vermicularis infection: prevalence and risk factors among preschool children in kindergarten in the capital area, Republic of the Marshall Islands. *BMC infectious diseases*, 19, 1-7. <https://doi.org/10.1186/s12879-019-4159-0>
- Fathoni, A., Muhibbin, A., Arifin, Z., Habiby, W. N., & Ismail, M. E. (2021). Implementation of guidance and counselling services to Muhammadiyah elementary schools, Surakarta, provincial Central Java, Indonesia. *Kasetsart Journal of Social Sciences*, 42(1), 177-184. <http://creativecommons.org/licenses/by-nc-nd/4.0/>
- Finkelstein, D. M., Hill, E. L., & Whitaker, R. C. (2008). School food environments and policies in US public schools. *Pediatrics*, 122(1), e251-e259.
- Food and Agriculture Organization. (2020). Food hygiene basic. Hazard analysis and critical control point (HACCP) system and guidelines for its application. *Codex Alimentarius. Academic Press*, 38-44.
- Fosnacht, K., Sarraf, S., Howe, E., & Peck, L. K. (2017). How important are high response rates for college surveys? *The Review of Higher Education*, 40(2), 245-265.
- Fouka G., & Mantzorou, M. (2011). What are the major ethical issues in conducting research? Is there a conflict between the research ethics and the nature of nursing? *Health Science Journal*, 5(1), 3.
- Galmiche, M., Déchelotte, P., Lambert, G., & Tavolacci, M. P. (2019). Prevalence of eating disorders over the 2000–2018 period: a systematic literature review. *The American journal of clinical nutrition*, 109(5), 1402-1413.
- Gatua, D. M. (2012). Impact of guidance and counselling services on students' social and emotional adjustment in public urban and rural secondary schools in Nakuru and Uasin Gishu Counties, Kenya. *International Journal of Science and Research (IJSR) ISSN (Online)*, 2319-7064.
- George, A. L. (2019). *Case studies and theory development: The method of structured, focused comparison* (pp. 191-214). Springer International Publishing.
- Ghani, Z. A., Sulaiman, N., & Mohammed, M. I. (2020). Challenges of Students Housing Provision in Malaysia. *Traektoriâ NaukiPath of Science*, 6(11).
- Ghate, S., Parekh, B. J., Thapar, R. K., Nadkarni, P. R., Sen, S., Bansal, U., & Gupta, P. (2020). Indian Academy of Pediatrics Guidelines on School Reopening, Remote Learning and Curriculum in and After the COVID-19 Pandemic. *Indian Pediatrics*, 57(12), 1153-1165.

- Gile, K. J., & Handcock, M. S. (2010). Respondent-driven sampling: an assessment of current methodology. *Sociological methodology*, 40(1), 285-327.
- Grace W. W., & Teresa, A. F. (2015). School Guidance and Counseling in Kenya: Historical Development, Status, and Future Prospects. *Journal of Education*.
- Grigg, S., Perera, H. N., McIlveen, P., & Svetleff, Z. (2018). Relations among math self-efficacy, interest, intentions, and achievement: A social cognitive perspective. *Contemporary Educational Psychology*, 53, 73-86.
- Han, K. T., & Leonard, J. (2017). Why diversity matters in rural America: Women faculty of color challenging Whiteness. *The Urban Review*, 49, 112-139.
- Health and Safety Executive Annual Report and Accounts. (2020).
- Health and Safety Executive. (2020). Welfare Facilities at Work. <https://www.hse.gov.uk/health-safety>. *Journal of Chemical Studies*. Accessed on 7/05/21.
- Herath, S., & Bentley, R. (2018). Crowding, housing and health: an exploratory study of Australian cities. In *State of Australian Cities National Conference*. SOAC Research Network.
- Ho, H. W. L., & Madden-Hallett, H. (2020). Diners' perceptions and attitudes of a crowded college dining environment: a qualitative study. *Journal of Quality Assurance in Hospitality & Tourism*, 21(2), 168-189.
- Hortsch, G. L. (2021). *Listening to graduates: An evaluation of a US Catholic high school religious education program*. University of Portland.
- Hovdenak, I. M., Stea, T. H., Magnus, P., Krokstad, S., Samdal, O., & Bere, E. (2021). Evaluating the effect of seven years of the Norwegian School Fruit Scheme (2007–2014) on fruit, vegetable and snack consumption and weight status: A natural experiment. *Scandinavian journal of public health*, 49(4), 347-357. <https://doi.org/10.1177/1403494819875923>
- <https://assets.publishing.service.gov.uk/media/61434e078fa8f503b02d1f14/printready-hse-annual-report-and-accounts-2020-2021.pdf>
- <https://doi.org/10.3390/su12156032>
- Husband, G. (2020). Ethical data collection and recognizing the impact of semi-structured interviews on research respondents. *Education Sciences*, 10(8), 206. <https://doi.org/10.3390/educsci10080206>
- Iddy, H. (2018). *Girls and secondary education in rural Tanzania: Perceptions, obstacles and future possibilities* (Doctoral dissertation, Ph. D. thesis, The University of Newcastle, Australia).
- Idris, S. K., & Al-Obaidi, K. M. (2018). Exploring the relationship between student enrollment and accommodation services delivery in Iraqi universities. *Journal of Education and Practice*, 9(14), 114-122.
- Irfan, B., Zahid, I., Khan, M. S., Khan, O. A. A., Zaidi, S., Awan, S. & Irfan, O. (2019). Current state of knowledge of basic life support in health professionals of the largest city in Pakistan: a cross-sectional study. *BMC health services research*, 19, 1-7. <https://doi.org/10.1186/s12913-019-4676-y>
- Ishaka, Y. (2015). *Influence of guidance and counselling services on secondary schools students' discipline in Mbale Municipality, Uganda* (Doctoral dissertation).

- Isiteketo, J. K & Nakamba J. (2019). An Assessment of the Opportunities and Challenges of Weekly Boarding on Pupils' Academic Performance: A Case of Mwandia District. *The International Journal of Multi-Disciplinary Research*. ISSN: 3471-7102, ISBN: 978-9982-70-318-5.
- Jagero, N. O. (2011). An evaluation of school environmental factors affecting performance of boarding secondary students in Kenya. *African Journal of Education and Technology*, 1(1), 127-138.
- Jagero, N. O., Agak, J., & Ayodo, T. M. (2010). An evaluation of home environmental factors affecting performance of boarding secondary school students in Kenya.
- Jasper, C., Le, T. T., & Bartram, J. (2012). Water and sanitation in schools: a systematic review of the health and educational outcomes. *International journal of environmental research and public health*, 9(8), 2772-2787.
- Jaworska, N., De Somma, E., Fonseka, B., Heck, E., & MacQueen, G. M. (2016). Mental health services for students at postsecondary institutions: A national survey. *The Canadian Journal of Psychiatry*, 61(12), 766-775.
- Jennifer, G.F. (2011). *Management of student hostel accommodation problems in Federal Colleges of education*. Southeastern Nigeria
- Johansen, T.B., Astrup, E., Jore, S., Nilssen, H., Dahlberg, B.B., Klingenberg, C., Berg, A.S., Greve-Isdahl, M. (2020). Infection prevention guidelines and considerations for paediatric risk groups when reopening primary schools during COVID-19 pandemic, Norway. *Eurosurveillance*, 25.
- Johansson, T., Pedersen, A., Bergström, K., Sternberg Lewerin, S., Penell, J., & Bergh, A. (2021). Bacterial Contamination of Equine Dentistry Equipment: Effect of Cleaning and Disinfection. *MDPI Publisher*
- Johnson, Burke, and Larry Christensen. (2008). *Educational research: Quantitative, qualitative, and mixed approaches*. Sage publications.
- Joshua, K. K and Zachariah, K. K. (2016). Conflict and Trade-offs Between Efficiency and Access: A Case of Day and Boarding Secondary Schools in Kenya. *Journal of Education and Practice*, 7 (26).
- Kanga, B. M. (2017). Gender Comparison in the Effectiveness of Guidance and Counselling Services in Enhancing Students' adjustment to School Environment In Boarding Secondary Schools in Kenya. *International Journal of Advanced Engineering, Research and Science (IJAERS)*, Vol. 4, No. 3, pp: 1-14.
- Karpinski, M. (2015, March 13). *Student accommodation in Malaysia*. Retrieved from <https://www.hotcoursesabroad.com/study-in-malaysia/student-accommodation/student-accommodation-in-Malaysia/>
- Khajehzadeh, I., & Vale, B. (2016). Shared student residential space: a post occupancy evaluation. *Journal of Facilities Management*.
- Kim, H. S., Ko, R. E., Ji, M., Lee, J. H., Lee, C. S., & Lee, H. (2018). The usefulness of hand washing during field training to prevent acute respiratory illness in a military training facility. *Medicine*, 97(30), e11594.
- Kim, J., Lee, S. Y., & Kang, J. (2020). Temperature reduction effects of rooftop garden arrangements: a case study of seoul national university. *Sustainability*, 12(15), 632.

