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Effect of Sports on Students' Enrolment in Private Universities in Kenya

Kevin Wairagu Muchemi

**Submitted in partial fulfillment of the requirements for the Degree of Master of
Science in Education Management at Strathmore University**

School of Humanities and Social Sciences

Strathmore University

Nairobi, Kenya

June, 2019

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Kevin Wairagu Muchemi

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14th June, 2019

APPROVAL

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ABSTRACT

Student enrolment is critical for any university's survival. The last decade has seen a significant expansion in the higher education sector in Kenya, an expansion that for the last couple of years is now threatened by an increasing enrolment crisis especially for private universities. As many Kenyan universities like their counterparts' world-over, spend resources on sports as a strategy for student enrollment, it is imperative to back such strategies with contextualized studies on the actual effect, if any, of university sports on students' enrolment. This study builds into existing literature by primarily contributing to the mixed results conceptual gap in the global discourse on university sports and enrolment. Additionally, it includes the missing African context with perspectives from students, coaches and deans of students on the subject. The study investigates the effect of university sports on students' enrolment with a focus on private universities in Kenya. University sports is discussed specifically as sports success and sports scholarships considerations. The study is discussed within the behavioral science and human capital theories of net price theory and rational choice theory. The three research objectives seek to establish whether university sports success and sports scholarships respectively, singly and jointly have an effect on student enrolment in Kenyan private universities. This study employs a mixed method design, integrating quantitative and qualitative data. The study employed purposive sampling method to target 6 deans of students, 5 sports students (captains) and 5 coaches in each of the 6 select private universities from Nairobi, Embu, Kajiado and Kiambu counties to target a total of 66 respondents. Two questionnaires were developed and administered in a survey to coaches and students, while an interview guide was developed and used to interview the deans of students. The overall response rate for this study was 88 percent. The research findings established that university sports success and scholarships have a positive effect on the students' enrolment in private universities in Kenya. This was reflected in the findings that majority (over 66 percent) of students, coaches and deans of students' respondents strongly agreed that university sports has a positive effect on student enrolment in Kenya. We can therefore conclude that it would be a worthwhile strategy for private universities in Kenya to invest in sports success and sports scholarships among other strategies to attract student enrolments in their universities.

Key terms: University Sports, Enrolment, Sports Success and Sports Scholarships.

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LIST OF ABBREVIATIONS

ANU	Africa Nazarene University
CUE	Commission for University Education
HELB	Higher Educations Loans Board
JAB	Joint Admissions Board
KCSE	Kenya Certificate of Secondary Education
KEMU	Kenya Methodist University
KUCCPS	Kenya Universities and Colleges Central Placement Service
KUSA	Kenya University Sports Association
MKU	Mount Kenya University
NACOSTI	National Commission for Science, Technology and Innovation
SAT	Standardized American Test Scores
SU	Strathmore University
UNESCO	United Nations Education, Social and Cultural Organization
USA	United States of America
USIU	United States International University

DEFINITION OF KEY TERMS

University Sports	These are all competitive recreational activities that constitute board, field, indoor and water games for which students and staff at a university engage in internally and externally with competition.
Sports Success	This is the good performance, wins and victories that a sports team is able to attain in the course of its engagement within or with external competition. To be understood in the context of university sports as defined above. It consists rankings.
Sports Scholarships	These are monetary or in-kind support offered by a university, the government or corporate and individual stakeholders of a university sports scholar in order to attract them to enrol, study and complete their studies at the university or college. It spans full and partial sports scholarships.
Student Enrolment	The total number of students properly registered and/or attending classes at an institution.

ACKNOWLEDGEMENT

This work was made possible by the very generous and kind assistance of God, the sponsorship of Strathmore University, the supports from my family, the very wise counsel of my supervisor Dr. Magdalene Dimba, and the useful information from Strathmore University's Sports and Financial Aid Office staff. I would also like to acknowledge my classmates for their ideas and support. Finally yet importantly, I would like to acknowledge all the authors whose research work I have cited as reference for my work. God's favor and mercy be with you all.

DEDICATION

This dissertation is dedicated to my parents Eng. Richard Muchemi Wairagu, Mrs. Elizabeth Wambui Michire, Mr. Mwenda Kariuki Mucheru and Mrs. Joyce Wambui Mucheru; my brothers Moses Michire Muchemi and Kevin Mwenda Mucheru; my sister Jemima Wambui Muchemi; my wife Rita Wangui Wairagu; my sons Klayton Muchemi Wairagu and Kyle Mucheru Wairagu; and all the Sports Scholars, Coaches and Deans of Students in Private Universities in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter sought to address the study background, problem definition, justification of the study, research objectives, research questions, scope of the study, significance of the study, limitations and delimitations.

1.2 Background of the Study

University sports by its very design is participative. It brings people together, uniting them in interests that transcend their cultures, races and other divisive elements. In 1978, the UNESCO adopted Article 1 of the Charter of Physical Education and Sports, effectively making Sports a fundamental human right for all persons; young, old, male and female, abled and disabled. Further, Article 31 on the Convention of the Rights of the Child that additionally require that the government and institutions taking care of children to avail the environment, facilities and necessities for play. In Kenya, the Sports Act number 25 of 2013 spells out functions, bodies and rules guiding sports development and activities in Kenya including an academy of sports to oversee all sports activities including university sports. Much remains unsaid though on the relationship between university sports in Kenya and student enrolment.

The contribution of university sports in promoting university growth has been a key area of literature development especially in the American and European contexts. Researchers have particularly singled out the relationship between sports success and the size of a university's applications, and the relationship between sports success and the quality of a university's applicants. Caudill et al, (2018) extended both areas of research above by using a unique panel data set consisting of 10 institutions that either supplemented or removed college football for the years between 2015 and not earlier than 1997 in order to examine the impact of the presence of college football programme on both the size of university applications and the quality of the students enrolled. Outcomes from a panel data estimator suggested that the size of their applications contracts the year following cessation of a college football programme.

In Kenya, KUSA and National league rankings have over the years been used to measure sports success. Czekanski et al, (2019) explains that intercollegiate athletic contests were originally organised by students who set the time, place and rules for competition. However, faculty soon developed concerns about the effect of athletics on students. Additionally, university presidents realised the financial opportunities involved with intercollegiate competition and thus they took control through the formation of university athletic committees.

In the case of admission test scores, the results are similar, indicating that the admission test scores of incoming freshmen shrinks after cessation of football. Sports is therefore a critical part of university education and has been found, by some researchers, to have an effect on the quantity and quality of student enrolment at least as far as empirical studies in Europe and the United States of America indicate. Pope and Pope (2014) established from examining a set of data in the USA that the colleges and universities that topped in the basketball and football leagues received an average of 10% increase in SAT scores received for admissions from prospective students. A more recent study by Van Holm and Zook (2016) focused on a sample of universities that included football between 2004 and 2014 versus a control sample group that did chose not to include football and discovered that the inclusion of football in the universities resulted into an increase in the student enrollment in that period.

Critics to this early position include Frank (2004), who find that if any positive relationship is to be found between athletics success and student enrollment in universities, it would be at the very best, insignificant. In Africa, university sports have played significant roles over the years, Grandlingh, (1996) argues that Rugby became a unifying factor in South Africa especially after the first university club was formed in 1919 while the game was played in Stellenbosch University formerly Victoria College as early as 1880. In Kenya, the KUSA and National rankings have shown a consistent good performance for universities that invest in sports scholarships like Strathmore University, USIU, Daystar, African Nazarene, and Mount Kenya University among others. There is limited literature however, on the effect of sports and sports succession the student enrollment in universities in Kenya.

Siegfried and Getz (2006) argue that university students world-over make enrollment decisions many times based on limited information about an institution's reputation. Athletics is one instrument that institutions of higher education have at their disposal that can be used to directly affect reputation and the prominence of their schools. As universities in Kenya especially the private ones struggle with an enrollment crisis after the seemingly successful government efforts to curb cheating on KCSE as experienced from the year 2016, it is critical to establish if among the enrollment strategies to adopt, private universities can consider sports and sports success like their counterparts in the USA and in Europe.

Hossler (2000) finds that on most campuses there are multiple purposes for creating and sustaining enrollment management organizations. Sports scholarships often take center stage and are mostly in the form of partial and full scholarships (Bryant, 2016). However, the purposes always focus on attracting and retaining students. These goals typically include efforts to increase the number of new students, plans to diversify the student body, efforts to retain more students, and a desire to enroll more high-ability students or students with special talents (athletics, music, theater, and so on). Senior leadership on many college campuses is equally interested in enrolling more nonresident students, more students of color, more high-ability students, or all such groups. These, too, can become important goals for enrollment managers. This study focusses on university enrolment from a perspective of university sports as operationalized into sports success and sports scholarships for the Kenyan private university context.

