EFFECT OF CO -CURRICULAR ACTIVITIES ON THE PERFORMANCE OF STUDENTS IN SECONDARY SCHOOLS: A CASE STUDY OF SELECTED BOARDING SCHOOLS, KAJIADO EAST SUB-COUNTY

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DECLARATION

This research project is my original work and has not been presented for a degree in any other University.

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This research project has been submitted with my approval as The Management University of Africa Supervisor.

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DEDICATION

I wish to dedicate this study to my dear mother Agnes Kanini for being a pillar of both strength and motivation during my entire study.

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I acknowledge my supervisor, Miss Anne Sedah, for her encouragement, guidance and suggestions on the entire research. I also appreciate the Management University of Africa Faculty of Education for their support, my friends and the participants contributed to this study. Thank you all for making this project possible.

ABSTRACT

This study examined the effect of co-curricular activities on the academic performance of students in selected public boarding secondary schools in Kajiado East Sub-County, Kenya. The research aimed to investigate how the availability and variety of co-curricular activities, alongside student involvement levels, influenced academic outcomes. The study was anchored in the Holistic Education Theory, which emphasizes the development of multiple dimensions of a student's potential. A descriptive research design was employed, collecting data from students across several boarding schools between April and September 2025. Data was collected using a structured questionnaire. Data was analyzed using descriptive statistics such as frequencies and percentages and presented using tables, figures and charts. The findings revealed that a balanced and diverse portfolio of co-curricular activities positively correlated with improved academic performance, enhanced social skills, and higher student motivation. Students who were actively involved in co-curricular programs showed better academic results and exhibited lower absenteeism and disciplinary issues. Nonetheless, the study identified challenges such as limited availability of certain activities, inadequate resources, and inconsistent student participation which negatively affected the potential benefits of co-curricular engagement. The study concluded that effective integration of co-curricular activities into the school curriculum could significantly improve student academic achievement and holistic development. It recommended that school administrators and policymakers ensure adequate provision, accessibility, and supervision of co-curricular programs. Additionally, it suggested incorporating co-curricular participation in the evaluation of student performance and continuous capacity building for teachers and activity coordinators. By focusing on the context of rural boarding schools in Kajiado East Sub-County, this study filled existing research gaps related to co-curricular activities' impact in less-studied geographical and institutional settings. The insights derived contributed to the broader discourse on student development, informing educators, parents, and policymakers on strategies to foster balanced academic and co-curricular engagement for enhanced student outcomes.

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ACRONYMS AND ABBREVIATIONS

CCA	Co-Curricular Activities
CBC	Competency-Based Curriculum
KCSE	Kenya Certificate of Secondary Education
GPA	Grade Point Average
OTL	Opportunity to Learn

OPERATIONAL DEFINITION OF TERMS

Academic Performance	The measurable academic outcomes of students typically reflected in examination scores, class rankings, and attendance records. For this study, it primarily refers to KCSE or mock exam results (Waweru & Kimemia, 2018; Kiptoo & Mwangi, 2022).
Availability and Variety of CCA	The number and types of co-curricular programs offered by a school, including factors such as accessibility, scheduling, equipment, and staff support (Denault & Poulin, 2017; Badura et al., 2016).
Co-Curricular Activities	Structured, school-approved programs outside the standard curriculum (e.g., sports, music, clubs, drama) that enhance learners' holistic development through participation, leadership, or creativity (Fredricks & Simpkins, 2015; Feldman & Matjasko, 2016).
Participation in CCA	The frequency and type of engagement by students in school-based co-curricular activities over a defined academic period (Knifsend & Graham, 2015; Delgado & Stefkovich, 2015).
Student Involvement	The level of a student's active engagement in CCAs, including holding leadership roles, regular attendance and consistent commitment (Mwangi & Karanja, 2019; Amara & Kaggwa, 2020).

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter provides the background to the study, the statement of the problem, research objectives, research questions, justification and scope of the study.

1.1 Background of the Study

Education in the 21st century transcends traditional classroom learning and encompasses the holistic development of students. Co-curricular activities, such as sports, music, drama, debate and club participation, are increasingly recognized as essential components of modern education systems. These activities contribute to the acquisition of crucial life skills including teamwork, leadership, communication, and time management (Fredricks & Simpkins, 2015). Active involvement in co-curricular programs enhances students' cognitive and social development and fosters a sense of belonging in the school environment (Feldman & Matjasko, 2016).

Globally, empirical research supports the positive link between co-curricular participation and improved academic outcomes. Knifsend and Graham (2015) found that students who participated in a moderate range of extracurricular activities reported higher school satisfaction and academic motivation. Feldman and Matjasko (2016) further reported that such participation can reduce dropout rates and foster better behavioral and academic outcomes. In the UK, similar trends have been observed, with students engaging in structured after-school programs showing improved interpersonal and problem-solving skills (Denault & Poulin, 2017).

In Sub-Saharan Africa, a growing number of education systems are incorporating co-curricular programs into their school frameworks. According to Otieno and Murungi (2021), structured involvement in these activities has shown potential to improve learners' academic performance, confidence, and discipline across Kenyan and Ugandan secondary schools. Despite these benefits, implementation is often hindered by insufficient funding, limited facilities, and a focus on academic examinations.

In Kenya, the Ministry of Education recognizes co-curricular activities as integral to the new Competency-Based Curriculum, aiming to nurture learners' talents and holistic competencies (Republic of Kenya, 2017). Despite policy support, implementation in many boarding schools remains uneven. Some schools emphasize academics at the expense of co-curricular programs, raising questions about whether learners are receiving the balanced development envisioned.

In Kajiado East Sub-County, boarding schools serve students from diverse backgrounds. However, limited research exists on how co-curricular engagement influences student performance in this specific context. There is a need to explore whether students who actively participate in such programs perform better academically, socially, and behaviorally than their less-involved peers.

The target population includes students enrolled in selected public and private boarding secondary schools in Kajiado East Sub-County. The study will also involve teachers and administrators to provide contextual insights into the planning, delivery, and perceived impact of co-curricular programs.

1.1.1 Co- Curricular Activities

This aims to establish the measurable relationship between students' participation in co-curricular activities and their academic results. This research will collect and analyze academic records of students who are actively involved in various school activities compared to those who are not. By doing so, the research seeks to determine if involvement in these programs enhances academic outcomes such as exam scores, class rankings, and subject performance. The goal is to provide evidence that can inform school policies on balancing academics with co-curricular engagement.

1.1.2 Availability and Variety of Co- curricular Activities

This objective focuses on establishing what types of co-curricular programs are available, how diverse they are (e.g., sports, clubs, drama, music), and how accessible they are to all students. The study aims to determine whether the range and structure of co-curricular programs influence both student involvement and performance. It will also evaluate how well schools are supporting these programs through staffing, funding, and scheduling.

1.1.3 Student Involvement

The aim is to measure how actively students engage in co-curricular programs, including the frequency of participation, consistency, and leadership roles. The study will survey students and review school records to establish patterns of involvement. It will help determine whether students are just nominal members or genuinely participating, and what factors influence their level of involvement.

1.2 Statement of the Problem

Recently, schools in Kajiado East Sub-County have increasingly invested in co-curricular activities as part of efforts to promote holistic education. Boarding secondary schools in the region dedicate time, facilities, and staff to support a range of non-academic programs such as sports, drama, music, and student clubs. These programs are intended to complement academic learning and contribute to the development of leadership, discipline, and interpersonal skills. However, despite this commitment, many schools lack empirical evidence to show whether these programs are yielding measurable improvements in student outcomes.

A key concern lies in the apparent disconnect between program investment and academic returns. While time is allocated for these activities, some schools continue to report stagnating grades, rising absenteeism, or persistent behavioral issues. According to Waweru and Kimemia (2018), the effectiveness of co-curricular programs is not automatic; it requires strategic planning and continuous monitoring. Without such structures in place, there is a risk that resources may be misused or underutilized, failing to enhance student performance. Moreover, teachers in some schools report that students perceive them as optional or recreational, rather than as critical components of their learning journey, undermining their developmental potential.

The opportunity cost of these programs is also significant. Time spent on co-curricular activities could otherwise be directed toward academic tutoring, exam preparation, or psychosocial support. In the absence of data confirming the benefits of them, such trade-offs become increasingly difficult to justify—especially in performance-driven educational

environments. Feldman and Matjasko (2016) caution that without clearly defined goals and performance indicators, co-curricular programs risk becoming peripheral rather than transformative aspects of schooling.