- Kim, N., & Lambie, G. W. (2018). Burnout and implications for professional school counselors. *Professional Counselor*, 8(3), 277-294.
- Kimwaga, R., Mayo, A. W., & Guya, E. (2014). Menstrual hygiene management in secondary schools in Tanzania.
- Kinton, C., Smith, D. P., Harrison, J., & Culora, A. (2018). New frontiers of studentification: The commodification of student housing as a driver of urban change. *The Geographical Journal*, 184(3), 242-254.
- Kiruru, N. J., & Ogola, R. T. (2020). Quality of private accommodation for undergraduate students in public universities in Kenya. *European Journal of Education Studies*, 7(6).
- Kisumu West Constituency. (2020, 3 June). In Wikipedia. https://en.wikipedia.org/wiki/Kisumu_West_Constituency
- Kothari, C. (2016). *Research Methodology; Methods and Techniques*. New Delhi: New Age International Publishers.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Krejcie, R.V. and Morgan. (1970). *Determining Sample Size for Research Activities. Educational and Psychological Measurement*, Vol.30, No 3. Pp.607-610.
- Kuponiyi, OT, Amoran OE, Kuponiyi OT. (2016). School health services and their practice among public and private primary schools in Western Nigeria. *BMC Res Notes*. <http://bmcresnotes.biomedcentral.com/articles/10.1186/s13104-016-2006-6>.
- Laryea, S., & Ibem, E. (2017). 16th-18th August 2017 University of Ghana, Accra, Ghana.
- Leavy, P. (2022). Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches. *Guilford Publications*.
- Lim, J. H. (2019). Investigating the Effect of Increasing Enrolment on Student Housing Management: A Study of a Public University in Malaysia. *Journal of Asian Architecture and Building Engineering*, 18(2), 295-302.
- Lim, S., & Kim, H. (2020). Housing experiences of families with children living in poor and overcrowded housing in Korea. *Children and Youth Services Review*, 118, 105437.
- Lipson, S. K., Lattie, E. G., & Eisenberg, D. (2019). Increased rates of mental health service utilization by US college students: 10-year population-level trends (2007–2017). *Psychiatric services*, 70(1), 60-63.
- Little, W., Vyain, S., Scaramuzzo, G., Cody-Rydzewski, S., Griffiths, H., Strayer, E., & Keirns, N. (2014). *Introduction to sociology* (1st Canadian ed.) BC Campus: Victoria, BC, Canada.
- Lubis, M., Fauzi, R., Lubis, A. R., & Fauzi, R. (2018, August). A Case Study of Universities Dormitory Residence Management System (DRMS) in Indonesia. *2018 6th International Conference on Cyber and IT Service Management (CITSM)* (pp. 1-6). IEEE.

- Maddocks, S., Perumal, K., & Chetty, V. (2020). Schooling for children living with human immunodeficiency virus in a community in Kwazulu-Natal, South Africa: Perceptions of educators and healthcare workers. *The South African Journal of Physiotherapy*, (76)
- Maki, T. H., Singh, S., Eldabi, T., & Elali, W. (2015). Organisational effectiveness in secondary schools: An empirical study. *Higher Education in the Twenty-First Century II*, 1-117.
- Mamba, M. M. (2020). *Do tuition elimination policies in Sub-Saharan Africa matter? Evidence from the Universal Secondary Education Policy in Uganda*. Columbia University.
- Manti, S., & Licari, A. (2018). How to obtain informed consent for research. *Breathe*, 14(2), 145-152.
- Maore, N. M. (2014). *Influence of head teachers' student management principles on students' well-being in secondary schools in Kisii south district, Kenya* (Doctoral dissertation, University of Nairobi).
- Maphoso, L. S. T., & Mahlo, D. (2014). Basic facilities and academic achievement: A comparative study between boarding and non-boarding schools. *International Journal of Educational Sciences*, 6(2), 309-315.
- Maslow, A. (1943). *Maslow's hierarchy of needs*. Index of DOCS/Teaching Collection/Honolulu.
- Mathwasa, J., & Sibanda, L. (2020). Enhancing students' self-efficacy: implication for high school guidance and counselling educators. In *Counseling and Therapy*. *IntechOpen*. <https://doi.org/10.5772/intechopen.97085>
- Matthew, I. A. (2020). The Perception of School Heads and Teachers on Challenges of Effective Management of Public-Boarding Schools in Ondo State, Nigeria. *Asian Journal of Education and Social Studies*, 23-33. <https://doi.org/10.9734/ajess/2020/v8i130212>
- Maupa, B. (2020). *An evaluation of the effectiveness of guidance and counselling services offered in Zimbabwean universities* (Doctoral dissertation).
- Maurice, A. A., & Enose, M. S. (2016). Impact of free Secondary Education Policy on Primary to Secondary Education Transition Rate in Kenya: A case study of Mbita and Suba Sub- Counties.
- McCreesh, N., Frost, S. D., Seeley, J., Katongole, J., Tarsh, M. N., Ndunguse, R. & White, R. G. (2012). Evaluation of respondent-driven sampling. *Epidemiology*, 138-147.
- McKenna, J. M., & White, S. R. (2018). Examining the use of police in schools: How roles may affect responses to student misconduct. *American Journal of Criminal Justice*, 43, 448-470.
- McMaughan, D. J., Oloruntoba, O., & Smith, M. L. (2020). Socioeconomic status and access to healthcare: interrelated drivers for healthy aging. *Frontiers in public health*, 8, 231.
- Mellinger, C. D., & Hanson, T. A. (2020). Methodological considerations for survey research: Validity, reliability, and quantitative analysis. *Linguistica Antverpiensia, New Series—Themes in Translation Studies*, 19.