The enrolment pool halved from 16,000 candidates to about 8,000 in 2016, Kenya Certificate of Secondary Education, resulting in an unprecedented quality and quantity enrolment challenge especially for private universities (Mugambi, 2017). Quality enrolment is measured mainly by entry grades and talents while quantity is measured by student numbers in enrolment (Caudill et al, 2018). Private universities in Kenya have been known to use sports (Mutula, 2002) as a strategy for enrolment management yet there is limited contextualized findings on resultant effect of such strategies if any. In addition to a contextualized gap, the research also sought to fill a conceptual gap by addressing the contradicting literature on the effect of sports on student enrolment (Frank, 2004) versus (Pope and Pope, 2014).

1.3 Problem Statement

Unprecedented university enrolment challenges especially for private universities in Kenya presents material concern for higher education stakeholders. Private universities in Kenya have been known to use sports as a strategy for enrolment management yet there is limited contextualized findings on resultant effect of such strategies if any. In addition to a contextualized gap, the research also sought to fill a conceptual gap by addressing the contradicting literature on the effect of sports on student enrolment. Student enrolment is critical for any university's survival (Bryant, 2016). The last decade has seen a significant expansion in the higher education sector in Kenya, an expansion that for the last couple of years is now threatened by an increasing enrolment crisis especially for private universities (Mugambi, 2017). According to Marguerite (2016), colleges and universities spend lots of time and money enrolling new students to its programs. As many Kenyan universities like their counterparts' world-over, spend resources on sports as a strategy for student enrollment, it is imperative to back such strategies with contextualized studies on the actual effect, if any, of sports on students' enrolment.

Early reviews of existing literature on the effect of sports scholarships on enrolment decisions (Heller, 1997; Leslie and Brinkman, 1993) suggest that receiving a sports scholarship has a significant positive effect on the decision of students to enrol to the financial aid awarding university. Later, Hossler (2000), finds merit in the strategic use of campus-based financial aid as an essential component of enrollment management strategies while Frank (2004), holds a contrary position, establishing in his study that little or no significant relationship exists between sports success and university student enrolment. Given these contradicting positions, it is worthwhile to take out the guesswork in sports and sports success related university student enrollment strategies especially in a third world country like Kenya, whose economic resources are relatively inadequate compared to America and Europe.

As Kenyan universities invest on sports success and sports related financial aid to attract students as part of their new students' recruitment strategies; it is of strategic importance to establish the effect of such strategies on attracting new student populations and on the quality of new students enrolled (Hossler, 2000). Hence, a need to establish the effect of university sports on university students' enrolment management in the Kenyan context.

1.4 Research Objectives

1.4.1 General Objective

The study sought to examine the effect of sports on students' enrolment in private universities in Kenya.

1.4.2 Specific Objectives

Specific objectives of the study were as follows:

1. To investigate whether sports success has an effect on the student enrolment in private universities in Kenya.
2. To examine if sports scholarships have an effect on the student enrolment in private universities in Kenya.
3. To establish if there is a difference in the effect of sports scholarships and sports success on student enrolment in private universities in Kenya.

1.5 Research Questions

The study sought to answer the following research questions:

1. What effect does sports success have on student enrolment in private universities in Kenya?
2. What effect does sports scholarships have on student enrolment in private universities in Kenya?
3. What is the difference in the effect of sports success and sports scholarships on enrolment in private universities in Kenya?

1.6 Scope of the Study

This study focused on the effect of university sports on university students' enrolment management in Kenya. It specifically looks at sports success and sports scholarships as used for university student enrolment management in Kenya. It studies Kenya as a context where little has been done on the subject (Mutula, 2002; UNESCO, 2002; World Bank, 2004). The study sought specifically draw responses from a survey of the top five Kenyan

private universities as per the CPS International 2016 ranking. The respondents were be limited to university sports captains, university sports coaches and university deans of students from the select six private universities in Kenya via survey and cross-validation through expert interviews.

1.6.1 Limitation of the Study

Limitations are circumstances outside of the direct control of the researcher that may restrict the conclusions and affect the possibilities of generalization of the research findings (Best and Khan, 1993). Factors that influence university students' enrolment are diverse. The study was limited to the effect of university sports scholarships and university sports success as a choice of the researcher, effectively leaving out equally important variables like institutional reputation, programs offered at an institution, quality of faculty, facilities. The researcher also limited themselves to the human capital theories of net price and rational choice theories. Other limitations were that the study findings could not be generalized to the university population since it was restricted to 6 select private universities in Kenya. The time available limited the researcher to the specific sample of universities. Some of the information sought was considered trade secrets by some respondents further limiting the study output.

1.6.2 Delimitation of the Study

The study targeted only three categories of respondents namely deans, sports captains and coaches. Parents, faculty, admissions and such other critical stakeholders were not included in the respondents following the choice of framework adopted and the guiding theories therein. Variables on sports success including KUSA and National rankings; sports scholarships including partial and full scholarships as well as student enrolment including quality and quantity were the focus of the study. Any other factor and or variables affecting student enrolment at private universities in Kenya was not investigated by the study as per the limits of the framework and theories. The context was limited to 6 universities spread out in 4 out of 47 counties of Kenya namely: Nairobi, Kajiado, Kiambu and Embu.

1.7 Significance of the Study

This study is of crucial significance as it provides an insight on the effect of sports on the student enrolment in Kenyan universities.

It follows therefore that beneficiaries of this study include among others:

Universities: the study findings may be applied by private universities especially in Kenya as a reference for university sports, admissions and financial aid managers' in enrolment management strategy. Admissions staff, deans of students, sports managers and financial aid managers can for example use the findings of the research to propose or strategize around sports success and sports scholarships to improve their student enrolment.

Governments: Specifically, Government of Kenya's bodies such as Higher Education Loans Board and Universities Funding Board could also refer to its findings for application to policy and strategy. HELB can for example use the findings to consider sports related products for university students like sports loans and bursaries for talented sports students wishing to pursue higher education in Kenyan universities.

Researchers and scholars: the study will be of great importance to strategy and higher education scholars and researchers. It will offer them both theoretical and practical learning on the effect of sports success and sports scholarships on university students' enrolment management in Kenya. This will add to existing literature on the subject.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant literature on the effect of sports success and sports scholarships on private university students' enrolment in Kenya. The chapter develops theoretical review, conceptual framework, empirical review that was used in the study.

2.2 Theoretical Review

This section covers relevant models, theories and frameworks in explaining the effect of sports success and sports scholarships on university students' enrolment management in Kenya. The research objectives are discussed within the behavioral science and human capital theories of Net Price theory and the Rational Choice theory; see Bryant, (2016). This study considered the Net Price and Rational Choice theoretical framework also as economic theories. Both are reviewed separately, but are interconnected in the quest for knowledge regarding access to post-secondary education and the effect of sports success and sports scholarships on student enrolment in universities. This rationale was combined to promote a better understanding of the perception of freshmen and graduates on enrollment decisions to readers with no prior knowledge of these particular theories and stakeholders who may have prior knowledge, but more importantly have an interest in university sports success and scholarships and the impact they have on university student enrollment.

2.2.1. Net Price Theory

Net price theory refers to a theory fashioned from the Human Capital Theory which holds, in the higher education financing context, that students are likely to enrol and complete their studies if their fees is reduced to a 'net' amount by any form of financial aid (Leslie and Brinkman, 1987). Later, St. John (1995), argues that the concept of net price as embedded in human capital theory, is essential to most public finance strategies in higher education. In Human Capital Theory, Gary Becker (1998), argued that often the most important cause of differences in opportunities to attend postsecondary education is the

availability of funds. He further argued that scholarships and loans are funds for accessibility and as such, sports scholarships are argued to bear positive effect on student enrolment (Bryant, 2016). Net-price theory therefore as applied to this research focusses on the gross attendant costs less the financial aid offered to the students. Thus, the objective to establish whether sports scholarships have an effect on student enrolment numbers in Kenya is matched to the assumptions that students respond to a single net price. Also, reductions in net price for some populations can improve enrolment numbers and this was also examined.