International research consistently shows that students who participate in well-structured co-curricular activities tend to achieve better academic and behavioral outcomes (Fredricks & Simpkins, 2015; Badura et al., 2016). These programs are linked to improved grades, school attendance, self-esteem, and reduced dropout rates. However, these findings largely emerge from urban, Western, or day-school settings. Whether such patterns hold true in rural Kenyan boarding schools—such as those in Kajiado East—remains an open question.

Locally, schools in Kajiado East face additional challenges. Kiptoo and Mwangi (2022) note that many institutions lack systems to track student involvement in co-curricular programs or evaluate their outcomes. As a result, students who consistently participate in sports or clubs often receive no academic recognition or structured mentorship. This limits the motivational and developmental potential of these activities and contributes to uncertainty about their value.

Given these gaps, it is critical to evaluate the actual effect of co-curricular activities on student academic performance in this context. This study seeks to determine how students who engage actively in co-curricular activities perform compared to those who dont. It also aims to examine how availability and variety of programs, as well as depth of student involvement, influence academic outcomes.

1.3 Objectives of the Study

1.3.1 General Objective

The main aim is to investigate the effect of co-curricular activities on the academic performance of students in selected boarding secondary schools focusing on Kajiado East Sub-County.

1.3.2 Specific Objectives

i To assess the effect of co-curricular activities influences performance of students in the selected boarding Schools, Kajiado East Sub-County.

ii To assess the availability and variety of co-curricular activities offered in the selected boarding schools, Kajiado East Sub-County.

iii To evaluate the level of student involvement in co-curricular activities in selected boarding schools, Kajiado East Sub-County.

1.4 Research Questions

i What is the effect of co-curricular activities on student performance in selected boarding schools in Kajiado East Sub-County?

ii What co-curricular activities are available in selected boarding schools, Kajiado East Sub-County?

iii What is the level of student involvement in co-curricular activities in the selected boarding schools, Kajiado East Sub-County?

1.5 Significance of the Study

This research will benefit several key stakeholders. School administrators and teachers will gain insights into how co-curricular activities influence student performance, helping them improve program planning and student engagement. Education policymakers will use the findings to guide curriculum implementation and resource allocation, especially within the competency based curriculum framework. Parents and guardians will better understand the value of encouraging their children to participate in co-curricular programs. Finally, future researchers will find the study useful as a reference for exploring similar issues in education.

1.6 Scope of the Study

The research will be conducted over a period of approximately seven months, from April to September 2025, covering data collection, analysis, and reporting phases.

This research focuses on examining the effect of co-curricular activities on student performance in selected boarding schools within Kajiado East Sub-County, Kenya. The research is geographically limited to this area due to its unique socio-cultural diversity, semi-arid environment, and growing number of boarding schools implementing co-curricular programs.

The target group for the study includes students in Form 2 to Form 4**,** teachers**,** and school administrators involved in co-curricular activities. Form 2–4 students are selected because they have had sufficient exposure to both academic work and co-curricular programs, allowing for a more accurate assessment of their experiences and outcomes (Mutweleli,

2014). Teachers and administrators are included to provide expert insight into the planning, implementation, and perceived impact of co-curricular activities on students.

1.7 Chapter Summary

The chapter provided an overview of the study by introducing the background, stating the problem, outlining the objectives, research questions, significance and the scope of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of relevant theoretical and empirical literature, identifies research gaps, outlines the conceptual framework and provides operationalization of variables guiding this research.

2.1 Theoretical Review

The theoretical literature review aims to examine key educational theories that support the role of co-curricular activities, their availability and variety, and their influence on student performance, with Holistic Education Theory serving as the cornerstone for this study's first objective.

2.1.1 Holistic Education Theory

"The theory was developed by Ron Miller in the early 1990s as a response to the limitations of traditional education systems that focused narrowly on academic achievement. The theory promotes the idea that education should nurture the whole person—intellectually, emotionally, socially, physically, morally, and spiritually—rather than solely focusing on test scores or academic outcomes. According to Miller, holistic education values experiential learning, creativity, and meaningful relationships, encouraging students to connect learning to real-life experiences and self-discovery. The theory relates to this research as it supports the view that co-curricular activities are essential components of a well-rounded education. These activities—such as sports, drama, music, and clubs—provide avenues for students to develop critical life skills like leadership, teamwork, self-confidence, and emotional intelligence, which ultimately contribute to improved performance both inside and outside the classroom. In the context of boarding schools in Kajiado East Sub-County, holistic education justifies integrating structured co-curricular programs into the school culture to enhance student outcomes. However, critics argue that the theory is too idealistic and lacks clear implementation frameworks, making it difficult to apply consistently across diverse school settings. Others note that its emphasis on non-academic growth may divert attention from measurable academic standards, especially in exam-driven systems like Kenya's.

2.1.2 Opportunity to Learn Theory

The Opportunity to Learn Theory was introduced by John B. Carroll in 1963 as part of his model for school learning. The theory posits that student achievement is largely influenced by the amount and quality of instructional opportunities provided to them. According to Carroll, learning occurs when students are given sufficient time, resources, and access to well-structured content that matches their individual learning needs. In the context of this study, it supports the idea that the availability and variety of co-curricular activities in schools significantly affect student involvement and learning outcomes. When schools offer a diverse range of co-curricular options—such as sports, debate, music, clubs, and art—they increase the chances for students to find areas of interest where they can develop critical life skills, improve motivation, and enhance their overall school experience. If these opportunities are limited, unevenly distributed, or poorly implemented, students are deprived of valuable learning experiences that support both academic and personal growth. This is especially important in boarding schools, where students spend most of their time within the school environment. However, critics of this theory argue that it tends to overemphasize external factors like resources and school structure while underestimating the role of student agency, motivation, and socio-emotional dynamics, which also significantly influence learning outcomes.

2.1.3 Constructivist learning Theory

The Constructivist Learning Theory is most commonly associated with Lev Vygotsky, who developed the socio-cultural dimension of constructivism in the late 1970s. The theory asserts that learners construct knowledge through active engagement, interaction with their

environment and meaningful collaboration with others. Rather than receiving knowledge passively, students learn best when they participate in activities that are socially and culturally relevant, allowing them to make personal sense of concepts and experiences. In this study, Constructivist Learning Theory provides a strong foundation for understanding how student performance can be enhanced through practical, interactive, and student-centered approaches such as those offered by co-curricular activities. For example, participating in drama clubs, sports teams, or academic competitions allows students to develop communication, problem-solving and leadership skills which are abilities that directly contribute to their academic success and personal development. By applying this theory, the study recognizes that performance is not solely tied to classroom instruction, but also to experiential learning opportunities that promote deeper understanding and self-confidence. However, critics of the theory argue that it may be difficult to implement in large, resource-constrained classrooms and that standardized assessments may not fully capture the depth of learning achieved through constructivist methods.

2.2 Empirical Literature Review

This section aims to examine past research findings related to co-curricular activities, their availability, student involvement and performance to identify patterns, inconsistencies and areas requiring further investigation.

2.2.1 Co- Curricular Activities and Students Performance

Fredricks and Simpkins (2015) conducted a meta-analysis of global studies to investigate how structured co-curricular programs influence youth development and academic success. Their findings showed that students engaged in organized after-school activities

demonstrated improved school engagement, academic focus, and emotional well-being. The study concluded that regular participation in co-curricular activities significantly supports student motivation and educational outcomes. They recommended that schools should create inclusive and structured extracurricular programs, supported by tracking systems to monitor student engagement. However, the study lacked specific attention to rural or boarding school contexts, particularly in developing countries.

Knifsend and Graham (2015) examined the effects of breadth in extracurricular participation among high school students in the United States. Using survey data and academic performance records, they found that moderate involvement (two to three well-selected activities) was associated with higher GPA and a stronger sense of belonging. Conversely, over-involvement led to academic strain. They concluded that the quality and balance of involvement are more important than the sheer number of activities. The researchers recommended that schools help students make informed choices about co-curricular commitments. A key gap in the study is its exclusive focus on day schools, leaving out boarding school dynamics.