- Mensah, C., & Appietu, M. E. (2020). Examining Boarding School Foodservice Satisfaction and Patronage of Sources of Meals. *Journal of Culinary Science & Technology*, 18(6), 507-526
- Micha, R., Karageorgou, D., Bakogianni, I., Trichia, E., Whitsel, L. P., Story, M., & Mozaffarian, D. (2018). Effectiveness of school food environment policies on children's dietary behaviors. Systematic review and meta-analysis. *PLoS one*, 13(3), e0194555.
- Ministry of Education and Sports. (2017). *The Education and Sports Sector Annual Performance Report: Financial Year 2016/17*. Kampala, Uganda: Ministry of Education and Sports.
- Ministry of Education, Republic of Ghana. (2017). *Medium Term Expenditure Framework (MTEF) for 2017- 2019: 2017 budget estimates*. Accra, Ghana: Author. Available at <https://www.mofep.gov.gh/sites/default/files/pbbestimates/2017/2017-PBB-MOE.pdf>.
- Ministry of Education. (2020). *COVID-19 guidelines*. Available at https://www.education.go.ke/images/COVID19_GUIDELINES.pdf
- Mishra, S. B., & Alok, S. (2022). *Handbook of research methodology*.
- MOEST. (2016). *Basic Education Programme Rationale and Approach*. National Education Sector 2013-2018. Retrieved from Email: nesp@education.go.ke www.education.go.ke
- Mubita, K. (2016). Barriers to effective safety and health management at Sefula secondary school in western Zambia. *Asian Journal of Management Sciences & Education* Vol. 5(4) October 2016, pp 88-95
- Mubita, K. (2020). An assessment on the Provision, Quality, and Adequacy of School Welfare Facilities in Lusaka. *International Journal of Research and Innovation in Social Science (IJRISS)* |Volume V, Issue VI, June 2021|ISSN 2454-6186.
- Mugenda A.G, Mugenda O.M (2012). *Research Methods Dictionary*. Applied research and Training services, Nairobi, Kenya.
- Mumiukha, C. K., Ngugi, M. N., Ndiga, B. A., & Fedha, F. (2015). Transitional Enrolment Trends within the Different Educational Levels in Kenya: An Analysis of Promoting Facets. *Journal of Education and Practice*, 6(33), 21-32.
- Mummolo, J., & Peterson, E. (2019). Demand effects in survey experiments: An empirical assessment. *American Political Science Review*, 113(2), 517-529.
- Murphey, D., & Sacks, V. (2019). Supporting Students with Adverse Childhood Experiences: How Educators and Schools Can Help. *American Educator*, 43(2), 8-11.
- Mutisya, M. (2020, February 24). *Some Kenyan schools are dangerously overcrowded. What must be done?* The Conversation. <https://theconversation.com/some-kenyan-schools-are-dangerously-overcrowded-what-must-be-done-131774>
- Mwangota, B. (2019). *Perceptions of educational stakeholders on the implementation of fee-free education in public secondary schools in Tanzania: A case of Sumbawanga municipality* (Doctoral dissertation). The University of Dodoma.

- Mwikya, V. N., Cheloti, S. K., & Mulwa, D. (2019). Influence of cost of education on transition rates from primary to secondary schools in Kenya: A case of Machakos sub-county. *International Journal of Economics, Commerce and Management United Kingdom* ISSN 2348 0386 Vol. VII, Issue 3, March 2019
- Mwirigi, S. F., & Muthaa, G. M. (2015). Impact of enrollment on the quality of learning in primary schools in Imenti Central District, Kenya.
- Namai, L. B. A., & Manyasi, B. (2019). Effectiveness of Guidance and Counselling Procedures in the Development of Values among Learners in Public Secondary Schools in Nakuru County, Kenya.
- National Health Commission of China (2017). *Nutrition guidelines of school meals*. Accessed 8 July 2020. <http://www.nhc.gov.cn/wjw/yingyang/201708/e8a131882d2c4a8c95f10a8b7b5fe662.shtml>
- Ndoma, J. T., & Douglas, C. (2018). *The Effects of Shortage of Accommodation on Students'*. (Marketing Management Lecturer & PhD Candidate, Department of Entrepreneurship) BA ISAGO University, P. Bag 149, Gaborone, Botswana.
- Nemes, J., & Mzimya, S. (2015). The Availability and Utilisation of Girls' Hostel Services: The Case of Selected Rural-Based Community Secondary Schools in Igunga District, Tanzania. *International Journal in Management & Social Science*, 3(7), 114-123.
- Ngala, F. B. (2018). Students' Perception of Quality of Accommodation Resources used in Teacher Education Programmes in the Universities in Nakuru County, Kenya. *Kabarak Journal of Research & Innovation*, 5(2), 115-132.
- Ngugi, M., Mumiukha, C., Fedha, F., & Ndiga, B. (2015). Universal Primary Education in Kenya: Advancement and Challenges. *Journal of Education and Practice*, 6(14), 87-95.
- Nicholaus, C., Martin, H. D., Kassim, N., Matemu, A. O., & Kimiywe, J. (2020). Dietary Practices, Nutrient Adequacy, and Nutrition Status among Adolescents in Boarding High Schools in the Kilimanjaro Region, Tanzania. *Journal of Nutrition and Metabolism*. <https://doi.org/10.1155/2020/3592813>
- Njenga, M. M. (2019). *Institutional determinants of implementation of the 100 percent transition policy in public secondary schools in Nyandarua central sub-county, Kenya* (Doctoral dissertation, University of Nairobi). <http://erepository.uonbi.ac.ke/handle/11295/107451>
- Nor, Z. M., Abdullah, A. R., Jamaluddin, R., & Ghazali, H. (2021). Boarding school healthy eating policy implementation opinions of school teachers: a qualitative study. *International journal of modern Education*, 3(9), 50-65. Volume 3 Issue 9 (June 2021) PP. 50-65. <https://doi.org/10.35631/IJMoe.39005>
- Nwosu, K. C., Wahl, W. P., Cassim, H., Okwuduba, E. N., & Nnaemeka, G. U. (2020). Teaching children with special needs in Nigerian regular classes: Impact of gender, marital status, experience, and specialty. *International Journal of Learning, Teaching and Educational Research*, 19(12), 86-105. <https://doi.org/10.26803/ijlter.19.12.5>

- Nyaga, J., Mwaura, P., & Mutundu, K. (2021). Socio-Economic and Health Consequences of Drugs and Substance Use in Gachie, a Peri-Urban Town on the Outskirts of Nairobi. *VOLUME 6: DEC 2021*, 67.
- Nyirandikubwimana, C., Njihia, R., W, & Mwalwâ, S. (2019). Influence of Free Education Policy on Quality Education in Day Public Secondary Schools in Huye District, Rwanda. *Journal of Education*, 2(2), 29-51. <http://localhost/xmlui/handle/1/6817>
- Ochieng, M. (2023). *Influence of school meals on students' enrolment in selected Secondary Schools in Kyegegwa district* (Doctoral dissertation, Makerere University). <http://hdl.handle.net/20.500.12281/14478>
- Ogungbe, M. A., Olukolajo, M. A., & Binuyo, O. P. (2018). An investment analysis of private student hostel in Nigeria tertiary institutions: a case of FUTA campus. *International journal of investment management and financial innovations*, 4(1), 1-8.
- Ogunode, N. J., & Agwor N, O. (2021). Perception of Secondary School Teachers on the Causes of Inadequate Infrastructural Facilities in Public Secondary Schools in Gwagwalada. Area Council of FCT, Abuja, Nigeria. *Electronic Research Journal of Behavioural Sciences*, 4, 1-9.
- Ohri-Vachaspati, P., Turner, L., & Chaloupka, F. J. (2012). Fresh Fruit and Vegetable Program participation in elementary schools in the United States and availability of fruits and vegetables in school lunch meals. *Journal of the Academy of Nutrition and Dietetics*, 112(6), 921-926. <https://doi.org/10.1016/j.jand.2012.02.025>
- Olagunju, R. E., & Zubairu, S. N. (2016). Post Occupancy Evaluation of Students 'hostel Accommodation in Federal University of Technology, Minna. *Journal of Building Performance*, 7(1).85.
- Ong'injo, J. A., Ngala, F., & Kiptiony, G. (2023). Relationship between increased student enrolment and delivery of catering services in public boarding secondary schools in Kisumu West Sub- County, Kenya. *Journal of Education Management & Leadership (JEMML)*, 2(1), 118-136. <https://doi.org/10.51317/jeml.v2i1.391>
- Ong'injo, J., Ngala, F., & Kiptiony, G. (2023). Relationship between Increased Student Enrolment and Delivery of Accommodation Services in Public Boarding Secondary Schools in Kisumu West Sub- County, Kenya. *Kabarak Journal of Research & Innovation*, 13(3), 51-65. <http://ojs.kabarak.ac.ke/index.php/kjri/article/view/686>
- Orscheln, R. C., Newland, J. G., & Rosen, D. A. (2021). Practical school algorithms for symptomatic or SARS-cov-2-exposed students are essential for returning children to in-person learning. *The Journal of Pediatrics*, 229, 275. <https://doi.org/10.1016/j.jpeds.2020.09.060>
- Otieno, M. A., & Ochieng, J. A. (2020). Impact of 100 per cent transition policy on public secondary schools in Machakos Sub-County, Kenya: Focusing on coping strategies. *Journal of Education and Practice*, 11(24), 69-77. <https://doi.org/10.7176/JEP/11-24-08>