The Net Price theory was the dominant theory financial aid professionals adopt when addressing students and parents and explaining direct cost owed to schools and as such Net Price theory creates a true picture of what is owed to the institution in spite of the contradicting and federally mandated figures included in many econometric models on the cost of attending college. Such models stipulate a regulatory communication and reporting requirement by the American Federal Student Aid. These components are inclusive of tuition, room, board, fees, books, supplies and combined make up factors that can impact enrollment decisions (Perna, 2006). Many scholars agree financial aid could offset direct cost by simply sharing the balance owed to an institution (Goldrick-Rab, Harris, & Trostel, 2009). This study adopted Net Price theory for simplification purposes to promote understanding for the reader, not to be confused with ‘cost of attendance’ (Perna, 2006). There are many arguments about alternative theories that challenge the traditional Net Price (St. John & Stark, 1995). Those repeatedly favored persistence and retention, not enrollment. If the net price is indeed shared with the potential student at an earlier time in the quest for education, the study shows it could be a decision changer if one is also compelled by making a rational choice. In that regard the choice to include the Rational Choice theory evolved. We can capture additional information in regard to individuals and preparation for college with this inclusion.

2.2.2 Rational Choice Theory

Rational Choice Theory is an economic principle proposed by George Homans (1961), which states that individuals always make prudent and logical decisions (Scott, 2000). Further, these decisions provide people with the greatest benefit or satisfaction, given the choices available, and are also in their highest self-interest. The rational choice theory in

education views long-term options that reduce the opportunity to fail (Gabay-Egozi, Shavit, Yaish, 2010). Accordingly, therefore, the theory then implies that students would be drawn more to what appeals to their interests and as such may be applied on the objective dealing with the sports success' effect on university students enrolment decision (Tierney & Venegas, 2009).

According to the competence-based competition, a solid competitive advantage is based on the capacity to create, strengthen and broaden the firm's core competencies to make new products that will succeed in the market (Prahalad & Harmel, 1990). Here all three objectives of the study are evaluated using the competence-based competition under Rational Choice Theory. A combination of Net-Price Theory and Rational Choice Theory therefore appears to be adequately appropriate for the study. This study therefore did not chose Net price theory and Rational Choice theories as competing theories, but rather complimenting theories appropriate to the framework of the study on effect of university sports on student enrolment.

The theories were introduced as a starting guide during the proposal phase and were revisited and confirmed after data collection. The research questions clarified the necessity to interpret the data using the net price and rational choice theories. Rational Choice is a reason based theory which has an unchangeable history of philosophical literature not under the scrutiny found with net price (Bryant, 2016). This study was justified in a reason-based approach to the rational choice model. It made sense from a positive and social-scientific perspective. Like the students' decision to enroll, the researcher was motivated and had reason-based justification without normative constraints that the theories combined was right for the theoretical framework.

2.3 Empirical Review

2.3.1 University Sports

According to Eakins (2018), sport sociology as a science has to overcome several difficulties: it is despised by both sports sciences and sociologists alike. Athletes are very well aware of the practical side of sport but they are not able to enter into academic discussions about it, while some sociologists are not familiar with the practical side

of sport, are not willing to do sports but mention it as a social subsystem. From the European Sport for all Charter a wide variety of definitions were formulated to capture the essence of sport. As society transforms itself from time to time, so do sports as a subsystem: some elements disappear and others become emphasized in it. The numbers of ancient Greek games, for example, which often regrettably and widely resulted in death, cannot be compared to present day soccer, rugby, American football, baseball and such other type of professional sports, which are sometimes heavily infiltrated by business. It should be emphasized that today sport is not simply a leisure activity but forms the part of lifestyle, thus sport activity has an impact on social status. Therefore, sport or the lack of it, the place and form of physical activity affect individuals' position in society, and as a result, the entire social structure. Lately, the health maintaining and recreational functions of sport became more relevant in the essence of sports, however, the boundary between competitive and leisure sports is emphasized to a greater extent. This study applies the broadest interpretation of sports to include all indoor, outdoor, field, water and board games. The study further looks at the effect of university sports on student enrolment.

According to Smith, (2011), in the United States, arguments over the mission, structure and function, of college sport date back to the initial inclusion of sport in higher education. Tracing the history of college sport in the America, gymnasiums and physical training were first introduced on college campuses in the early 1800s and viewed as a means for students to engage in healthy activities and prevent campus disorder through allowing a healthy output for physicality. This early physical training failed to attract the attention of a large number of students until the 1840s when students began participating more in 'ball games' like football, baseball and cricket. To organise these and other physical activities, sport clubs began to form at individual institutions, beginning with Yale's creation of a boat club in 1843. These early clubs did not engage in intercollegiate competition but rather were founded to promote the sport and provide a social outlet for members. This began to change in 1852, when the first intercollegiate competition was held in crew between Harvard and Yale. This early organization of university sports provides a motive for this study to build in contemporary perspectives of University sports today in the 21st century.

Czekanski et al, (2019) explains that intercollegiate athletic contests were originally organised by students who set the time, place and rules for competition. However, faculty soon developed concerns about the effect of athletics on students. Additionally, university

presidents realised the financial opportunities involved with intercollegiate competition and thus they took control through the formation of university athletic committees. This led to the formation of conferences and national associations designed to ‘run’ intercollegiate athletics. Intercollegiate athletic competition continued to expand under the control of university presidents, as university prominence, honour, prestige and revenue generation became hallmarks. However, this form of university intercollegiate athletic competition has not been the only form of university sponsored sport taking place on college campuses. Rather, even as intercollegiate competition grew, universities continued to have sport clubs that promoted the sport and provided a social outlet for participants. Despite the continual prominence and growth of collegiate club sport in the 1900s and 2000s though, the field has not received the same scholarly focus as intercollegiate athletics. Accordingly, the present day understanding of collegiate sport club structure, function, goals and missions is lacking. Given the current day participation rate, approximately 8500 students competed in the 2016–2017 Championships Series) and scope of club sport, it can be concluded that collegiate sport club participation has come a long way since 1843 and thus the need for this study to continue to explore the area further especially with a view to introduce an African perspective.

Further in the largest Asian context, according to Liu et al, (2018), with the passing of time, the policies of school sports education have changed from “Enhancing physical fitness” to “Health first” guidelines of physical education curriculum in colleges and universities in China. Moreover, the Chinese government has paid attention in students’ development in mental health through the change of policies. School physical education is for all students, and should vigorously promote national standards of physical education. The content of physical education classes should meet the demand of national policies, and should make use of different ways to teach students. The formation of physical education should be flexible for every student and change the way of teaching when necessary. The National People’s Congress promulgated the “sports law of the P.R.C.” in 1993, and it stipulated that schools in China should hold sports days annually. In February of 1993, the Chinese government set out new laws to emphasize the importance of improving the quality of education because they wanted society to become more and more prosperous. According to this policy, physical education should train students to have abilities to solve problems and find out the students with outstanding skills. Between 1994 and 2010, the

Chinese government set out several policies and laws to make physical education better. Sports value in the different periods in the history of People's Republic of China shows how critical sports is to education. This study picks emphasis of this importance a cue to look into effect of university sports in student enrolment in Kenyan private universities.

According to Asembo (2003), the Kenyan context is unique. The structure of sports organization in Kenya stretches from the grassroots to the national level. Most of the various sports disciplines have clubs and National Federations, which coordinate their activities. The Kenya National Sports Council is the umbrella for all the sports federations whose main responsibility is to oversee and coordinate the activities of the federations. The Department of Sports plays the main role of formulating and ensuring implementation of the national policy on Sports. Members of the public are also at liberty to form and register their own sports clubs, most of which affiliate to their respective national sports federations and organizations. The national sports federations organize their respective activities at national level while their branches and sub-branches do the same at the provincial and district levels, respectively. Further, the last decade has seen a significant expansion in the higher education sector in Kenya, an expansion that for the last couple of years is now threatened by an increasing enrolment crisis especially for private universities (Mugambi, 2017). While some universities in Kenya use sports success and sports scholarships to attract enrolments; there are limited studies to support this strategy in our context (Mutula, 2002). This study therefore explores Kenya as a unique developing country in Africa as a distinct context compared to America, Europe and Asia where related studies have been conducted.

Van Holm and Zook (2016), find that recent research links athletic success, particularly in football, to overall increases in donations, student applications, school enrolment and student quality. Additionally, colleges cite football as key to building a sense of community on campus through school spirit and creating a unique institutional identity. This sense of community also positively affects other student outcomes, such as lower drug use, improved academic performance and higher retention rates. The existence of empirical research extolling footballs benefits, as well as the market shift towards an emphasis on tuition and fees and increased competition for students, may be influencing college presidents and trustees to consider adding the sport. This paper will examine the effect of

university sports success on student enrolment, particularly examining the role of league rankings and sports scholarships on enrolment.