Regionally, Otieno and Murungi (2021) investigated the influence of participation in sports and clubs on academic performance across secondary schools in Uganda and western Kenya. The study utilized surveys, interviews and document analysis from 24 schools, they found that active participants scored significantly higher in exams and had fewer disciplinary issues. The study concluded that structured co-curricular engagement supports not only academic success but also behavioral improvement. They recommended implementing formal monitoring systems to measure student progress in relation to their

participation. However, the study lacked longitudinal follow-up, limiting insights into long-term impact.

Locally, Waweru and Kimemia (2018) explored the effect of co-curricular activities on Kenya Certificate of Secondary Education performance in Nyeri County. The researchers used questionnaires and performance data from 250 students and 30 teachers. Findings revealed that students who regularly participated in school activities such as drama, sports, and academic clubs consistently outperformed their peers. They concluded that co-curricular programs enhance student focus, confidence, and discipline. The study recommended institutionalizing student participation records and integrating the activities metrics into academic evaluations. However, it was limited to a single county and did not evaluate diversity in activity types.

Kimathi and Njoroge (2020) conducted a case study in two boarding schools in Central Kenya to examine how participation in music and drama affects student growth. Through interviews, classroom observation, and performance analysis, they found that co-curricular participation significantly improved students' communication, creativity, and self-esteem. While academic performance improved moderately, students displayed notable leadership and collaborative skills. The study concluded that these activities are key to holistic learner development and recommended that schools allocate more resources and time to support artistic activities. However, the narrow focus on arts excluded other activity domains such as sports or leadership.

2.2.2 Availability and Variety of Co- Curricular Activities and Students Performance

Denault and Poulin (2017) studied how program diversity in co-curricular offerings affects student development and academic motivation in Canadian secondary schools. Through a longitudinal survey involving over 3,000 students, they found that schools offering a wide variety of accessible, interest-driven activities had higher student engagement, emotional well-being, and school satisfaction. The authors concluded that availability and variety are essential in meeting diverse student needs and enhancing school experience. They recommended continuous review of activity offerings and student input in designing programs. However, the study did not explore the direct academic impact of program diversity.

Badura et al. (2016) carried out a large-scale cohort study across four European countries to determine the relationship between extracurricular variety and academic resilience. Using national education datasets involving over 9,000 students, they found that students exposed to at least five well-supported activities had fewer absences, stronger school commitment, and improved overall performance. The study concluded that offering a wide co-curricular menu improves student retention and reduces academic stress. Their key recommendation was the implementation of national policies that enforce activity minimums in schools. The gap identified was that the study did not examine the influence of program quality or resource limitations.

Regionally, Kiptoo and Mwangi (2022) conducted a study in 60 secondary schools across rural and urban areas in Kenya and Tanzania. Using interviews with principals, student questionnaires, and school timetable analysis, they found that schools with greater variety and better equipment had significantly higher student participation. Rural schools often

offered only two to three programs due to lack of infrastructure, leading to low engagement. The authors concluded that program availability and resource adequacy directly affect student motivation. They recommended policy intervention to standardize co-curricular offerings. However, the study did not assess how availability impacted academic performance.

Otieno and Kuria (2020) examined how accessibility and scheduling affect student engagement in three boarding schools in Kisumu County. Data were collected through structured interviews, observation checklists, and school records. While most schools listed multiple co-curricular options, the study found that poor scheduling, inadequate facilities, and low staffing restricted actual access and meaningful participation. The study concluded that variety alone is insufficient without logistical support. It recommended resource audits and student feedback mechanisms to ensure functional access. The main gap was the absence of a connection between these factors and student academic performance.

Wanjiru and Cheruiyot (2021) studied 10 public schools in Nairobi County to assess how the number of available co-curricular programs influenced student involvement. Using descriptive survey design with 400 students, they found that schools offering five or more structured programs had significantly higher student engagement and satisfaction. The study concluded that diversity of activities improves learner inclusion. It recommended that schools involve students in designing activity schedules. However, the research did not examine how variety influenced learning outcomes such as academic achievement or discipline.

2.2.3 Student Involvement in Co- Curricular Activities and their Performance

Delgado and Stefkovich (2015) explored the link between depth of student involvement in co-curricular activities and their academic self-efficacy across schools in Canada and Australia. Using online surveys and focus group discussions with 2,500 students, they found that students who held leadership roles in clubs and sports reported higher academic confidence and better study habits than passive members. The study concluded that leadership intensifies the benefits of co-curricular engagement. It recommended leadership development pathways in school programs. However, it relied on self-reported academic success, lacking verification with actual grades.

Feldman and Matjasko (2016) conducted a comprehensive meta-analysis of 29 studies examining the influence of extracurricular activity involvement on academic performance. The study showed that students with high involvement, particularly in structured and supervised environments, achieved higher Grade Point Average and reduced absenteeism. They concluded that co-curricular programs are most effective when guided by intentional learning goals. Their recommendation was for schools to match activities with academic mentorship and integrate them into learner progress evaluations. The study, however, did not investigate outcomes after students leave school.

Amara and Kaggwa (2020) focused on the academic effects of co-curricular participation in Ugandan schools. Using a longitudinal mixed-methods design involving student performance records and teacher interviews over two academic years, the study found that consistent participation in sports and clubs improved performance and reduced truancy. The study concluded that long-term involvement supports academic growth and discipline. It recommended government-backed frameworks for monitoring and expanding co-

curricular programming. The research, however, did not disaggregate findings by activity type or level of involvement.

In Kenya, Kiptoo and Mwangi (2022) examined how intensity and leadership within Co-curriculum activities influenced academic achievement in selected boarding schools. Using a cross-sectional survey and KCSE mock exam records, the study found that students in leadership positions or consistently active in clubs scored higher on average than non-participants. They concluded that structured involvement led to better academic and behavioral outcomes. The study recommended integration of these activities tracking into school records. The gap noted was its failure to analyze participation barriers such as economic or gender-related constraints.

Mwangi and Karanja (2019) carried out a mixed-methods study in Meru County to assess how student leadership in co-curricular activities affected academic and behavioral outcomes. The study utilized questionnaires, school records and FGDs involving 350 students and 10 teachers. Findings indicated that student leaders had better attendance, higher self-discipline, and more consistent academic performance than their peers. The study concluded that co-curricular leadership nurtures accountability and time management. It recommended that schools formalize leadership mentorship in these activity structures. However, it did not compare these students to those without leadership roles.

2.3 Summary and Research Gaps

Table 2.1: Summary and Research Gaps

Author (s)	Area of Study	Methodology	Findings	Knowledge Gaps	Focus of This Study
Fredricks & Simpkins (2015)	Co-curricular participation and academic motivation	Meta-analysis of global studies	Participation improved engagement, attendance, and performance	Focused on Western, urban schools; not contextualized to boarding settings	Tests same variables in rural Kenyan boarding schools
Knifsend & Graham (2015)	Breadth of extracurricular participation vs GPA	Survey and academic records of U.S. high schoolers	Moderate participation improved GPA; over-involvement reduced performance	Only covered day schools; didn't assess leadership or intensity	Extends scope to boarding school context and explores involvement quality
Otieno & Murungi (2021)	Impact of CCA on academic performance in E. Africa	Mixed methods: survey, interviews, document analysis	CCA participants had better grades and fewer discipline issues	No longitudinal data; lacked deeper focus by activity type	Explores outcomes across multiple activity types in Kenya
Waweru & Kimemia (2018)	CCA and KCSE performance in Nyeri County	Questionnaire and exam analysis	CCA participants scored higher and had better discipline	Narrow geographical scope; didn't include leadership role analysis	Broader area (Kajiado East) and includes leadership involvement
Kimathi & Njoroge (2020)	Arts-based CCAs and student growth	Case study: interviews, observation	Improved communication, collaboration, and confidence	Focused only on arts, excluding sports and clubs	Incorporates multiple domains: arts, sports, leadership
Denault & Poulin (2017)	Program diversity and school engagement	Longitudinal study (3,000+ students, Canada)	Variety enhanced motivation and emotional well-being	No direct link to academic performance	Links activity variety with actual performance data