- Owino, S. (2023, April 20). MPs set out new measures to ensure safety in schools. *Nation; Nation Media Group*. <https://nation.africa/kenya/news/education/mps-set-out-new-measures-to-ensure-safety-in-schools-4205766>
- Oxworth, C. (2023). African girls' experiences of gender in school communities: observations and reflections from a researcher. In *Inclusion, Equity, Diversity, and Social Justice in Education: A Critical Exploration of the Sustainable Development Goals* (pp. 153-165). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-19-5008-7_11
- Parhiala, P., Ranta, K., Kontunen, J., Law, R., La Greca, A. M., & Gergov, v. (2019). Interpersonal counselling in the treatment of adolescent depression: randomized controlled effectiveness and feasibility study in school health and welfare services. *School mental health. Journal Springe link*, 1-19. <https://doi.org/10.1007/s12310-019-09346-w>
- Peprah, C., Oduro-Ofori, E., & Asante-Wusu, I. (2015). Analysis of accessibility to water supply and sanitation services in the Awutu-Senya East Municipality, Ghana. *Journal of Sustainable Development*, 8(8), 310. <https://doi.org/10.5539/jsd.v8n8p310>
- Powell, P. K., Lawler, S., Durham, J., & Cullerton, K. (2021). *The Food Choices of US University Students during COVID-19*. *Appetite*, 161, 105130. <https://doi.org/10.1016/j.appet.2021.105130>
- Prestbakmo, M. H. (2020). *Experiences with organizing school food programs in Norwegian Lower Secondary Schools—a qualitative study* (Master's thesis, Oslo Metropolitan University). Storbyuniversitet. <https://hdl.handle.net/10642/8886>
- Puth, M. T., Neuhäuser, M., & Ruxton, G. D. (2014). Effective use of Pearson's product-moment correlation coefficient. *Animal behaviour*, 93, 183-189. <https://doi.org/10.1016/j.anbehav.2014.05.003>
- Ramukumba, T. S., Rasesemola, R. M., & Matshoge, G. P. (2019). Compliance to the integrated school health policy: Intersectoral and multisectoral collaboration. *Curationis*, 42(1), 1-8. <https://doi.org/10.4102/curationis.v42i1.1912>
- Ranga, A., & Majra, J. P. (2020). Determinants of Personal Hygiene among School Children: A Community Based Cross-Sectional Study from Sonapat, Northern India. *Global Journal of Medicine & Public Health*, 9(4), 1-8.
- Read, A., Lutgens, D., & Malla, A. (2023). A Descriptive Overview of Mental Health Services Offered in Post-Secondary Educational Institutions Across Canada. *The Canadian Journal of Psychiatry*, 68(2), 101-108. <https://doi.org/10.1177/07067437221128168>
- Reeves, L. M., Priest, P. C., & Poore, M. R. (2012). School toilets; facilitating hand hygiene? A review of primary school hygiene facilities in a developed country. *Journal of public health*, 34(4), 483-488. <https://doi.org/10.1093/pubmed/fds028>
- Republic of Kenya.(2018). Economic survey. Nairobi. *Kenya National Bureau of Statistics*. <https://doi.org/10.1017/S1368980019001174>

- Rida, Z., Hall, E., Hasnin, S., Coffey, J., & Dev, D. A. (2019). The perception of school food-service professionals on implementing the Healthy, Hunger-Free Kids Acts of 2010: a mixed-methods study. *Public health nutrition*, 22(11), 1960-1970. <https://doi.org/10.1017/S1368980019001174>
- Roqib, M. (2021). Increasing Social Class through Islamic Boarding Schools in Indonesia. *Journal of Social Studies Education Research*, 12(2), 305-329.
- Rukabu, A. B. (2015). *Reversing privatization of education: A case study of Rwanda*. Kigali: Advocacy Works Action.
- Ruto, J., Manduku, J., & Kosgey, A. (2017). Determinants of effective guidance and counselling programmes in public secondary schools in Kericho Sub-County, Kenya. *European Journal of Education Studies*. <http://dx.doi.org/10.46827/ejes.v0i0.1211>
- Saggers, B. (2015). Student perceptions: Improving the educational experiences of high school students on the autism spectrum. *Improving Schools*, 18(1), 35-45. <https://doi.org/10.1177/1365480214566213>
- Salehi, A. S., Saljuqi, A. T. K., Akseer, N., Rao, K., & Coe, K. (2018). Factors influencing performance by contracted non-state providers implementing a basic package of health services in Afghanistan. *International journal for equity in health*, 17(1), 1-16. <https://doi.org/10.1186/s12939-018-0847-4>
- Schroeder, K., Malone, S. K., McCabe, E., & Lipman, T. (2018). Addressing the social determinants of health: A call to action for school nurses. *The Journal of School Nursing*, 34(3), 182-191. <https://doi.org/10.1177/1059840517750733>
- Serrem, K., Dunay, A., Serrem, C., Atubukha, B., Oláh, J., & Illés, C. B. (2020). Paucity of nutrition guidelines and nutrient quality of meals served to Kenyan boarding high school students. *Sustainability*, 12(8), 3463-3475. <https://doi.org/10.3390/su12083463>
- Shi, Y., Lukomskyj, N., & Allman-Farinelli, M. (2021). Food access, dietary acculturation, and food insecurity among international tertiary education students: A scoping review. *Nutrition*, 85, 111100. <https://doi.org/10.1016/j.nut.2020.111100>
- Shokri, R., Dargahi, A., Rezaei, S., Valipour, A., Zovedavianpoor, S., Atafar, Z., & Golchehreh, M. (2018). A comparative study of the environmental health and safety of urban and rural schools of Abadan and their compliance with national standards. *Journal of Advances in Environmental Health Research*, 6(1), 9-16. <https://dorl.net/dor/20.1001.1.26763478.2018.6.1.2.7>
- Simons, H. (2014). Case study research: In-depth understanding in context. *The Oxford handbook of qualitative research*, 455-470. <https://doi.org/10.1093/oxfordhb/9780199811755.013.005>
- Skundberg-Kletthagen, H., & Moen, Ø. L. (2017). Mental health work in school health services and school nurses' involvement and attitudes, in a Norwegian context. *Journal of clinical nursing*, 26(23-24), 5044-5051. <https://doi.org/10.1111/jocn.14004>