2.3.2 University Student Enrolment

Accordingly, enrolment management refers to the traditional task of setting and meeting the goal of assembling a student body that comprises a predetermined and advantageous mix of students in terms of quality, number and diversity in all its forms (Hallak et al, 2019). Student enrolment in universities has been found to be very competitive over the years and increasingly only universities with the best enrolment strategies are able to attract the quality and quantity of students they want (McLendon, Heller and Lee, 2009). Market forces are increasingly influencing the higher education sector. Many higher education institutions have begun to adopt market-oriented strategies. This competitive environment is driven by several factors relating to among others a growing appetite for higher education and the perceived future benefits therein. Universities and colleges' status also grows from historical reputation, aggregate student demand and student entry scores, scholarly standing and research performance. Further, Dynarski & Scott-Clayton, (2007) found that as much as the student is the primary decision maker; there is influence from family, guardians or parents. This study will focus on the direct observations of the students, coaches and deans on in part specifically on the effect of sports scholarships on student enrolment.

Student enrolment in higher education remains crucial to an institution's survival (Bryant, 2016). This is because, for students, choice simply means more than one institution becomes available for patronage. Competition assumes some response by other suppliers and suggests suppliers compete for similar students based on product differentiation and price. The quality and quantity of students that constitute student enrolment in universities has a huge bearing on the institutions survival and reputation. Global financial constraints have forced universities to investigate different methods and modes to increase student enrolment world over. Universities therefore are expected to put in their best efforts to ensure a sustainable enrolment for the going concern and development of the institution. Researchers point to the cost of attendance and financial aid as being one of the top concerns and most influential factors in the university-choice process, while other studies

show cost as a much smaller influence, especially in relation to achievement, availability of programme and quality of the institution (Bryant, 2016). Net-price theory, rational choice theory have been used to explain the bounded rationality that describes interrelated nature of student characteristics and environmental characteristics in the information processing steps leading to a final decision. This study applies further the net-price theory and rational choice theory as human capital theories that help to explain the effect of university sports on student enrolment in private universities in Kenya.

There are numerous purposes for creating and sustaining enrollment management in institutions of higher education (Hossler, 2000). However, the purposes often focus on attracting and retaining students. These efforts typically include efforts to increase the number of new students, plans to diversify the student body, efforts to retain more students, and a desire to enroll more high-ability students or students with special talents (athletics, music, theater, and so on). Administrators and faculty often assume that the only goal of enrollment management is to increase the number of new students.

According to Bryant, (2016), while for many college campuses quality and quantity enrolment is measured by enrolling more nonresident students, more students of color, more high-ability students, or all such groups; this study measures quality enrolment from a perspective of entry grades and talents including sports talents. Further it measures sports quantity by student enrolment numbers. Moreover, this study focusses on university enrolment from a perspective of university sports as operationalized into sports success and sports scholarships for the Kenyan private university context.

A review of past related studies shows a variety of choice factors important to students when selecting higher education institutions. These factors can be grouped into three broad categories: socioeconomic characteristics, environmental characteristics and institutional characteristics (Hallak et al. 2019). The literature shows that socioeconomic characteristics such as parental education, academic ability, educational aspirations and gender all have an impact on the university-choice process of incoming students. Environmental characteristics in the university-choice process include parent and family influences, high school counsellors, teachers, peer influences and influences based on cultural and social

capital. Institutional characteristics can be classified into fixed characteristics and running efforts to communicate or make contact with students. Fixed characteristics include cost and financial aid, quality and rankings, technology available, location and undergraduate programme availability. Efforts to communicate or contact students include web and Social Media promotional materials and word of mouth among others. This study shares the impressions of the deans, students and coaches on the effect of sports on student enrolment, effectively making meaningful contributions to enrolment management literature. This is key in managing institutional activities such as coordinating issues and local trends, diversity, sports success, reputation, academic and research goals and revenue generation among others.

2.3.2 Sports Scholarships

Frank (2004) examines whether successful college athletic programs stimulate additional applications from prospective students and greater contributions by alumni and other donors. He also studies if so, is it likely that additional investment in such programs is a cost-effective way of increasing these benefits? He considers these questions from a theoretical perspective that focuses on the economic incentives confronting institutions that participate in big-time college athletics.

He then reviewed numerous empirical studies that have attempted to measure various aspects of the relationships between athletic success and success in other domains. The findings reported in these studies are mixed, but the overall message is easily summarized: It is that if success in athletics does generate the indirect benefits in question, the effect are almost surely very small. He also suggest that the most important decisions confronting policy makers, both at individual institutions and at collective athletic governing bodies, do not hinge significantly on how strongly alumni giving and the quality of entering students depend on athletic success. Policies that would create incentives for all institutions to reduce their spending on big-time athletic programs would free up resources for other purposes at no cost either to alumni giving or the size of applicant pools. In his conclusion, Frank (2004), therefore finds that if any positive relationship is to be found between athletics success and student enrollment in universities, it would be at the very best,

insignificant. In this study, deans, coaches and students views provide a contrary finding in these recent times.

Van Holm and Zook (2016) also present mixed findings as they focused on a sample of universities that included 50 institutions that had started college football and resultant football scholarships between 2004 and 2014, versus a control sample group that did chose not to include college football and discovered that the inclusion of football in the universities resulted into an increase in the student enrollment in that period. The expansion of college football, both in terms of new locations and spending at existing programs, was attributed in part to the belief that athletic success brings other benefits, including increases in donations, student applications, enrolment and student quality. Analysis was done on a sample of colleges that started football programs in the last decade against a control group without the sport in order to test the short-term benefits of starting a team. Results show that while there was an immediate increase in applications to the college, the quality and retention of students declines. The results for adding a football team on student quality and quantity are therefore mixed. Implementing football is shown to be associated with an increase in the number of applications, though it attracts a slightly lower quality of students to enrol. In this study, the findings from the deans, coaches and students provide a specific, direct and balanced perspective on the effect of sports scholarships on student enrolment in universities in Kenya. Partial and full scholarships were hence used as a measure of sports scholarships for private universities in Kenya in this study.

Most recently, Britt et al, (2017) establishes that while financial aid inducements might be used to meet student financial need, the motive often is to use the award as a merit scholarship precisely to entice or attract brilliant students with top academic entry grades or those endowed with sports talents that may be useful to the university such as hockey, football and basketball. In their study, they examined a sample of 2,475 undergraduate students to determine the influence of financial stress, debt loads, and financial counseling on retention rates. Results indicate, among other findings, that financial stress contributes to an increased likelihood of discontinuing college. Self-reported student loan debt contributes to an increased likelihood of discontinuing college, although students with the highest amount of university - reported student loan debt have a decreased likelihood of discontinuing college one year later as compared to students with no student loan debt.

Interestingly, in this study students who sought financial counseling were more likely to discontinue college within the next year. Although this contradicts prior studies that have shown that students experience less financial stress immediately after meeting with a peer counselor and for two months later, it is suggested that the timing of the counseling may be an important factor. Implications for practice include early intervention for students who are self-funding their education, who are under high financial stress, or have a perception of high student loan debt. According to Britt et al (2017), at the campus level, financial aid professionals should collaborate with personal finance researchers to better understand how financial stress and student debt relate to university students' enrolment and retention. This study provided additional information on financial aid particularly in sports as a possible enrolment strategy for universities in Kenya.

2.3.3 Sports Success

McCormick and Tinsley (1987) are among the earliest studies on the subject of the relationship between sports success and student enrolment in higher education institutions. In their study they indicate that there is a positive correlation between the winning record of a university's football team and the average entrance test scores of that school's freshman class. They explain this correlation by suggesting that athletic success proposes a university's name, and thus leads more high school students to apply to that school. As a result, the university can be more selective in its admissions decisions, and can thus enrol a more accomplished group of students.

McCormick and Tinsley, however, in their methodology and consequent findings offer only anecdotal evidence of the hypothesized relationship between athletic success and applicant totals. They also only consider football success as the measure of sports success for the colleges in the study. Further, the context in their study is America. This study expands the literature from earlier studies by including other sports in the study as a measure of success and by considering an African context.