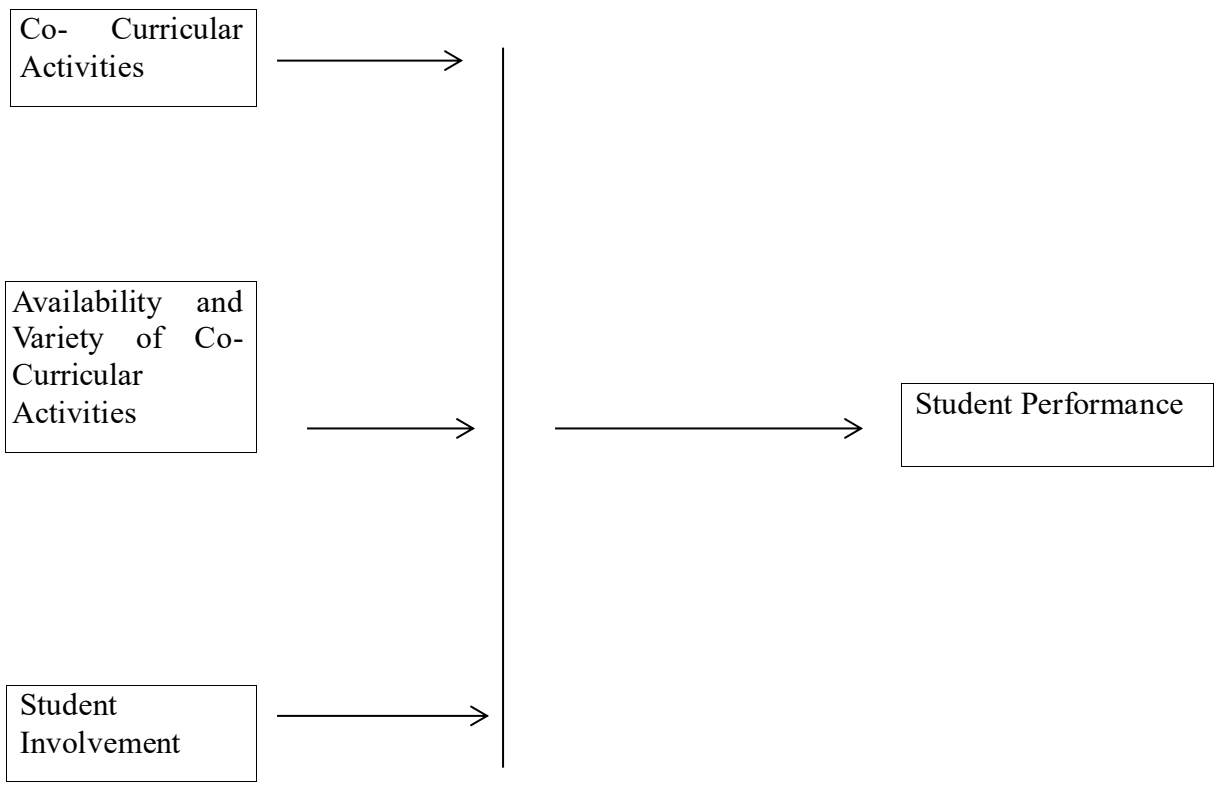
Author (s)	Area of Study	Methodology	Findings	Knowledge Gaps	Focus of This Study
Badura et al. (2016)	Extracurricular breadth and academic resilience	Cohort study across 4 European nations	Wide CCA options linked to better retention and fewer absences	Ignored program quality and resourcing barriers	Measures not just variety, but adequacy and access
Kiptoo & Mwangi (2022)	Availability of CCAs and participation in rural/urban areas	Mixed methods across 60 schools	More variety = more engagement; rural schools offered fewer programs	Didn't analyze academic results; only participation levels	Connects variety and access directly to student academic outcomes
Otieno & Kuria (2020)	Accessibility and participation in Kisumu boarding schools	Case study using observation and interviews	Poor scheduling and staffing limited access despite program availability	Didn't link access to academic performance	Links availability, accessibility, and performance
Wanjiru & Cheruiyot (2021)	Activity variety and student engagement in Nairobi schools	Descriptive survey (400 students)	More activity options increased involvement and satisfaction	Didn't evaluate learning or academic outcomes	Examines both participation and academic achievement
Delgado & Stefkovich (2015)	CCA involvement depth and academic self-efficacy	Mixed: online surveys, focus groups (2,500 students)	Leadership roles led to greater self-belief and academic drive	Relied on self-reported performance	Uses objective performance records (KCSE scores)
Feldman & Matjasko (2016)	Structured CCA involvement and academic outcomes	Meta-analysis of 29 studies	Strong correlation with GPA and reduced absenteeism	No insight into post-school or long-term impacts	Provides baseline for future local longitudinal research
Amara & Kaggwa (2020)	Long-term participation and academic growth in Uganda	Longitudinal study over 2 years	Sustained participation improved performance and discipline	Didn't disaggregate impact by activity type	Analyzes impact of leadership vs. general participation

Author (s)	Area of Study	Methodology	Findings	Knowledge Gaps	Focus of This Study
Kiptoo & Mwangi (2022)	Leadership and academic results in Kenyan boarding schools	Survey + performance records	Leaders scored higher and had better behavior	Didn't assess access barriers (e.g., gender, finances)	Investigates factors limiting participation and leadership opportunities
Mwangi & Karanja (2019)	CCA leadership and performance in Meru	Mixed: questionnaires, FGDs, records	Leaders had better discipline, performance, and attendance	No comparative analysis of leaders vs. non-leaders	Explores comparative effects and integrates tracking into performance metrics

2.4 Conceptual Framework

According to Adom, Hussein and Agyem (2018), a conceptual framework serves as a researcher's roadmap by organizing ideas into a coherent system that supports the design and interpretation of the study.

Figure 2.1: Conceptual Framework



2.5 Operationalization of Variables

Table 2.2: Operationalization of Variables

Variables	Indicators	Measurement Scale	Type of Scale
Co-Curricular Activities Participation	-Frequency of participation per week -Breadth of activity types joined -Average hours spent per activity	5- point likert scale	Ordinal scale
Availability and Variety of Co-Curricular Activities	-Number of distinct programmes offered -Adequacy of equipment/facilities -imitable accessibility	5- point likert scale	Ordinal scale

Variables	Indicators	Measurement Scale	Type of Scale
Student Involvement	-Leadership roles held -Participation intensity index -Self-reported commitment/motivation	5- point likert scale	Ordinal scale

2.6 Chapter Summary

This chapter reviewed theoretical and empirical literature, summary and research gaps, conceptual framework and operationalization of variables.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter outlined research design, target population, sample and sampling techniques, data collection instruments and procedure, data analysis and presentation and ethical considerations.

3.1 Research Design

A research design is the overall plan for connecting conceptual research problems to the relevant and achievable empirical data (Creswell & Creswell, 2018). This study adopted a descriptive survey design, which was suitable for systematically collecting data from a sample and analyzing the characteristics, behaviors, and perceptions of a population. Descriptive research allows the researcher to assess relationships among variables without

manipulating them (Kivunja & Kuyini, 2017). It was particularly appropriate for this study because it enabled collection of quantifiable data on student participation, program variety and academic outcomes through structured questionnaires.

3.2 Target Population

The target population refers to the complete group of individuals relevant to the research objectives (Mugenda & Mugenda, 2019). In this study, the target population comprised Form 2 to Form 4 students, teachers and school administrators in selected four boarding secondary schools in Kajiado East Sub-County. The targeted number of respondents was be 144.

Table 3.1: Target Population

Category	Target Population	Percentage (%)
Students	120	83
Teachers	20	14
Administrators	4	3
Total	**144**	**100**

3.3 Sample and Sampling Technique

Sampling refers to the process of selecting a portion of the population for the study (Bryman, 2016). The sample size was determined using Slovin's Formula, which is suitable when the population size is known and the researcher aims for a specific margin of error:

$$n = \frac{N}{1 + N(e^2)}$$ Where:

n= required sample size

N= target population (144)

e= margin of error (0.05).

$$n = \frac{144}{1 + 144(0.05^2)}$$

$$n = \frac{144}{1 + 144(0.0025)}$$

$$n = \frac{144}{1 + 0.36}$$

$$n = 106$$

Thus, the sample size for this study was 106 respondents.

Stratified random sampling was used which according to Etikan and Bala (2017) is useful when the researcher wants to compare specific groups or ensure proportional representation of key characteristics across the sample. This method is appropriate because it ensures that all key groups (students, teachers, administrators) are adequately represented in the sample, which enhances the accuracy and generalizability of the findings. Additionally, purposive sampling was used to select the school administrators. This method was appropriate because administrators were few in number and possessed specialized insights into the planning and evaluation of co-curricular programs, making their inclusion essential for meaningful analysis.