- Smith, L. P., Ng, S. W., & Popkin, B. M. (2013). Trends in US home food preparation and consumption: analysis of national nutrition surveys and time use studies from 1965–1966 to 2007–2008. *Nutrition journal*, 12(1), 1-10. <https://doi.org/10.1186/1475-2891-12-45>
- Sugut, T. J. (2020). *Influence of Principals' Management Practices on Adherence to Safety Standards in Public Secondary Schools in Nandi North Sub-county, Kenya*. (Doctoral dissertation Nairobi University). <http://erepository.uonbi.ac.ke/handle/11295/153750>
- Suleiman, Y., Olanrewaju, M. K., & Suleiman, J. M. (2019). Improving Guidance and Counseling Services for Effective Service Delivery in Nigerian Secondary Schools. *JOMSIGN: Journal of Multicultural Studies in Guidance and Counseling*, 3(1), 75-89. <https://doi.org/10.17509/jomsign.v3i1.19606>
- Sürücü, L., & Maslakci, A. (2020). Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, 8(3), 2694-2726.
- Tabong, P. T. N., Maya, E. T., Adda-Balinia, T., Kusi-Appouh, D., Birungi, H., Tabsoba, P., & Adongo, P. B. (2018). Acceptability and stakeholders perspectives on feasibility of using trained psychologists and health workers to deliver school-based sexual and reproductive health services to adolescents in urban Accra, Ghana. *Reproductive health*, 15(1), 1-16. <https://doi.org/10.1186/s12978-018-0564-x>
- Tam, R., Yassa, B., Parker, H., O'Connor, H., & Allman-Farinelli, M. (2017). University students' on-campus food purchasing behaviors, preferences, and opinions on food. <https://doi.org/10.1016/j.nut.2016.07.007>
- Thulani, D. (2015). Gender disparities in Education enrolment and attainment in Sub Saharan Africa. *Journal of Educational and social research*, 5(3), 297-283. <https://doi.org/10.5901/jesr.2015.v5n3p279>
- U.S. Department of Agriculture, Food and Nutrition Service, Washington, DC. (As of January 2019). Retrieved from <https://www.unicef.org/stories/11-lessons-water-school>.
- Ugalde, M. R., Guffey, D., Minard, C. G., Giardino, A. P., & Johnson, G. A. (2018). A survey of school nurse emergency preparedness 2014–2015. *The Journal of School Nursing*, 34(5), 398-408. <https://doi.org/10.1177/1059840517704702>
- Umeh, C. A. (2018). Challenges toward achieving universal health coverage in Ghana, Kenya, Nigeria, and Tanzania. *The International journal of health planning and management*, 33(4), 794-805. <https://doi.org/10.1002/hpm.2610>
- UNESCO. (2015). Education for All 2000-2015: Achievements and Challenges, Education for All. *Global Monitoring Report*. Education for All 2000-2015.
- UNICEF. (2015). Water, sanitation and hygiene in schools: Global baseline report 2015. United Nations Children's Fund (UNICEF).
- United Nations. (2015). Sustainable Development Goals. *Sustainable Development Knowledge Platform*.
- Varpio, L., Paradis, E., Uijtdehaage, S., & Young, M. (2020). The distinctions between theory, theoretical framework, and conceptual framework. *Academic Medicine*, 95(7), 989-994.

- Wada, O. Z., & Oloruntoba, E. O. (2021). Safe reopening of schools during COVID-19: an evaluation of hand wash facilities and students' hand hygiene knowledge and practices. *European Journal of Environment and Public Health*, 5(2), em0072. <https://doi.org/10.21601/ejeph/9704>
- Waithaka, T. K. (2017). *Indiscipline in Public Secondary Schools: the Case of Nairobi County* (Doctoral dissertation, University of Nairobi). <http://hdl.handle.net/11295/102818>
- Wan, Y. (2021). Capacity or money? Why students choose to drop out of junior high school in rural northeast China. *Educational Review*, 1-18.
- Wanja, H. (2014). An understanding of the Trends in the Free Secondary Education funding policy and transition rates from primary to secondary education in Kenya. *Journal of Education and Social*. <http://dx.doi.org/10.5901/jesr.2014.v4n1p133>
- Waweru, R. (2011) *Effect of Free Primary Education on Enrollment in Private Schools in Kenya: A Case of Kiambu Municipality in the County of Kiambu, Kenya* (Doctoral dissertation, Kenyatta University).
- Weiss, K. D. (2020). *Are We Prepared? A Quantitative Study of Elementary School Counselors' Knowledge, Skills, and Dispositions to Working with LGBTQ Youth*. Rowan University.
- Were, B. M. (2014). *The Influence of Low-Cost Boarding Primary Schools on Access and Retention in Arid and Semi-Arid Lands: a case of Lomelo Division; Turkana county-kenya*. Unpublished Master of Education of Kenyatta University.
- World Health Organization. (2020). *World health statistics*. Define. Indic 2007, 79–86. Available online: <https://www.who.int/whostat2007/en/> (accessed on 31 January 2020). *WHO*.

APPENDICES

Appendix I: Letter of Introduction

Ong'injo Atieno Jackline,
Kabarak University,
P.O.Private Bag 20157,
Nakuru.

Dear Sir/Madam,

Re: Permission for Data Collection

I am a student pursuing a Master's Degree in management and leadership at Kabarak University. I am conducting research on the relationship between increased student enrolment and delivery of student welfare services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

Your school is among those chosen for the study. It would be greatly appreciated if you would allow the sampled respondents from your school to take part in this study on an agreed-upon date. The information gathered will be held in the strictest confidence and will be used solely for academic reasons.

Thank you in advance for your cooperation.

Sincerely,

Ong'injo Atieno Jackline

GMEML/M/0466/05/19

Appendix II: Letter of Consent

School of Education

Kabarak University

P.O. Box Private Bag, 20157,

Kabarak.

Informed consent

Title : Relationship between increased student enrolment and delivery of student welfare services in public boarding secondary schools in Kisumu West Sub- County, Kenya.

Description: This is a research proposal for the Masters of Education in leadership and management at Kabarak University. The Master's student is Jackline Atieno Ong'injo and the supervisors are Prof. Frederick Ngala, PhD and Prof. Gladys Kiptiony, PhD. Information is needed on student welfare services these include the accommodation services, catering services, health services, and guidance and counseling services. Your participation and suggestions will be highly appreciated.

Voluntary Participation: Your participation in this study is voluntary. You can refuse to participate in the study or opt out at any time without giving any explanations.

Anonymity: To ensure anonymity, please do not write your name or the name of your school on the questionnaires.

Privacy and Confidentiality: In this research, neither your name nor the name of your school will be mentioned. The information gathered will not be disclosed to anyone other than the researcher and will be kept in locked cabinets that only the researcher has access to. Immediately after data analysis, all the questionnaires from the field will be shredded.

Dangers: There are no risks associated with the study, but your participation will require some of your time. Filling the questionnaires should take place in the school compound.

Benefits: One of the benefits that will emerge from this study is that you will be able to contribute to the improvement of students' welfare services in the schools.

Results communication: This information will only be used for Academic purposes. However, the researcher will be happy to share the outcomes of the study with interested participants. Thank you once again for agreeing to take part in this research. Please do not hesitate to contact the researcher through the university if you have any recommendations or queries.

Fill the box below.

I have read and understood and do hereby accept to participate in this research

Yes () No ()

Appendix III: Questionnaire for Students

Instructions: Kindly do not include your name or the name of your school on the questionnaire. Fill in the blanks with the appropriate answer by putting a tick (✓) inside the bracket.

Section A: Background information

1. Please put a tick against your gender.
Female [] Male []
2. Please indicate your age below.
Below 15yrs () 15-18 years () above 18 years ()
3. Which class are you in?
Form 2 () Form 3 () Form 4()
4. Which year did you join form one?
2021 () 2020 () 2019 ()

Section B: Accommodation services

Kindly indicate whether you agree or disagree with the following statements by placing a tick (✓) in the appropriate column.

Key 1 Strongly agree, 2 Agree, 3 Disagree, 4 strongly disagree.

No.	Statements	1	2	3	4
1.	Due to increased enrolment, there is crowding in the dorm				
2.	Due to increased enrolment, there are fewer bed spaces in the dorm				
3.	Due to increased enrolment, some students share beds				
4.	Due to increased enrolment, there are increased incidences of stealing in the dormitories.				
5.	Due to increased enrolment, dormitories are often untidy.				
7.	Due to increased enrolment, there are increased cases of respiratory infections among students in the dormitories.				
8.	Due to increased enrolment, there is usually a lot of noise the dorm				
10.	The bathrooms in the dormitories are not enough for us				
11.	The toilets in the dormitories are not enough for us				
12.	Due to increased enrolment, there is inadequate supply of water in the dormitories.				
13.	Increased enrolment denies students privacy in the dormitories.				

Section C: Catering services

Please indicate whether you agree or disagree with the following statements by placing a tick (✓) in the appropriate column.