More recent literature on the subject consists empirical studies that have produced mixed results on the relationship between a school's sports success and the quantity and quality of students that apply to the school. Pope and Pope (2009) conducted a study using two unique data sets to shed additional light on the indirect benefits that sports success provides

to colleges in a particular national sports league ranking. Key findings include the following: (1) football and basketball success significantly increases the quantity of applications to a school, with estimates ranging from 2% to 8% for the top 20 football schools and the top 16 basketball schools each year, (2) private schools see increases in application rates after sports success that are two to four times higher than public schools, (3) the extra applications received are composed of both low and high entrance test scoring students, thus providing potential for schools to improve their admission outcomes, and (4) schools appear to exploit these increases in applications by improving both the number and the quality of incoming students. Their study considered secondary data available on entrance test scores as compared to sports performance. This study focusses on sports success and primary data was collected from sports students, coaches and deans of students directly on their views on the effect of sports success on student enrolment.

According to Caudill et al (2018), the role played by collegiate athletics in furthering the mission of institutions of higher education has been one of the more active research streams in the economics literature. Two areas of emphasis in this particular genre concern the relationship between athletics success and the size of a university's applicant pool, and the relationship between athletics success and the quality of a university's incoming class.

In their study, Caudill et al, (2018) extends both lines of research above by employing a unique panel data set consisting of 10 institutions that either added or eliminated college football between 1997 and 2015 in order to examine the impact of the presence of college football programme on both the size of university applicant pools and the quality of the students chosen for admission. Results from a panel data estimator presented suggest that the size of their applicant pool shrinks the year following discontinuation of a college football programme. In the case of general entrance scores, the results are similar, indicating that the entrance scores of incoming freshmen decrease after discontinuation of football. In this study, the researcher looked at recent views of respondents in 2019 from the select universities and focuses on describing the current situation in the Kenyan context from those views on whether sports success has an effect on the university student enrolment. Measures of sports success in this study therefore consisted KUSA and National league rankings of private universities in Kenya.

2.4 Research Gap

Empirical works show mixed outcomes on the relationship between a school's sports success and the quantity and quality of students that apply to the school (Caudill, 2018). Literature consisting (McCormick and Tinsley, 1987; Pope and Pope, 2009, 2014; Bryant, 2016; Caudill; 2018) find that university sports success and sports scholarships have an effect on university student enrolment. On the other hand, Frank (2004) find that there is insignificant effect, if any, of sports success and scholarships on student enrolment as per the outcome of his studies on effect of college football on student enrolment. Van Holm and Zook (2016) would more recently show similarly contrasting results in their study on the subject that actually found little and somewhat counterproductive effect of sports success on student enrolment. This study focused on finding out if sports had any effect on the enrolment of students at the university, thus contributing to address the conceptual gap on mixed results on the subject. It adds more weight on the former views and findings as coaches, deans and students respondents in this study indicate a positive effect of sports scholarships and sports success on student enrolment.

A western context of literature (Caudill et al, 2018; Britt et al, 2017; Bryant, 2016; Mclendon et. al., 2009; Dynarski et. al., 2007; St. John, 2006; Frank, 2004; Hossler, 2000) points to a positive effect of sports scholarships student enrolment in higher education but also suggests that there are many other factors such as the perception of the student applicants on the university's reputation, their level of financial need and their own abilities both academic and other talents. In the Kenyan context however, such connections between university sports and student enrolment, would currently would be based more on anecdote than empirical research owing to a contextual gap in literature on the subject. This is because relevant literature from Kenya on the subject only highlights topics such as leadership and talent management in Kenyan universities, (Kamau, Gakure, & Waititu, 2013); University education in Kenya, (Mutula, 2002); and Project success for universities in Kenya, (Mbawi, Muchelule & Muchelule, 2017). This study therefore extend the literature on this subject by adding an African context from the findings in Kenya to fill the contextual gap, while at the same time addressing the conceptual gap as found in the differences in available literature on the effect of sports on student enrolment.

2.5 Conceptual Framework

According to Mugenda & Mugenda (2013), a conceptual framework is a concise description of a phenomenon accompanied by a visual depiction of major variables of the study. The point of convergence in the empirical review suggests implications from the anchor theory of Net-Price and Rational Choice theories inform the conceptual framework in this study. The dependent variable in this study is ‘University Student Enrolment’ while the independent variable is ‘University Sports’.

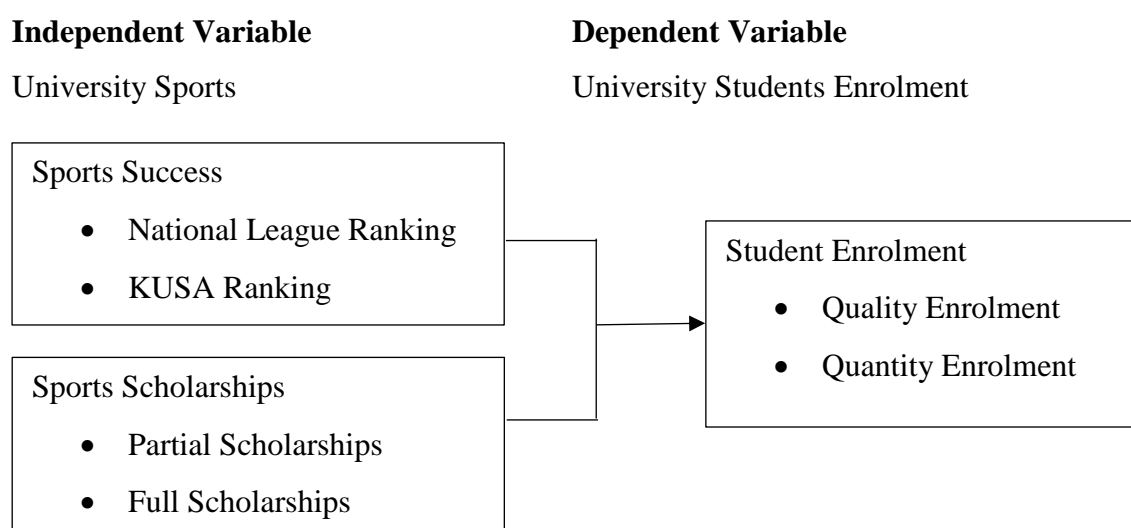


Figure 2.1. Conceptual Framework

Sports success as an independent variable is operationalized to include ranking of sports at different leagues. National Ranking and KUSA Ranking were of specific importance. Sports Scholarships as the second independent variable of Student Enrolment is operationalized as Student Quality and Student Quantity. The effect of the independent variables on the dependent variable is examined in this research by means of a survey on the Sports Coaches and Sports Captains (students) of the select private universities and an interview is also conducted for the Deans of Students at the same universities to establish the effect and or relationships if any.

2.6 Chapter Summary

Theoretical and empirical review of literature on sports success and sports scholarships and their effect on the quality and quantity of university students' enrolment appears to suggest a positive effect according to (Bryant, 2016; McLendon et. al., 2009; Pope and Pope, 2009; Dynarski et. al., 2007; St. John, 2006, Hossler, 2000; McCormick and Tinsley, 1987; Coughlin and Erikson, 1984). At the same time, other factors are highlighted as stronger determinants of student enrollment when compared to sports (Frank, 2004; Van Holm and Zook, 2016). They include: the perception of the student applicants on the university's reputation, their level of financial need and their own abilities both academic and sports talents. A conceptual framework has been founded on the anchoring theoretical framework of net-price and rational choice theories to include an exhaustive list of sports success and sports scholarships as independent variables to be compared and analyzed separately and jointly on their effect on students enrolment as the dependent variable hinged on these human capital key economic theories. This study therefore sought to establish the effect of university sports on student enrolment in the context of private Kenyan universities.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology and research design to be adopted in conducting the study and collecting the desired data. The chapter describes the selection of data to be used, the survey expert interview procedure to be followed as well as the type of instrument to be used. The data collection procedures and data analysis techniques to be used in analyzing the results of the study are also discussed.

3.2 Research Design

Pragmatism research philosophy was adopted for this study. Pragmatism unlike the extreme positivist and interpretivist research philosophies, accepts concepts to be relevant depending on how they affect desired action. Pragmatism opposes a ‘one shoe fits all’ approach and instead supports a multi-faceted approach to reality interpreting and understanding the world through research. This study further employs a descriptive research type using the mixed method design approach by way of integrating quantitative and qualitative data (Creswell & Creswell, 2017). In this study, the convergent mixed design was specifically adopted collecting qualitative and quantitative data together, at the same time and with equal priority. Here, expert-interviews were performed on deans of students to achieve cross validation with the survey on coaches and students to check for relationships between the variables (Fraenkel & Wallen, 2009). This study combines survey and expert-interviews as an approach with a standard open-ended interview for deans of students and a survey for sports coaches and sports captains. Melissa, (2014), describes expert-interviews as an investigation to learn what is already known and what remains to be learned about a topic through engaging known subject matter experts and reviewing available data from previously conducted research.