Table 3.2: Sample Distribution

Category	**Sample Size**	**Percentage (%)**
Students	87	82
Teachers	15	14
Administrators	4	4
Total	**106**	**100**

3.4 Data Collection Instruments

The main tool for data collection in this research was a structured questionnaire. A questionnaire is a widely used instrument in educational research for collecting data systematically from a large sample within a relatively short time (Creswell & Creswell, 2018). It was particularly appropriate for this study because it allowed for the collection of standardized, quantifiable data from students, teachers and administrators across multiple schools. Questionnaires are efficient for gathering information about attitudes, behaviors, experiences and perceptions related to co-curricular activity participation. Moreover, they ensure anonymity, which enhances the likelihood of honest and unbiased responses, especially when sensitive topics such as student discipline or performance are involved (Kabir, 2016).

3.5 Pilot Study

Before the actual data collection, a pilot study was conducted to pre-test and validate the research instruments. The pilot study helped determine whether the questionnaire was understandable, appropriately worde, and effectively measures the intended variables. In this research, the pilot was conducted in one boarding school in Kajiado East Sub-County not included in the main sample, using about 10% of the total sample size.

3.5.1 Validity

According to Heale and Twycross (2015), validity ensures that the data collected truly reflects the concept being studied and supports sound conclusions. To ensure content validity in this research, the questionnaire was reviewed by academic experts and the research supervisor to confirm that all items are clear, relevant and aligned with the study objectives. Feedback from the pilot study helped refine questions for clarity and relevance.

3.5.2 Reliability Test

A reliable instrument will yield the same results under consistent conditions (Taherdoost, 2016). A reliable instrument produces stable and consistent outcomes under similar conditions. In this study, test-retest reliability was used by administering the questionnaire to the pilot group twice within a short interval. The consistency of responses was measured using correlation analysis and necessary revisions were made to enhance internal reliability before the main data collection.

3.6 Data Collection Procedure

Data collection begun after obtaining the necessary approvals from the Management University of Africa and relevant educational authorities in Kajiado East Sub-County. The researcher first visited the selected boarding schools to seek consent from school administrators and scheduled appropriate times for administering the questionnaires. During data collection, the researcher personally distributed the questionnaires to the selected students, teachers and administrators and provided brief instructions on how to fill them accurately and honestly. Respondents were assured of confidentiality and informed

that participation was voluntary. Completed questionnaires were collected on the same day to minimize data loss and ensure higher response rates.

3.7 Data Analysis and Presentation

Data analysis refers to the process of systematically organizing, transforming, and interpreting collected data to extract meaningful patterns and draw conclusions (Williams, 2021). The study employed descriptive statistics such as frequencies, percentages and means to summarize the data and describe patterns related to student performance, co-curricular involvement and availability of activities. The results were presented using tables, charts and graphs to facilitate easy interpretation.

3.8 Ethical Considerations

This study will adhered to standard ethical guidelines to protect the rights, dignity and welfare of all participants throughout the research process.

3.8.1 Informed Consent

Informed consent refers to the process of providing participants with all necessary information about the study—including its purpose, procedures, potential risks, and benefits—so they can voluntarily decide whether to participate (Fouka & Mantzorou, 2019). In this study, all participants were informed about the purpose of the research, their role and their right to withdraw at any time without penalty.

3.8.2 Voluntary Participation

Voluntary participation means that participants have the freedom to join or withdraw from the study at any time without pressure or penalty (Resnik, 2020). Participants were clearly told that involvement was optional and that they could decline or withdraw at any point without facing any consequences.

3.8.3 Confidentiality

Confidentiality is the obligation to protect participants' private information from unauthorized access or disclosure (McDermid et al., 2014). The study was assigned codes instead of names on questionnaires and all data was securely stored and only accessed by the researcher.

3.8.4 Privacy

Privacy involves respecting participants' personal space and their right to control what information they share (Wiles et al., 2016). In this study, privacy was respected by ensuring that respondents completed questionnaires in a quiet, non-intrusive setting without interference or supervision. No questions requiring deeply personal, sensitive or intrusive information were included in the instrument.

3.8.5 Anonymity

Anonymity means that participants' identities are not linked to their responses in any way (Babbie, 2020). The study ensured that no personal identifiers such as names or admission numbers were recorded on the questionnaires.

3.9 Chapter Summary

This chapter has presented the research design, target population, sampling techniques, data collection instruments and procedures, pilot study approach, methods of data analysis and the ethical considerations that guided the study.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents the research findings and discussion based on the study objectives, as well as the limitations encountered during the research process."

4.1 Presentation of Research Findings

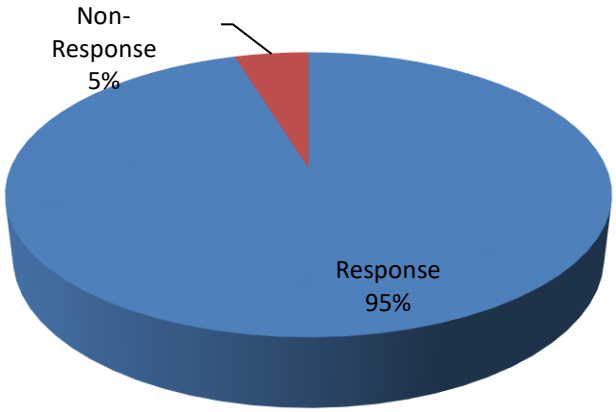
4.1.1 Response Rate

The response rate refers to the proportion of questionnaires that were completed and returned by the respondents compared to the total number that were distributed.

Table 4.1: Response Rate

Category	Frequency	Percentage (%)
Response	101	95
Non- Response	5	5
Total	106	100

Figure 4.1: Response Rate



Out of the 106 questionnaires distributed to the sampled respondents, 101 were duly completed and returned, representing a response rate of 95%, while 5% of the questionnaires were not returned. According to Mugenda and Mugenda (2019), a response rate above 70% is considered excellent for survey research.

4.1.2 Background Information

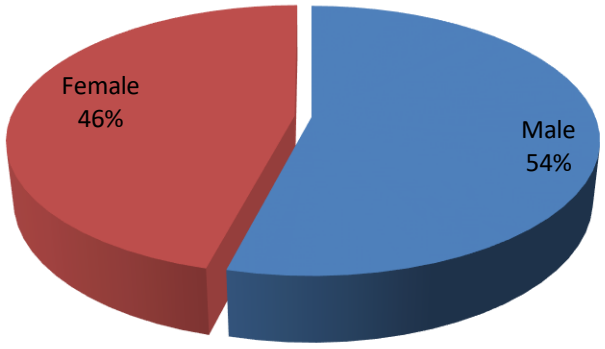
4.1.2.1 Gender of Respondents

This part of the study sought to determine the gender distribution of the respondents in order to understand the representation of male and female participants in the study sample.

Table 4.2: Gender of Respondents

Gender	Frequency	Percentage (%)
Male	55	54
Female	46	46
Total	**101**	**100**

Figure 4.2: Gender of Respondents



The findings show that 54% of the respondents were male while 46% were female. This indicates a fairly balanced gender representation in the study sample, with a slightly higher proportion of male participants. The relatively even distribution suggests that the study captured views from both genders adequately, which enhances the inclusivity and reliability of the findings related to co-curricular activities and academic performance.

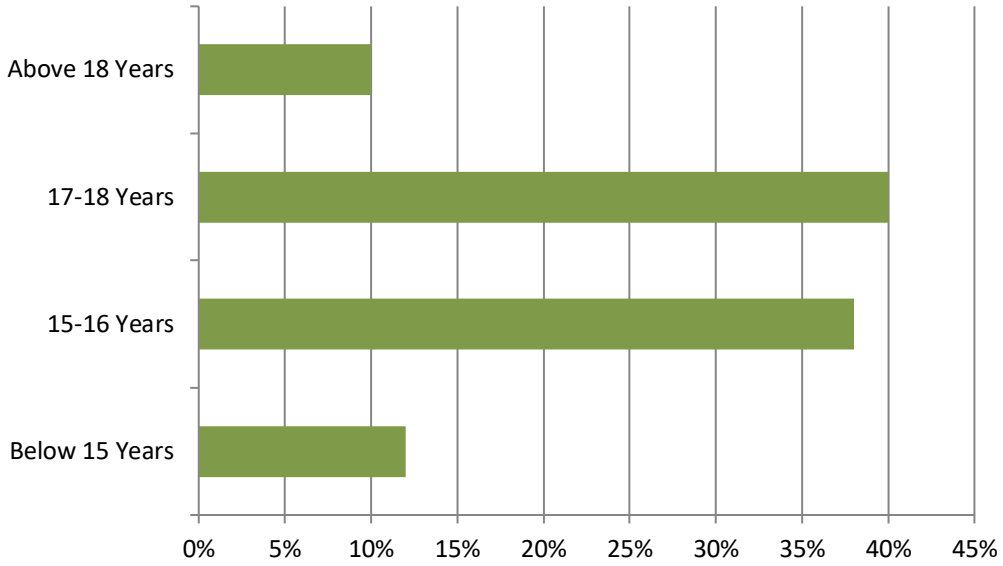
4.1.2.2 Age of Respondents

The study aimed to determine the age distribution of respondents to understand the diversity of age groups represented in the sample.