Key 1 Strongly agree, 2 Agree, 3 Disagree, 4 strongly disagree

No.	Statements	1	2	3	4
1.	As a result of increased enrolment sometimes, we eat half-cooked meals.				
2.	As a result of increased enrolment, the school sometimes provides poor quality food.				
3.	Due to increased enrolment, we are sometimes served little food.				
4.	Due to increased enrolment, we spend a lot of time queuing to be served food				
5.	As a result of increased enrolment, we often don't eat balanced diet				
6.	Due to increased enrolment, there is overcrowding in the dining halls.				
7.	Due to increased enrolment, there are fewer cooks in the school.				
8.	As a result of increased enrolment, there is competition for food among students.				
9.	Due to increased enrolment, sometimes students eat stale food.				

Section D: Health services

Please indicate whether you agree or disagree with the following statements by placing a tick (✓) in the appropriate column.

Key 1 Strongly agree, 2 Agree, 3 Disagree, 4 strongly disagree

No.	Statements	1	2	3	4
1.	Due to increased student enrolment, the toilets are usually dirty				
2.	Due to increased enrolment, hand-washing points in the school are not enough.				
3.	As a result of increased student enrolment, there are inadequate toilet facilities in the school compound.				
4.	As a result of increased student enrolment, there is an inadequate supply of clean water in the school compound				
6.	Due to increased student enrolment, there are more cases of infectious diseases.				
7.	As a result of increased student enrolment, there are cases of inadequate medicine in the school				
8.	As a result of increased student enrolment, nurses in schools are not enough.				
9.	Due to increased student enrolment, there are delays in attending to sick students.				

Section E: Guidance and Counseling services

Please indicate whether you agree or disagree with the following statements by placing a tick (✓) in the appropriate column.

Key 1 Strongly agree, 2 Agree, 3 Disagree, 4 strongly disagree

No.	STATEMENTS	1	2	3	4
1.	Due to increased enrolment, there are limited guidance and counselling services in schools crf				
2.	Due to increased enrolment, there are few face-to-face counselling sessions for students.				
3.	As a result of increased student enrolment, there are limited spaces in school where guidance and counselling sessions can take place.				
4.	Due to increased student enrolment, indiscipline cases have increased in the school.				
5.	Due to increased student enrolment, time set aside for guidance and counselling is not enough.				
6.	Due to increased student enrolment, there are inadequate guidance and counselling facilities in the school.				
7.	Due to increased student enrolment, guidance and counselling personnel are not enough for all students.				

Appendix IV: Questionnaire for Class teachers

Section A: Background information

Instructions: Kindly do not include your name or the name of your school on the questionnaire. Fill in the blanks with the appropriate answer by putting a tick (✓) inside the bracket.

1) Please tick against your gender.

Male Female

2) Indicate your age bracket

Below 40 years () 40-50 years () Over 50 years ()

3) Kindly indicate the type of school

Girls Boys Mixed

4) How long have you served as a teacher in the school?

Below 5 years () 5 years-10years () 10 years-15 years () Over 15 years ()

5) In what year was, your school founded.....
.....

6) Please complete the table below by showing the number of students enrolled in your school over the last four years.

Year	2018	2019	2020	2021
No. of students				

7) Please complete the table by showing form one intake over the last four years.

Year	2018	2019	2020	2021
Form 1 Intake				

Section B: Accommodation services

1. How has increased enrolment affected crowding in the dormitories?
.....
2. How has increased enrolment affected bed spaces in the dormitories?
.....
3. With increased enrolment, do we have enough beds in the dormitories?
.....
4. How has increased enrolment affected incidences of stealing in the dormitories?
.....
5. How has increased enrolment affected the level of uncleanliness/untidiness within the dormitories?
.....
6. How has increased enrolment affected the frequency of respiratory infections among students?
.....
7. How has increased enrolment affected noise pollution in the dormitories?
.....
8. How has increased enrolment affected the availability of bathrooms in the school?
.....
9. How has increased enrolment affected the availability of toilets in the school?
.....
10. How has increased enrolment affected water supply in the school?
.....

Section C: Catering services

1. How has increased enrolment affected the cooking of meals for students?
.....
2. How has increased enrolment affected the provision of quality food to students?
.....
3. How has increased enrolment affected the quantity of food provided to students?
.....

4. How has increased enrolment affected the time set aside for meals?
.....
5. How has increased enrolment affected the provision of a balanced diet to students?
.....
6. How has increased enrolment affected crowding in the dining halls?
.....
7. With increased enrolment, has the number of cooks increased?
.....
8. How has increased enrolment affected competition for food among students during meals?
.....
9. How has increased enrolment affected the provision of fresh food to students?
.....

Section D: Health services

1. How has increased enrolment affected the hygiene levels in the school?
.....
2. How has increased enrolment affected the number of hand washing points in the school?
.....
3. With increased enrolment, do you have enough sanitation facilities in school?
.....
4. How has increased enrolment affected the provision of clean water to the students?
.....
5. With increased enrolment, do you have enough toilets in the school compound?
.....
6. How has increased enrolment affected the spread of infectious diseases among students?
.....
7. How has increased enrolment affected the provision of medicine to sick students?
.....
8. How has increased enrolment affected the availability of nurses in school?
.....

9. How has increased enrolment affected attending of sick students in school?
.....

SECTION E: Guidance and Counseling services

1. With increased enrolment, do we have limited guidance and counselling services in school.....

2. How has increased enrolment affected face-to-face counselling sessions for students?
.....

3. How has increased enrolment affected the spaces in school where guidance and counselling sessions can take place?
.....

4. How has increased enrolment affected student discipline in school?
.....

5. How has increased enrolment affected the time set aside for guidance and counselling?
.....

6. With increased student enrolment, are there enough guidance and counselling facilities in school?
.....

7. With increased student enrolment, are there enough personnel for guidance and counselling in school?
.....

Thank you for participating!

Appendix V: Questionnaire for Boarding Mistresses/Masters

Section A: Background information

Instructions: Kindly do not include your name or the name of your school on the questionnaire. Fill in the blanks with the appropriate answer by putting a tick (✓) inside the bracket.

1. Please tick against your gender.

Male Female

2. Indicate your age bracket

Below 40 years () 40-50 years () Over 50 years ()

3. Indicate the type of school

Girls boys mixed

4. How long have you been employed at the school?

Below 5 years () 5 years-10years () 10 years-15 years () Over 15 years ()

Section B: Accommodation services

1. How has increased enrolment affected crowding in the dormitories?

.....

2. How has increased enrolment affected bed spaces in the dormitories?

.....

3. With increased enrolment, do we have enough beds in the dormitories?

.....

4. How has increased enrolment affected incidences of stealing in the dormitories?

.....

5. How has increased enrolment affected the level of uncleanliness/untidiness within the dormitories?

.....

6. How has increased enrolment affected the frequency of respiratory infections among students?

.....

7. How has increased enrolment affected noise pollution in the dormitories?

.....

8. How has increased enrolment affected the availability of bathrooms in the school?

.....

9. How has increased enrolment affected the availability of toilets in the school?

.....

10. How has increased enrolment affected water supply in the school?

.....

Thank you for participating

Appendix VI: Questionnaire for Matrons/Patrons

Section A: Background information

Instructions: Kindly do not include your name or the name of your school on the questionnaire. Fill in the blanks with the appropriate answer by putting a tick (✓) inside the bracket.

1. Please tick against your gender.

Male Female

2. Indicate your age bracket

Below 40 years () 40-50 years () Over 50 years ()

3. Type of school

Girls boys mixed

4. How long have you been employed at the school?

Below 5 years () 5 years-10years () 10 years-15 years () over 15 years ()

Section B: Accommodation Services

1. How has increased enrolment affected crowding in the dormitories?

.....

2. How has increased enrolment affected bed spaces in the dormitories?

.....

3. With increased enrolment, do we have enough bed in the dormitories?

.....

4. How has increased enrolment affected incidences of stealing in the dormitories?

.....

5. How has increased enrolment affected the level of uncleanliness/untidiness within the dormitories?

.....