3.3 Target Population and Sampling

The study population was all (36) private universities in Kenya as recognized by the Commission for University Education (CUE, 2017). This population provides the context necessary to fill the research gap in understanding the effect of sports, if any, on university student enrolment in Kenya. Specifically, the respondents in the population include students (sports captains), sports coaches and dean of students from Kenyan Universities.

The sampling frame of the study includes the six private universities with Sports Scholarships in Kenya (CPS International Sports Ranking, 2016). This is because of the limitations of time and resources of the study. Also, Mugenda & Mugenda (2013) provides that 10% - 30% is an adequate sample from a study population. Further, all sports coaches (about 5 per university), deans of students (1 per university) and sports captains (about 5 per university) in the select six universities were interviewed bringing the total target sample of respondents to about 66 consisting about 11 respondents from each of the target universities. These numbers were adjusted downwards after the pilot test revealed that most universities had less than 5 coaches and not 10.

3.4 Research Instrument

A questionnaire was developed and then distributed to the relevant students and coaches categories of respondents in the five sampled universities. The instrument captured data on both independent variables of sports success and sports scholarship and the dependent variable of university student enrolment. It was an appropriate tool as it was able to collect a variety of large amounts of data.

An interview guide was developed to obtain detailed information in a largely open ended fashion from the deans of students as they are expected to have a lot more information than the students and coaches on the enrolment data, strategies and costs elements of the study. See Appendix 1. Relevant secondary data was also sought from the six universities for complementary secondary data analysis as per the guidance of Creswell (2017). This was not forthcoming though as institutions claimed them to be trade secrets.

A pilot-test was conducted prior to administering the research instruments to the respondents, to check for their validity and reliability. Validity of the content sought via the instruments was measured against the objectives while a Cronbach's Alpha of 0.7 and above was used to determine the reliability of the instruments during this pilot test.

3.5 Data Collection Procedure

A concurrent triangulation design of the mixed method approach was specifically adopted in data collection; collecting both survey and interviews concurrently and then triangulating the results for cross validation. This took a span of three months to enable adequate sourcing of primary data (Creswell, 2017). Data collection was mainly done during intervarsity sports events and after training sessions to target the students and coaches respondents in their natural setting of sports activities, while site visits to universities was the procedure to target the deans of students or their representatives.

3.6 Data Processing and Analysis

The two independent variables of the study were analyzed for effect on the dependent variable from the primary data collected. Analysis was used to answer the research questions. Tables were used to summarize and analyze qualitative data and quantitative data of the study as per Creswell (2017). Further, the type of correlation coefficient utilized in a study depends on the type of data collected (nominal, ordinal, interval, or ratio). The four common correlation coefficients are: Pearson's Product-Moment Correlation (both variables must be interval or ratio), Spearman rank-order correlation (both variables are ordinal), Point-Biserial Correlation Coefficient (one variable interval or ratio and the other is nominal and dichotomous), and Kendall rank correlation - Phi Coefficient (both variables are nominal and dichotomous). Correlation coefficients range from -1.00 to 1.00, with the weaker the relationship the closer the coefficient is to zero. The following rule of the thumb for interpreting the strength of the correlation: > 0.7 is strong, > 0.3 is moderate, and < 0.3 is weak. The Spearman rank-order correlation was therefore used to check for correlation in the research objectives because the data collected was ordinal in nature.

3.7 Ethical Considerations

Careful considerations were made to ensure that the highest level of ethical standards in research were observed before during and after the study. The researcher obtained an approval letter from the School of Humanities and Social Science to conduct the study as annexed in the study. The researcher also submitted the study to the Strathmore University Ethics Review Board for review and got an ethical clearance to proceed with the study as annexed in this study. The researcher also obtained a research permit and letter of approval from the National Commission for Science, Technology and Innovation (NACOSTI) to conduct the research. The researcher also made a great effort to ensure that to the best of his knowledge all the literature used in the study was clearly and duly referenced and all the authors and secondary sources cited appropriately as annexed herein.

Further, the researcher obtained consent forms, as annexed herein, from all the respondents that participated in the study and their confidentiality was guaranteed. These were the efforts taken to ensure the integrity of the study and to ensure that the respondents were treated to the dignity they deserve.

CHAPTER FOUR

PRESENTATION OF RESEARCH FINDINGS

4.1. Introduction

This chapter covers the presentation, analysis, discussion and interpretation of the empirical findings on the effect of sports success and sports scholarships on private university students' enrolment in Kenya. The response rate, demographics of the respondents and findings from the sports captains, coaches and deans of students are shared and compared in a detailed analysis.

4.2 Response Rate

Two sets of questionnaires were administered in a survey to University Students Sports Captains and to University Sports Coaches at six select Private Universities in Kenya. An interview was also conducted with Deans of Students or their representatives from the select Private Universities in Kenya. The response rate was as shown in Table 4.1.

Table 4.1 Response Rate

Respondents	Questionnaires/ Interviews Issued	Questionnaires/ Interviews Returned	Response Rate
Deans/Reps	6	6	100%
Coaches	30	24	80%
Captains	30	28	93%
Total	66	58	88%

The response rate was deemed sufficient and analysis was therefore performed on the findings as is presented herein. Further, when the sampled respondents are compared with the quantity of respondents in other related empirical studies, this study interviews a significantly lower population given its limitation and focus but expands literature by including deans and coaches for their perspective and introduces a developing economy view as compared to Bryant (2016) who mainly focusses on students.

4.3 Demographic Distribution of Respondents

Whereas seminal work in this area looked at demographics from a race perspective (Pope and Pope, 2014), this study sought to contribute differently by establishing a different set of demographic parameters of interest like gender and years of experience of the respondents in an effort to understand the respondents and their responses better when compared to each other. Our different respondents included: students, coaches and deans as well as to be able to compare the findings from the respective five different private universities in Kenya.

4.3.1 Demographic Distribution of Deans of Student

The Deans of Students' demographic characteristics are presented herein with the purpose of comparing these characteristics at the six select private universities in Kenya. Gender, level of education and years of work experience are presented in the table 4.2.

Table 4.2: Deans of Students' Demographic Distribution

University	Dean's Gender	Dean's Experience (Years)	Dean's Education Level
SU	Male	17	Masters
USIU	Male	8	PhD
ANU	Male	11	Masters
KEMU	Male	10	Masters
MKU	Male	9	Masters
SPU	Male	8	Masters
Average	-	10.5 (Mean)	-

As indicated in Table 4.2, it was observed that all the Dean of Students were male. It was also observed that the average years of experience of the deans of students was 10.5 years. Further, it was established that all Deans had at least a Masters degree as their highest level of education. This study therefore got responses from relatively experienced deans of students who can be considered to have developed some expert insights over the 8 years' experience in the posts. Comparing this with Bryant, (2016) case study students' only focus groups approach, this study got relatively relevant respondents for the subject of effect of university sports on student enrolment to include also coaches and deans of students.

4.3.2 Demographic Distribution of Coaches

The Coaches' demographic characteristics are presented herein with the purpose of comparing these characteristics at the six select private universities in Kenya. Gender ratios are presented in the table 4.3.

Table 4.3: Coaches' Demographic Distribution

University	Male Coaches	Female Coaches
SU	6	0
USIU	2	3
ANU	1	1
KEMU	3	9
MKU	3	0
SPU	3	2
Ratio	18	6

As indicated in Table 4.3, it was observed that all the coaches were distributed in an 18:6 ratio of Male to Female; a better gender ratio compared to the all-male deans of students. This study adds a relatively new dimension to demographics of respondents introducing views of coaches on the subject of sports effect on enrolment compared to (Hallak, 2019; Caudill et al, 2018; Van Holm and Zook, 2016). This effectively grows literature on the subject.

4.3.3 Demographic Distribution of Students (Captains)

The Student Captains' demographic characteristics are presented herein with the purpose of comparing these characteristics at the six select private universities in Kenya. Gender, KCSE Mean Grade and Student Sports are presented in the table 4.4. The KCSE grades bring the perspective of quality of student enrolment especially when compared to related studies in the area of effect of sports success on university student enrolment. Other authors use American post-secondary school standardized entrance test scores (Caudill et al, 2018).