Table 4.3: Age Distribution of Respondents

Age Group	Frequency	Percentage (%)
Below 15	12	12
15- 16	38	38
17- 18	40	41
Above 18	10	10
Total	**101**	**100**

Figure 4.3: Age of Respondents



The results show that 41% of respondents were aged between 17 and 18 years, followed by 38% aged 15–16 years. Those below 15 years accounted for 12%, while 10% were above 18 years. This indicates that the majority of respondents were in the mid to late teenage years, which aligns with the target population of Form 2 to Form 4 students in secondary schools. The age distribution also reflects the typical age range of learners in Kenyan boarding schools, ensuring that the findings are representative of the intended study group.

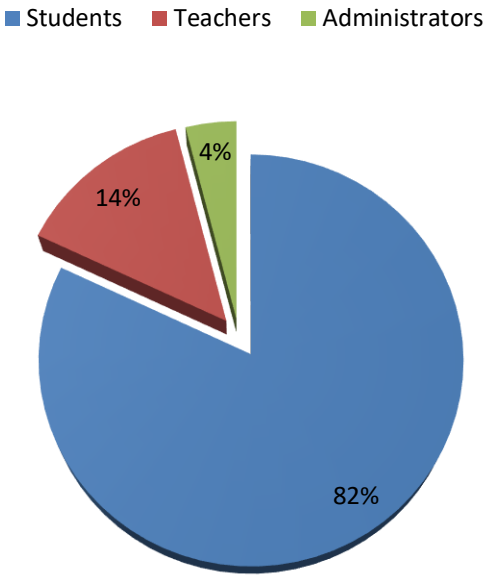
4.1.2.3 Category of Respondents

The study sought to establish the distribution of respondents by category in order to GAIN perspectives from students, teachers and school administrators.

Table 4.4: Category of Respondents

Category	Frequency	Percentage (%)
Students	83	82
Teachers	14	14
Administrators	4	4
Total	**101**	**100**

Figure 4.4: Category of Respondents



The findings indicate that the majority of respondents were students (82%), followed by teachers (14%) and school administrators (4%). This distribution reflects the target population, where students formed the largest group as they are the primary participants in co-curricular activities, while teachers and administrators provided additional insights based on their professional roles in planning, implementing, and overseeing these programs.

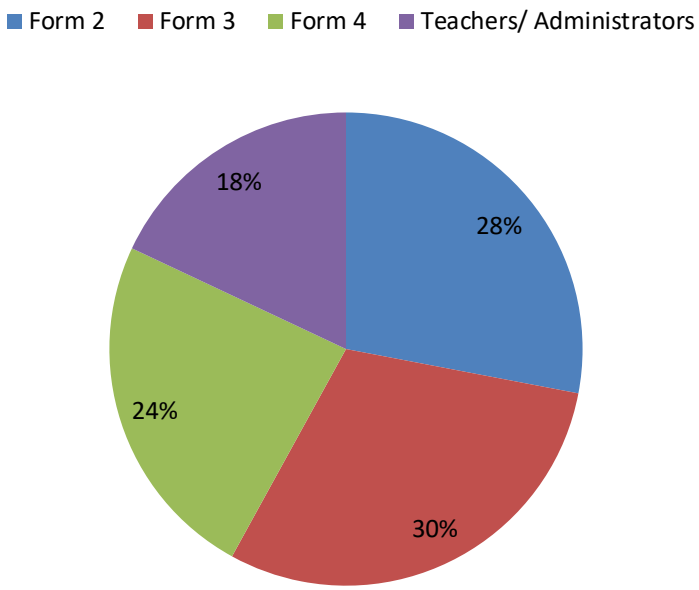
4.1.2.4 Form of Respondents

The study sought to identify the class or form of student respondents to determine their academic level and exposure to co-curricular activities.

Table 4.5: Form of Respondents

Form	Frequency	Percentage (%)
Form 2	28	28
Form 3	30	30
Form 4	24	24
Teachers/ Administrators	18	18
Total	**101**	**100**

Figure 4.5: Form of Respondents



The findings reveal that 31% of student respondents were in Form 3, 28% in Form 2, and 24% in Form 4, while 18% of the total respondents were teachers or administrators. This spread reflects balanced participation across the upper classes of secondary school, ensuring that perspectives were gathered from students with varying levels of academic

and co-curricular experience. Including teachers and administrators provided complementary insights to those of the students.

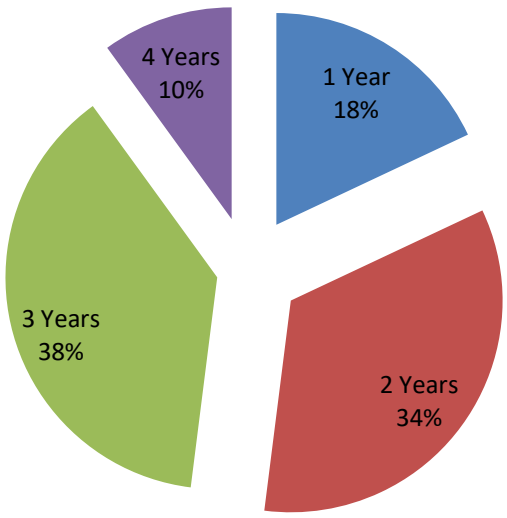
4.1.2.5 Years Spent in School

The study sought to determine the number of years respondents had been in their current school to assess their level of exposure to the academic and co-curricular environment.

Table 4.6: Years Spent in School

Years in School	Frequency	Percentage (%)
1 Year	18	18%
2 Years	35	34%
3 Years	38	38%
4 Years	10	10%
Total	**101**	**100**

Figure 4.6: Years Spent in School



The results indicate that the largest proportion of respondents (38%) had been in the school for three years, followed by 35% who had been in the school for two years. Those with one

year of experience accounted for 18%, while 10% had been in the school for four years. This suggests that most respondents had sufficient exposure to the school's co-curricular and academic environment, enabling them to provide informed feedback on the relationship between participation in these activities and academic performance.

4.1.3 Impact of Co-Curricular Activities on Student Performance

The first objective of the study was to assess how participation in co-curricular activities influences the academic performance of students in the selected boarding secondary schools. Respondents were asked to indicate their level of agreement with several statements on a five-point Likert scale.

Table 4.7: Impact of Co-Curricular Activities on Student Performance

Statement	SD	D	N	A	SA
Participation in co-curricular activities improves my academic performance.	5%	6%	10%	50%	30%
Students in co-curricular activities are more disciplined.	4%	7%	15%	48%	27%
Participation in co-curricular activities has improved my confidence and communication skills.	3%	5%	12%	52%	29%
Co-curricular activities help me manage time better.	6%	8%	14%	49%	24%
My exam performance has improved because of skills gained in co-curricular activities.	5%	9%	18%	45%	24%

The findings reveal that a majority of respondents agreed (50%) or strongly agreed (30%) that participation in co-curricular activities improves academic performance. Similarly, 75% of respondents agreed or strongly agreed that such participation enhances discipline, while only 11% disagreed. Most respondents (81%) acknowledged that co-curricular involvement had improved their confidence and communication skills, indicating that these programs contribute to personal development alongside academics. Additionally, 73%

agreed or strongly agreed that co-curricular activities help them manage time better, while 69% believed their exam performance had improved due to the skills gained. These results suggest that co-curricular activities not only complement academic work but also foster life skills that indirectly enhance academic success. The relatively small proportion of neutral or disagreeing responses may reflect differences in individual engagement levels, quality of program delivery, or balancing of academics and extracurricular commitments.