6. How has increased enrolment affected the frequency of respiratory infections among students?

.....

7. How has increased enrolment affected noise pollution in the dormitories?

.....

8. How has increased enrolment affected the availability of bathrooms/toilets in the school?

.....

9. How has increased enrolment affected water supply in the school?

.....

Thank you for participating!

Appendix VII: Questionnaire for Cateresses/Caterers

Section A: Background information

Instructions: Kindly do not include your name or the name of your school on the questionnaire. Fill in the blanks with the appropriate answer by putting a tick (✓) inside the bracket.

1. Please tick against your gender

Male Female

2. Indicate your age bracket

Below 40 years () 40-50 years () Over 50 years ()

3. Type of school

Girls boys mixed

4. How long have you been employed at the school?

Below 5 years () 5 years-10years () 10 years-15 years () Over 15 years ()

Section B: Catering services

1. How has increased enrolment affected the cooking of meals for students?

.....

2. How has increased enrolment affected the provision of quality food to students?

.....

3. How has increased enrolment affected the quantity of food provided to students?

.....

4. How has increased enrolment affected the time set aside for meals?

.....

5. How has increased enrolment affected the provision of a balanced diet to students?

.....

6. How has increased enrolment affected crowding in the dining halls?

.....

7. With increased enrolment, has the number of cooks increased?

.....

8. How has increased enrolment affected competition for food among students during meals?

.....

9. How has increased enrolment affected the provision of fresh food to students?

.....

Thank you for Participating!

Appendix VIII: Questionnaire for Nurses

Section A: Background information

Instructions: Kindly do not include your name or the name of your school on the questionnaire. Fill in the blanks with the appropriate answer by putting a tick (✓) inside the bracket.

1. Please tick against your gender
Male Female
2. Indicate your age bracket
Below 40 years () 40-50 years() Over 50 years ()
3. Type of school
Girls Boys Mixed
4. How long have you served in the school?
Below 5 years () 5 years-10years () 10 years-15 years () Over 15 years ()

Section B: Health services

1. How has increased enrolment affected the hygiene levels in the school?
.....
2. How has increased enrolment affected the number of hand washing points in the school?
.....
3. With increased enrolment, do you have enough sanitation facilities in school?
.....
4. How has increased enrolment affected the provision of clean water to the students?
.....
5. With increased enrolment, do you have enough toilets in the school compound?
.....
6. How has increased enrolment affected the spread of infectious diseases among students?
.....
7. How has increased enrolment affected the provision of medicine to sick students?
.....

8. How has increased enrolment affected the availability of nurses in school?

.....

9. How has increased enrolment affected attending of sick students in school?

.....

Thank you for participating!

Appendix IX: Questionnaire for Heads of Guidance and Counseling

Section A: Background Information

Instructions: Kindly do not indicate your name or that of your school on the questionnaire. Respond to the questions by putting a tick (✓) inside the bracket against the appropriate answer.

1. Please tick against your gender
Male Female
2. Kindly Indicate your age bracket
Below 40 years () 40-50 years () Over 50 years ()
3. Type of school
Girls Boys Mixed
4. How long have you been employed at the school?
Below 5 years () 5 years-10years () 10 years-15 years () Over 15 years ()

Section B: Guidance and Counseling services

1. With increased enrolment, do we have limited guidance and counselling services in school?
.....
2. How has increased enrolment affected face-to-face counselling sessions for students?
.....
3. How has increased enrolment affected the spaces in school where guidance and counselling sessions can take place?.....
.....
4. How has increased enrolment affected student discipline in school?
.....
5. How has increased enrolment affected the time set aside for guidance and counselling?
.....
6. With increased student enrolment, are there enough guidance and counselling facilities in school?
7. With increased student enrolment, are there enough personnel for guidance and counselling in school?.....

Thank you for participating!

Appendix X: Table for Determining Sample Size

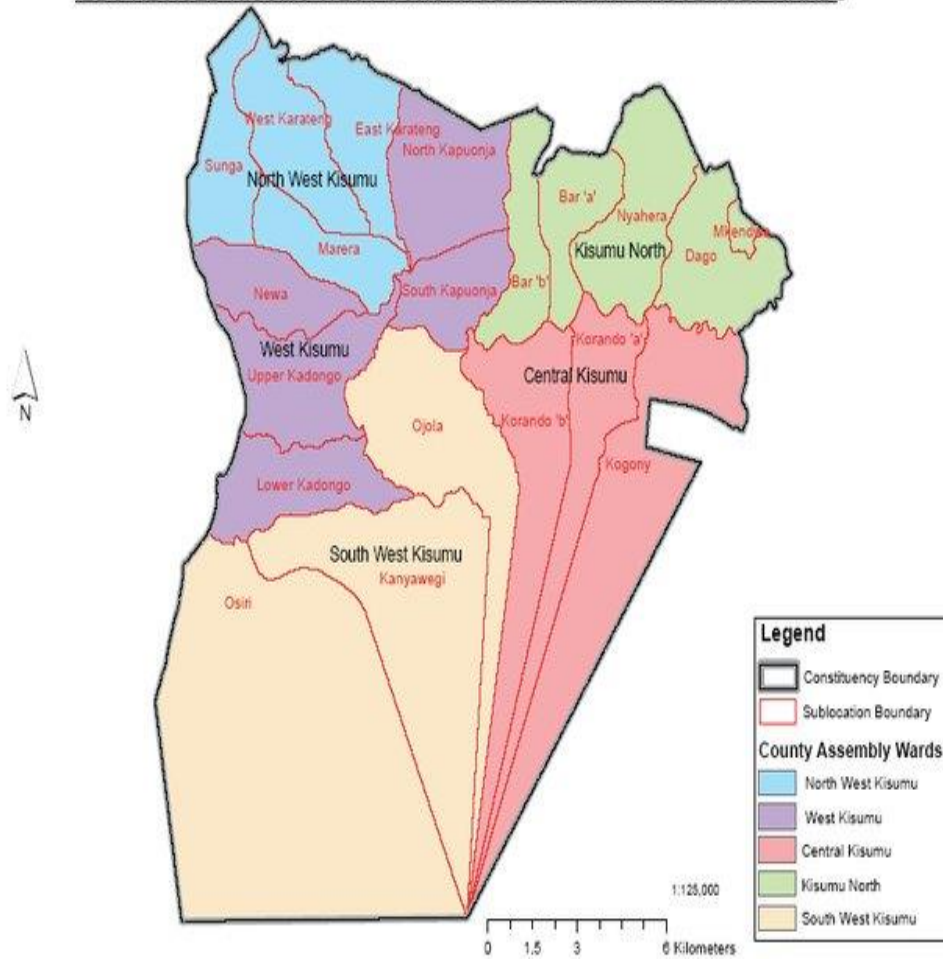
<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

Appendix XI: Geographical Location (Map)

IEBC REVISED KISUMU WEST CONSTITUENCY COUNTY ASSEMBLY WARDS



Appendix XII: KUREC Approval Letter



KABARAK UNIVERSITY RESEARCH ETHICS COMMITTEE

Private Bag - 20157
KABARAK, KENYA
Email: kurec@kabarak.ac.ke

Tel: 254-51-343234/5
Fax: 254-051-343529
www.kabarak.ac.ke

OUR REF: KABU01/KUREC/001/05/07/22

Date: 12th July, 2022

Jackline Atieno Onginjo,
Kabarak University,

Dear Jackline,

RE: RELATIONSHIP BETWEEN INCREASED STUDENT ENROLMENT AND DELIVERY OF STUDENT WELFARE SERVICES IN PUBLIC BOARDING SECONDARY SCHOOLS IN KISUMU WEST SUB-COUNTY, KENYA

This is to inform you that **KUREC** has reviewed and approved your above research proposal. Your application approval number is **KUREC-050722**. The approval period is **12/07/2022 – 12/07/2023**.