Table 4.4: Students (Captains)' Demographic Distribution

University	Male Students	Female Students	Student KCSE Average Mean Grade)
SU	4	1	B-
USIU	2	2	B+
ANU	3	1	B-
KEMU	5	0	B
MKU	4	1	B-
SPU	5	0	B-
Total	23	5	B- (Average)

The students (captains) respondents as shown in (Table 4.4.) in the study had a 23:5 ratio of male to female again indicating a skew on the male representation in university sports for the sample. Another observation is that the KCSE mean grades for all the universities is at a B- with USIU averaging a B+ which indicates that the Sports scholars had a higher mean grade than the minimum university entry requirement of C+. This alludes to sports contributing to the quality of student enrolments in private universities for this select sample, effectively supporting the findings of Caudill et al, (2018) that indicate collegiate sports has a positive effect on the quality of student enrolment.

Table 4.5: Sports Teams' Student Participation Distribution

Sports	University Name						Total
	ANU	KEMU	MKU	St Pauls	Strathmore	USIU	
Basketball	2	1	3	0	0	0	6
Chess	0	0	0	1	0	0	1
Handball	1	1	1	1	0	0	4
Hockey	0	0	0	1	1	2	4
Rugby	0	1	1	1	0	1	4
Soccer	1	1	0	1	2	0	5
Swimming	0	1	0	0	0	1	2
Table Tennis	0	0	0	0	1	0	1
Volleyball	0	0	0	0	1	0	1
Total	4	5	5	5	5	4	28

It was also observed in Table 4.5 that the majority (6) of students interviewed were basketball players while Table Tennis and Volleyball had the least(1) respondents. There were a total of 10 sports represented in this study consisting: Basketball, Chess, Handball, Hockey, Rugby, Soccer, Swimming, Table Tennis and Volleyball. This effectively expands scope on university sports beyond the cliché focus on college football and basketball as considered by (Caudill et al, 2018; Van Holm and Zook, 2016; Frank, 2004).

4.4 Dean of Students Responses

4.4.1 Effect of University Sports Success on Student Enrolment

Pope and Pope (2014), in their study consider the number and type of students that send their entrance scores to each college that participates in Division I, basketball or football. Using a fixed-effect identification strategy that controls for year-and school-specific unobserved heterogeneity, they find that there is a large and statistically significant increase in the number of students who send their entrance scores to schools that perform well in recent basketball or football events. For example, they find that a school that makes it to the “Final 4” in the basketball tournament or is ranked in the top 10 in the Associated Press Poll at the end of the football season experiences an average increase in sent entrance scores by 6%–8% the following year. In this study, it was observed by all (100%) of the dean of students’ respondents that Sports Success, particularly University Rankings on National Leagues and KUSA, affect positively the student enrolment in private universities.

4.4.2 Effect of University Sports Scholarships on Student Enrolment

Most of these early approaches to enrollment management according to Hossler (2000), included the office of financial aid, and acknowledged the role that pricing and financial aid played in influencing student enrollment decisions. Nevertheless, compared with the landscape of today, these early efforts to link financial aid within the broader concept of enrollment management seem simplistic. The role of financial aid within enrollment management has come a long way in just fifteen to twenty years. In this study, it was observed by all (100%) of the dean of students’ respondents that Sports Scholarships, particularly partial and full scholarships have the potential to affect positively the student

enrolment in private universities. This was observed by both deans of universities with sports scholarships as well as those without sports scholarship programs.

4.4.3 Effect of Sports Success and Scholarships on Student Enrolment

The following is a presentation of the findings of the deans of students on the effect of university sports success and scholarships on student enrollment in private universities in Kenya. All 6 deans of students interviewed indicated a yes on the effect of both sports scholarships and sports success on Kenyan private university student enrolments. In the discussion notes, some (4) indicated that sports plays a major role); (2) indicated that they were not sure of the magnitude of the effect while (1) said that sports scholarships and sports success plays a very little role. One of the deans further sighted ‘trade secrets’ as one of the barriers to their sharing their opinions on the subject. It can be observed that majority of the deans of students did (67%) indicated that both sports scholarships and sports success have a positive effect on university student enrolment. Sports success registered a higher effect on enrolment than sports scholarships by (16%).

4.5. Sports Captains Responses

4.5.1 Effect of University Sports Success on Students Enrolment

Findings here also support literature on the positive effect of sports success on student enrolment Caudill et al, (2018). Majority (71.5%) of the students’ respondents indicated that Sports Success, particularly University Rankings on National Leagues, affect positively the student enrolment in private universities indicated it in this study. See: Table 4.6.

Table 4.6: Effect of National League Ranking on Student Enrolment (Captain)

Does Sports have an effect on university student enrolment?		
	Frequency	Percent
Strongly Disagree	2	7.1
Disagree	2	7.1
Neither Agree nor Disagree	4	14.3
Agree	14	50.0
Strongly Agree	6	21.4
Total	28	100.0

It was observed by majority (71.5%) of the students' respondents that Sports Success, particularly University Rankings on KUSA, affect positively the student enrolment in private universities supporting literature from American context empirical studies. See the following: Table 4.7.

Table 4.7: Effect of KUSA League Rankings on Student Enrolment (Captains)

Does a ranking in the KUSA League affect student enrolment?		
	Frequency	Percent
Strongly Disagree	1	3.6
Disagree	4	14.3
Neither Agree nor Disagree	3	10.7
Agree	15	53.6
Strongly Agree	5	17.9
Total	28	100.0

4.5.2 Effect of University Sports Scholarships on Students Enrolment (Captains)

It was observed by majority (67.9%) of the students' respondents that Sports Scholarships, particularly full scholarships, affect positively the student enrolment in private universities. This results are in line with the Net Price and Rational Choice theories applied for this study. See Table 4.8.

Table 4.8: Effect of Full Scholarships on Student Enrolment (Captains).

Full Scholarships affect students' enrolment positively.		
	Frequency	Percent
Strongly Disagree	1	3.6
Disagree	1	3.6
Neither Agree nor Disagree	7	25.0
Agree	12	42.9
Strongly Agree	7	25.0
Total	28	100.0

It was observed by majority (53.5%) of the students' respondents that Sports Scholarships, particularly partial scholarships, affect positively the student enrolment in private

universities. This results are consistent with the prescribed outcomes of the Net Price and Rational Choice theories. See Table 4.9.

Table 4.9: Effect of Partial Scholarships on Student Enrolment (Captains).

Partial Scholarships affect students' enrolment positively.		
	Frequency	Percent
Strongly Disagree	1	3.6
Disagree	8	28.6
Neither Agree nor Disagree	4	14.3
Agree	9	32.1
Strongly Agree	6	21.4
Total	28	100.0

4.5.3. Effect of Sports Success and Scholarships Student Enrolment

The following is a presentation of the findings on student views on the effect of university sports on student enrollment in private universities in Kenya. Majority (96.4%) of the students found a positive effect of sports on student enrolment in Kenyan private universities. The findings support the work of Pope and Pope (2014), in that, just as they find that there is a large and statistically significant increase in the number of students who send their entrance scores to schools that perform well in recent basketball or football events, Captains too agree that sports have a positive effect on university enrolment in private universities in Kenya. The responses have been summarized in tables as indicated herein. Sports success registered a higher effect on enrolment than sports scholarships by at 3.6%.

Table 4.10: Effect of Sports Success and Scholarships Student Enrolment (Captains)

Does sports success and scholarships have an effect on university student enrolment?		
	Frequency	Percentage
Yes	27	96.4
No	1	3.6
Total	28	100.0

4.6. Coaches Responses

4.6.1 Effect of University Sports Success on Student Enrolment

It was observed in line with the predictions of the Net Price and Rational Choice theories that majority (79.2%) of the coaches' respondents that Sports Success, particularly University Rankings on National Leagues, affect positively the student enrolment in private universities. See the following: Table 4.11.

Table 4.11: Effect of National League Ranking on Student Enrolment (Coaches)

Does a ranking in the National League affect student enrolment?		
	Frequency	Percent
Strongly Disagree	1	4.2
Neither Agree nor Disagree	4	16.7
Agree	13	54.2
Strongly Agree	6	25.0
Total	24	100.0

It was observed by majority (66.7%) of the coaches' respondents that Sports Success, particularly University Rankings on KUSA, affect positively the student enrolment in private universities. See the following: Table 4.12.

Table 4.12: Effect of KUSA League Ranking on Student Enrolment (Coaches)

Does a ranking in the KUSA League affect student enrolment?		
	Frequency	Percent
Strongly Disagree	1	4.2
Neither Agree nor Disagree	7	29.2
Agree	9	37.5
Strongly Agree	7	29.2
Total	24	100.0

4.6.2 Effect of University Sports Scholarships on Students Enrolment (Coaches)

It was observed by majority (54.2%+25%=79.2%) of the coaches respondents that Sports Scholarships, particularly full scholarships, affect positively the student enrolment in private universities. Effectively expanding literature with Coaches' views. See Table 4.13.