4.1.4 Availability and Variety of Co-Curricular Activities

The second objective of the study was to assess the availability and variety of co-curricular activities in the selected boarding secondary schools. Respondents rated their agreement with the following statements on a five-point Likert scale.

Table 4.8: Availability and Variety of Co-Curricular Activities

Statement	SD	D	N	A	SA
The school offers a wide variety of co-curricular activities.	4%	7%	15%	50%	25%
The co-curricular activities offered cater to different student talents and interests.	5%	6%	18%	48%	24%
The school timetable allows adequate time for co-curricular activities.	8%	10%	20%	45%	18%
There are adequate facilities and equipment for co-curricular activities.	9%	12%	19%	42%	19%
All students have equal access to co-curricular activities regardless of gender or background.	5%	7%	16%	49%	24%

The results show that 75% of respondents agreed or strongly agreed that their school offers a wide variety of co-curricular activities, with only 11% disagreeing. Similarly, 72% indicated that these activities cater to different talents and interests, suggesting diversity in program offerings. However, responses regarding timetable adequacy were less strong,

with 63% agreeing and 18% disagreeing, indicating some scheduling challenges. Regarding facilities and equipment, 61% agreed they were adequate, but 21% disagreed, pointing to possible resource limitations. Equal access to activities received a positive response from 73% of participants, reflecting an inclusive approach in most schools. Overall, while variety and inclusivity are strong, logistical and resource constraints may limit the full potential of co-curricular programs.

4.1.5 Student Involvement in Co-Curricular Activities

The third objective of the study was to evaluate the level of student involvement in co-curricular activities in the selected boarding secondary schools. Respondents rated their agreement with the following statements on a five-point Likert scale.

Table 4.9: Student Involvement in Co-Curricular Activities

Statement	SD	D	N	A	SA
I regularly participate in co-curricular activities every week.	4%	6%	15%	52%	24%
I am actively involved (not just a member) in my chosen co-curricular activities.	3%	7%	16%	50%	25%
I hold or have held a leadership position in a co-curricular activity.	10%	15%	20%	40%	16%
My level of commitment to co-curricular activities is high.	4%	8%	17%	50%	22%
I balance my academic work and co-curricular involvement effectively.	5%	9%	18%	48%	21%

The findings reveal that 76% of respondents participate in co-curricular activities weekly, with only 10% indicating they do not. Active involvement, beyond nominal membership, was reported by 75% of respondents, suggesting strong engagement in school programs.

Leadership roles were less common, with 56% having served in such positions, indicating that while opportunities exist, they may not be accessible to all students. Commitment levels were generally high, with 72% agreeing or strongly agreeing that they are dedicated to their activities. Additionally, 69% believed they balance academics and co-curricular involvement effectively, though 14% disagreed, highlighting a need for strategies to help some students manage both commitments better.

4.2 Limitation of the Study

Although the study met its objectives and provided valuable insights into the relationship between co-curricular activities and academic performance, it was not without limitations. First, the geographical scope was restricted to selected boarding secondary schools in Kajiado East Sub-County. This limitation means the findings may not be fully generalizable to other regions with different socio-cultural, economic, or educational contexts.

Secondly, the study relied heavily on self-reported data from respondents. Such data is inherently prone to biases, as participants may exaggerate or understate their level of participation in co-curricular activities or their academic performance. This could have affected the accuracy of some responses.

Time constraints also posed a challenge, as data collection had to be completed within a limited period. This reduced the possibility of conducting follow-up interviews or clarifications that might have enriched the data. Furthermore, despite achieving a high response rate, a small proportion of the target respondents did not return their

questionnaires. This non-response, though minimal, may have slightly influenced the representativeness of the results.

Lastly, the study focused on three primary variables—participation in co-curricular activities, availability and variety of activities, and student involvement. While these were central to the research objectives, other potentially influential factors such as parental support, socio-economic background, and school leadership style were not examined, and their omission could have limited the scope of the findings.

4.3 Chapter Summary

This chapter presented and discussed the study's findings based on the research objectives, examined respondent demographics, analyzed results for each variable and outlined the limitations encountered during the research.

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

5.0 Introduction

This chapter presented the summary of the study findings, drew conclusions based on the results and provided recommendations for practice and further research.

5.1 Summary of Findings

5.1.1 Background Information

The study achieved a response rate of 95%, with 101 out of 106 questionnaires returned. This high rate aligns with Mugenda and Mugenda (2019), who state that a response rate above 70% is excellent for survey research, and it reflects the respondents' willingness to participate. The high level of participation also mirrors findings by Kiptoo and Mwangi (2022), who observed that well-coordinated school-based research in boarding institutions tends to yield higher response rates due to the structured nature of school environments. The gender distribution was fairly balanced, with 54% male and 46% female respondents. This balance ensured representation of perspectives from both genders, which is important given that Otieno and Murungi (2021) found that co-curricular participation benefits both male and female students, though the types of activities preferred may vary. The gender mix in this study suggests that co-curricular programs in the sampled schools are accessible to all students regardless of gender, consistent with Wanjiru and Cheruiyot's (2021) findings on inclusivity in Nairobi schools. Most respondents (41%) were aged 17–18 years, followed by 38% aged 15–16 years, with smaller proportions below 15 years (12%) and

above 18 years (10%). This distribution reflects the typical age range of upper secondary school students in Kenya. According to Fredricks and Simpkins (2015), older secondary students are more likely to have established routines that allow them to balance academics and co-curricular involvement effectively, which may enhance the developmental benefits of these programs. Among students, 31% were in Form 3, 28% in Form 2, and 24% in Form 4, with the remaining 18% being teachers or administrators. This spread ensured that perspectives came from students at different academic stages, which is important because Knifsend and Graham (2015) note that the benefits of co-curricular involvement can vary depending on a student's academic maturity and workload. Students made up the largest proportion of respondents (82%), followed by teachers (14%) and administrators (4%). This aligns with the target population of the study, where students are the primary participants in co-curricular activities, while teachers and administrators oversee their implementation. The inclusion of all three groups aligns with Delgado and Stefkovich's (2015) recommendation that evaluations of co-curricular programs should incorporate both participant and supervisory perspectives to gain a complete understanding of their impact. The majority of respondents had been in their school for three years (38%) or two years (35%), with smaller proportions for one year (18%) and four years (10%). This suggests that most had substantial exposure to their school's academic and co-curricular environment, allowing for informed feedback. Feldman and Matjasko (2016) emphasize that sustained exposure to structured co-curricular programs increases the likelihood of academic and behavioral benefits, supporting the validity of this study's findings.

5.1.2 Impact of Co-Curricular Activities on Student Performance

The findings revealed that a majority of respondents (80%) agreed or strongly agreed that participation in co-curricular activities improves academic performance. Similarly, 75% believed that students involved in such activities are more disciplined, and 81% indicated that participation had improved their confidence and communication skills. In addition, 73% agreed that co-curricular activities help them manage time better, while 69% reported improved examination performance due to the skills gained through participation.

These results are consistent with Fredricks and Simpkins (2015), who found that organized co-curricular programs enhance student engagement, motivation, and educational outcomes. They also align with Waweru and Kimemia (2018), who reported that secondary school students in Nyeri County who participated in activities like drama, sports, and academic clubs consistently outperformed their peers in the Kenya Certificate of Secondary Education (KCSE). Moreover, the observed improvements in discipline and confidence correspond with the findings of Otieno and Murungi (2021), who noted that structured involvement in co-curricular activities led to fewer disciplinary issues and higher self-esteem among students in Kenya and Uganda.

The results also mirror Knifsend and Graham's (2015) conclusion that moderate and well-balanced participation improves GPA and school belonging. The time management benefits identified in this study are in line with Delgado and Stefkovich's (2015) observation that students holding leadership or active roles in co-curricular activities develop better organizational and study habits. Overall, the findings suggest that participation in co-curricular programs complements academic learning by enhancing both cognitive and non-cognitive skills that contribute to improved academic performance.