This approval is subject to compliance with the following requirements:

- i. All researchers shall obtain an introduction letter to NACOSTI from the relevant head of institutions (Institute of postgraduate, School dean or Directorate of research)
- ii. The researcher shall further obtain a RESEARCH PERMIT from NACOSTI before commencement of data collection & submit a copy of the permit to **KUREC**.
- iii. Only approved documents including (informed consents, study instruments, MTA Material Transfer Agreement) will be used
- iv. All changes including (amendments, deviations, and violations) are submitted for review and approval by **KUREC**;
- v. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **KUREC** within 72 hours of notification;
- vi. Any changes, anticipated or otherwise that may increase the risk(s) or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to **KUREC** within 72 hours;
- vii. Clearance for export of biological specimens must be obtained from relevant institutions and submit a copy of the permit to **KUREC**;
- viii. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal and;
- ix. Submission of an executive summary report within 90 days upon completion of the study to **KUREC**

Sincerely,

Prof. Jackson Kitetu PhD.
KUREC-Chairman

Cc Vice Chancellor
DVC-Academic & Research
Registrar-Academic & Research
Director-Research Innovation & Outreach
Institute of Post Graduate Studies



As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord.
(1 Peter 3:15)



Kabarak University is ISO 9001:2015 Certified

Appendix XIII: University Research Authorization Letter


KABARAK UNIVERSITY
OFFICE OF THE DIRECTOR
INSTITUTE OF POST GRADUATE STUDIES

Private Bag - 20157
KABARAK, KENYA
<http://kabarak.ac.ke/institute-postgraduate-studies/>

E-mail: directorpostgraduate@kabarak.ac.ke

14th July 2022

The Director General
National Commission for Science, Technology & Innovation (NACOSTI)
P.O. Box 30623 – 00100
NAIROBI

Dear Sir/Madam,

RE: JACKLINE ATIENO ONGINJO – GMEML/M/0466/05/19

The above named is a student at Kabarak University. She is carrying out a research entitled “*Relationship Between Increase Student Enrolment and Delivery of Student Welfare Services in Public Boarding Secondary Schools in Kisumu West Sub-County, Kenya.*”

The student has been granted ethical clearance by Kabarak University Research Ethics Committee and is ready to undertake field research.

Kindly provide the student with a research permit to enable her to undertake the research.

Thank you.



Dr. Wilson O. Shitandi
DIRECTOR, POSTGRADUATE STUDIES



Kabarak University Moral Code

As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord. (1 Peter 3:15)



Kabarak University is ISO 9001:2015 Certified

Appendix XIV: NACOSTI Research Permit


REPUBLIC OF KENYA


**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Ref No: **958006** Date of Issue: **25/July/2022**

RESEARCH LICENSE



This is to Certify that Miss., Jackline Atieno Ong'injo of Kabarak University, has been licensed to conduct research in Kisumu on the topic: RELATIONSHIP BETWEEN INCREASED STUDENT ENROLMENT AND DELIVERY OF STUDENT WELFARE SERVICES IN PUBLIC BOARDING SECONDARY SCHOOLS IN KISUMU WEST SUB-COUNTY, KENYA for the period ending : 25/July/2023.

License No: **NACOSTI/P/22/19148**

Applicant Identification Number
958006


 Director General
**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION**

Verification QR Code


NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

Appendix XV: Permit from Sub-County Director of Education

**MINISTRY OF EDUCATION SCIENCE AND TECHNOLOGY
STATE DEPARTMENT OF BASIC EDUCATION**

WHEN REPLYING QUOTE
knortheducationoffice@gmail.com



KISUMU WEST DISTRICT
P.O. BOX 3001-40100
KISUMU

Tel: 020785643/44

REF: KSM/N/ED/SCH/2/VOL.1(12)

27TH JULY, 2022

TO

ALL PRINCIPALS OF BOARDING SECONDARY SCHOOLS
KISUMU WEST SUB COUNTY


**RE: AUTHORITY TO CONDUCT RESEARCH FOR
FULFILLMENT OF THE AWARD OF MASTERS OF
EDUCATION IN LEADERSHIP AND MANAGEMENT.**

Authority has been granted to the **JACKLINE ATIENO ONG'INJO** to
conduct research on ***Relationship between Increased Student Enrolment
and Delivery of Student Welfare Services in Public Boarding Secondary
Schools in Kisumu West Sub-County In Kisumu County.***

Any assistance given to her will be highly appreciated.

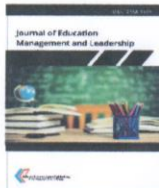
Thanks in advance.

SUB-COUNTY DIRECTOR OF EDUCATION
KISUMU WEST SUB-COUNTY
(SCDE)


**MARY OICHOE
SUB COUNTY EDUCATION OFFICER
KISUMU WEST**

CC: DEPUTY COUNTY COMMISSIONER
KISUMU WEST

Appendix XVI: List of Publication



RELATIONSHIP BETWEEN INCREASED STUDENT ENROLMENT AND DELIVERY OF CATERING SERVICES IN PUBLIC BOARDING SECONDARY SCHOOLS IN KISUMU WEST SUB-COUNTY, KENYA

Authors

Jackline Atieno Ong'injo⁽¹⁾ ; Fredrick Ngala⁽²⁾ ; Gladys Kiptiony⁽³⁾ 

Main author email: jackieonginjo@gmail.com

(1,2,3) Kabarak University, Kenya.

Cite this article in APA

Ong'injo, J. A., Ngala, F., & Kiptiony, G. (2023). Relationship between increased student enrolment and delivery of catering services in public boarding secondary schools in Kisumu West Sub-County, Kenya. *Journal of education management and leadership*, 2(1), 118-136. <https://doi.org/10.51317/jeml.v2i1.391>

 A publication of Editon Consortium Publishing (online)

Article history

Received: 21.04.2023

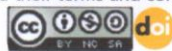
Accepted: 15.06.2023

Published: 16.08.2023

Scan this QR to read the paper online



Copyright: ©2023 by the author(s). This article is an open access article distributed under the license of the Creative Commons Attribution (CC BY) and their terms and conditions.



Abstract

This study sought to investigate the relationship between increased student enrolment and the delivery of catering services in public boarding secondary schools in Kisumu West Sub-County, Kenya. A descriptive survey approach was used to gather relevant data. The outcomes of this research will offer valuable insights to school administrators when making decisions concerning the allocation of school resources, with a particular focus on areas that have a significant impact on student catering services. The study involved a sample of 357 students and eight cateresses from eight public boarding secondary schools. The sample size of 357 students was determined using the Krejcie & Morgan table. A combination of census and proportionate sampling techniques was employed to select participants. Both open-ended and closed-ended questionnaires were utilised as data collection instruments. The qualitative data was presented in a narrative form, while the quantitative data was coded and entered into SPSS for analysis. Ethical research requirements were strictly adhered to throughout the study. The research findings indicates that the relationship between student enrolment and delivery of catering services was negative and statistically significant at .05 confidence level, $r(294) = -0.205$, $p = .000$. These findings concluded that increased enrolment has an adverse impact on the standard of catering services offered to students.

Key terms: Catering Services, Kisumu West, Public Boarding Secondary Schools, Relationship, Student Enrolment.

Appendix XVII: Evidence of Conference Participation



KABARAK UNIVERSITY

Certificate of Participation

Awarded to

Jackline Atieno Ong'injo

for successfully participating in the 12th Annual Kabarak University International Research Conference on Education held from 25th October 2022 and presented a paper entitled "*Relationship between increased Student Enrolment and Delivery of Accommodation Services in Public Boarding Secondary Schools in Kisumu West Sub County, Kenya.*"

Conference Theme

21st Century issues and practices in Education

Prof. Frederick Ngala
Dean School of Education

Dr. Miriam Muga
A.g Director - Research,
Innovation and Outreach

Kabarak University Moral Code

As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord.

(1 Peter 3:15)



Kabarak University is ISO 9001:2015 Certified