5.1.3 Availability and Variety of Co-Curricular Activities

The study found that 75% of respondents agreed or strongly agreed that their schools offer a wide variety of co-curricular activities, while 72% felt the activities cater to different talents and interests. However, only 63% agreed that the school timetable allows adequate time for co-curricular activities, indicating some scheduling challenges. On facilities and equipment, 61% believed they were adequate, but a notable 21% disagreed, suggesting resource gaps. Equal access to activities regardless of gender or background was confirmed by 73% of respondents, pointing to inclusive participation policies in most schools.

These findings support Denault and Poulin's (2017) study, which showed that schools offering a wide variety of interest-based programs report higher student engagement and satisfaction. They also align with Badura et al. (2016), who concluded that access to multiple well-supported activities increases school commitment and performance. The resource limitations highlighted in this study reflect the observations of Kiptoo and Mwangi (2022), who found that rural schools often offer fewer programs due to infrastructural constraints, leading to lower engagement.

The inclusivity reported in this study resonates with Wanjiru and Cheruiyot's (2021) findings that diversity in activity offerings promotes student inclusion and participation across genders. However, the timetable and facility challenges echo Otieno and Kuria's (2020) conclusion that variety alone is insufficient without proper scheduling, adequate equipment, and staffing. Overall, the results indicate that while variety and inclusivity in co-curricular programs are strong in the studied schools, logistical and resource constraints hinder optimal participation and impact.

5.1.4 Student Involvement in Co-Curricular Activities

The study established that 76% of respondents participate in co-curricular activities on a weekly basis, and 75% reported active involvement beyond mere membership. Leadership roles were held by 56% of respondents, showing that while opportunities for leadership exist, they are not evenly distributed among all students. Additionally, 72% indicated a high level of commitment to their chosen activities, and 69% felt they balanced academics and co-curricular involvement effectively.

These results align with Delgado and Stefkovich's (2015) findings that active engagement and leadership in co-curricular activities are associated with greater academic confidence, improved study habits, and stronger self-discipline. The relatively lower proportion of students in leadership positions reflects the observations of Kiptoo and Mwangi (2022), who noted that not all students have equal access to leadership roles due to factors such as economic constraints, teacher selection criteria, or student confidence levels.

The study's findings also correspond with Mwangi and Karanja's (2019) conclusion that students holding leadership roles demonstrate better attendance, discipline, and academic performance compared to their peers. Furthermore, the reported ability of most respondents to balance academic and co-curricular commitments supports Feldman and Matjasko's (2016) meta-analysis, which found that structured and supervised co-curricular participation fosters both academic success and personal development. Overall, the results highlight that active and consistent participation, particularly in leadership roles, enhances the benefits of co-curricular engagement, though there is room to broaden leadership opportunities for more students.

5.2 Conclusions

The study concludes that participation in co-curricular activities positively influences academic performance among students in selected boarding secondary schools in Kajiado East Sub-County. Active involvement enhances discipline, confidence, communication skills, and time management, all of which contribute to improved academic outcomes. These findings confirm previous research, such as Fredricks and Simpkins (2015) and Waweru and Kimemia (2018), which showed that structured co-curricular programs improve both academic and behavioral outcomes.

The study concludes that while schools in the study area offer a variety of co-curricular activities catering to diverse talents and interests, limitations in facilities, equipment, and timetable allocation reduce their effectiveness. Although inclusivity in access is generally strong, as supported by Wanjiru and Cheruiyot (2021), the resource gaps and scheduling challenges identified mirror those observed by Kiptoo and Mwangi (2022), indicating that variety alone does not guarantee optimal participation or impact.

The study concludes that most students are actively engaged in co-curricular programs, with a significant proportion taking on leadership roles. Such involvement promotes commitment, discipline, and the ability to balance academic and extracurricular demands. However, leadership opportunities are not evenly distributed, which may limit the full potential of these activities for some students. These findings are consistent with Delgado and Stefkovich (2015) and Mwangi and Karanja (2019), who emphasize the added benefits of leadership in enhancing academic and personal growth.

Overall, the study confirms that co-curricular activities are vital to the holistic development of students and can significantly complement academic learning when they are well-structured, adequately resourced, and inclusively managed.

5.3 Recommendations

The study recommended that schools in Kajiado East Sub-County and beyond should strengthen the integration of co-curricular activities into their academic programs, recognizing their positive influence on student performance, discipline, and life skills development. Adequate time should be allocated within school timetables to allow for meaningful participation without compromising academic learning. Schools should invest in improving facilities, equipment, and resources to support a diverse range of activities that cater to different student talents and interests. Efforts should also be made to ensure inclusivity so that all students, regardless of gender or background, have equal access to these programs. Leadership opportunities within co-curricular activities should be expanded to encourage broader student participation in decision-making and role modeling. Finally, the Ministry of Education and school administrators should adopt structured monitoring and evaluation systems to track student involvement and outcomes, using the data to enhance program quality and effectiveness.

5.4 Suggestions for Further Studies

Based on the scope and limitations of this study, several areas were suggested for future research. First, a longitudinal study should be conducted to examine the long-term impact of co-curricular involvement on students' academic performance, career progression, and life skills after graduation. Second, comparative research between rural and urban boarding

schools would help to identify contextual differences in the availability, variety, and impact of co-curricular activities. Third, future studies could include additional variables such as parental involvement, socio-economic background, and school leadership style to provide a more comprehensive understanding of the factors influencing academic performance. Lastly, qualitative case studies focusing on specific types of co-curricular activities—such as sports, arts, or academic clubs—would offer deeper insights into their unique contributions to student development.

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APPENDIX I: QUESTIONNAIRE

Impact of Co-Curricular Activities on the Academic Performance of Students in Selected Boarding Secondary Schools in Kajiado East Sub-County

Dear Respondent,

You have been selected to participate in this study titled *"Impact of Co-Curricular Activities on the Academic Performance of Students in Selected Boarding Secondary*

Schools in Kajiado East Sub-County." The purpose of this questionnaire is to collect information on the types, availability, and influence of co-curricular activities on students' academic performance. Your responses will be used solely for academic purposes and will be treated with strict confidentiality. Please answer all questions honestly. Do not write your name anywhere on the questionnaire.

Kindly indicate your response by ticking (✔) in the appropriate box or filling in the space provided. The scale used is:

1 = Strongly Disagree (SD)

2 = Disagree (D)

3 = Neutral (N)

4 = Agree (A)

5 = Strongly Agree (SA)

SECTION A: DEMOGRAPHIC INFORMATION

(Please tick as appropriate)

1. What is your gender?

   ☐ Male ☐ Female

2. What is your age?

   ☐ Below 15 ☐ 15–16 ☐ 17–18 ☐ Above 18

3. What is your category?

   ☐ Student ☐ Teacher ☐ Administrator

4. What is your class/form (for students only)?

   ☐ Form 2 ☐ Form 3 ☐ Form 4

5. How many years have you been in this school?

   ☐ 1 year ☐ 2 years ☐ 3 years ☐ 4 years

SECTION B:

Impact of Co-Curricular Activities on Student Performance

Please rate the following statements:

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)
Participation in co-curricular activities improves my academic performance.	☐	☐	☐	☐	☐
Students in co-curricular activities are more disciplined.	☐	☐	☐	☐	☐
Participation in co-curricular activities has improved my confidence and communication skills.	☐	☐	☐	☐	☐
Co-curricular activities help me manage time better.	☐	☐	☐	☐	☐
My exam performance has improved because of the skills gained in co-curricular activities.	☐	☐	☐	☐	☐

Availability and Variety of Co-Curricular Activities

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)
The school offers a wide variety of co-curricular activities.	☐	☐	☐	☐	☐
The co-curricular activities offered cater to different student talents and interests.	☐	☐	☐	☐	☐
The school timetable allows adequate time for co-curricular activities.	☐	☐	☐	☐	☐
There are adequate facilities and equipment for co-curricular activities.	☐	☐	☐	☐	☐
All students have equal access to co-curricular activities regardless of gender or background.	☐	☐	☐	☐	☐

Student Involvement in Co-Curricular Activities

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)
I regularly participate in co-curricular activities every week.	☐	☐	☐	☐	☐
I am actively involved (not just a member) in my chosen co-curricular activities.	☐	☐	☐	☐	☐
I hold or have held a leadership position in a co-curricular activity.	☐	☐	☐	☐	☐
My level of commitment to co-curricular activities is high.	☐	☐	☐	☐	☐
I balance my academic work and co-curricular involvement effectively.	☐	☐	☐	☐	☐

THANKYOU FOR YOUR PARTICIPATION!