Table 4.13: Full Scholarships affect students' enrolment positively (Coaches).

Do Full Scholarships affect University Student Enrolment?		
	Frequency	Percent
Strongly Disagree	1	4.2
Neither Agree nor Disagree	4	16.7
Agree	13	54.2
Strongly Agree	6	25.0
Total	24	100.0

It was observed by majority (66.7%) of the students' respondents that Sports Scholarships, particularly partial scholarships, affect positively the student enrolment in private universities in line with the Human Capital theories chosen for this study. The findings further include the views of coaches; a segment of key respondents not included in past empirical studies. See Table 4.14.

Table 4.14: Partial Scholarships affect students' enrolment positively (Coaches).

Do Partial Scholarships affect University Student Enrolment?		
	Frequency	Percent
Strongly Disagree	1	4.2
Neither Agree nor Disagree	7	29.2
Agree	9	37.5
Strongly Agree	7	29.2
Total	24	100.0

4.6.3 Effect of Sports Success and Scholarships on Student Enrolment

The following is a presentation of the findings on student views on the effect of university sports success and scholarships on student enrollment in private universities in Kenya. Most (95%) of the coaches believe that sports success and scholarships has an effect on student enrolment in Kenyan private universities. The findings effectively support expected outcomes of the Net Price and Rational Choice Theory. Sports success registered a higher effect on enrolment than sports scholarships by 12.5%. The responses have been summarized in tables as indicated herein.

Table 4.15: Effect of Sports Success and Scholarships on Enrolment (Coaches)

Does sports success and scholarships have an effect on university student enrolment?		
	Frequency	Percentage
Yes	23	95.8
No	1	4.2
Total	24	100.0

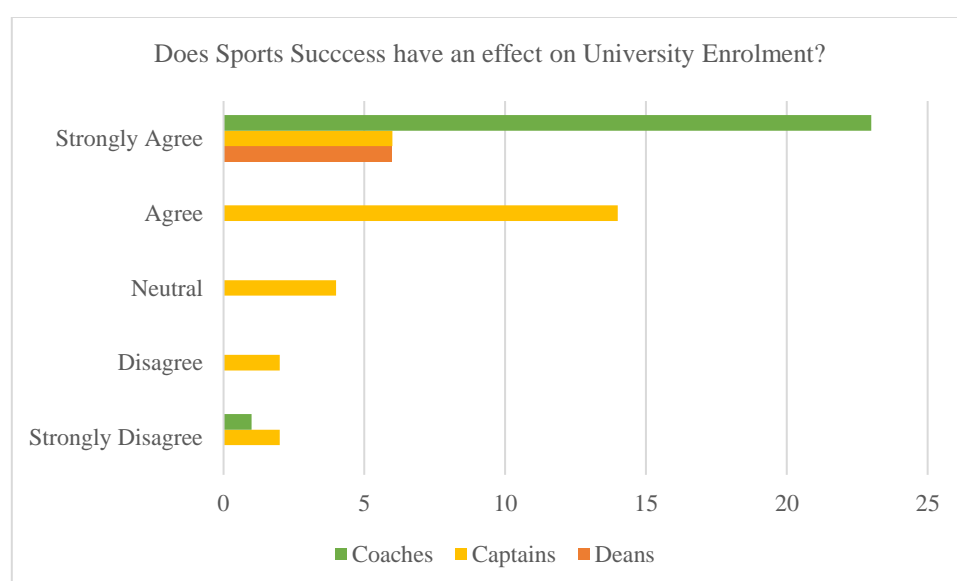
4.7. Summary

In summary, the researcher established a triangulated result of majority (over 66%) of the students, coaches and deans of students at the select Kenyan private universities, believe in a positive effect of sports scholarships and sports success as variables on university student enrolment. The quantitative data collected from students and coaches affirms the qualitative data collected from the deans of students. This effectively answers our research questions to the affirmative as earlier developed in the fore chapters of the study.

4.7.1 Effect of University Sports Success on Students Enrolment

It was observed by majority of the dean, students and coaches as respondents that Sports Success affects positively the student enrolment in private universities. See: Figure 4.1.

Figure 4.1: Effect of University Sports Success on Student Enrolment (Cross-Tabs)

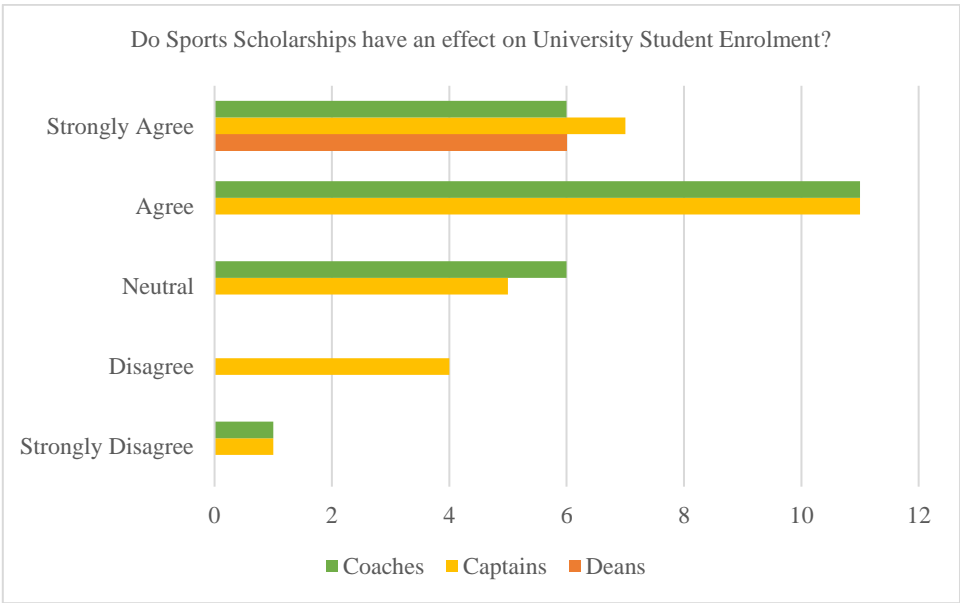


It was observed by majority of the students, deans of students and coaches as respondents that Sports Success, particularly University Rankings on the National Leagues and KUSA, affect positively the student enrolment in private universities. This is contrary to the literature observations by Frank (2004) and Van Holm and Zook (2016) that found little if any effect of sports success on university students’ enrolment.

4.7.2 Effect of University Sports Scholarships on Students Enrolment

It was observed by majority of the students, deans of students and coaches as respondents that Sports Scholarships, particularly full and partial scholarships, affect positively the student enrolment in private universities. See Figure 4.2.

Figure 4.2: Effect of Sports Scholarships on University Students Enrolment.



Majority of the students, coaches and deans of students as respondents indicated that Sports Scholarships, particularly full and partial scholarships, affect positively the student enrolment in private universities in Kenya. Empirical works of Britt et al (2016) have effectively been supported by this study’s findings.

Further, the findings from students, deans of students and coaches also establish the demographic characteristics of the potential students likely to be attracted to a private university by sports. They are largely: Talented and Needy (75%) and High School Sports Scholars (25%) keen on developing their sports talents as they pursue their higher education. The target candidates for sports scholarships in Kenya are largely needy but talented students as per this study's findings. This categorization contributes a new dimension to the race, gender and geographical demographics studied by Pope and Pope (2014). See table 4.16.

Table 4.16: Target Candidates for University Sports Scholarships in Kenya.

Which students are likely to be attracted by Sports Scholarships?		
	Frequency	Percentage
Sports Scholars	6	75
Talented and Needy	18	25
Total	24	100.0

4.7.3 Sports Scholarships vs Sports Success

This findings of this study on the difference in the effect of both sports success and scholarships implies that sports success contributes more to enrolment in private universities in Kenya than sports scholarships by 10.9% as reflected by the responses from the deans, coaches and students. Further, the type of correlation coefficient utilized in a study depends on the type of data collected (nominal, ordinal, interval, or ratio). The four common correlation coefficients are: Pearson's Product-Moment Correlation (both variables must be interval or ratio), Spearman rank-order correlation (both variables are ordinal), Point-Biserial Correlation Coefficient (one variable interval or ratio and the other is nominal and dichotomous), and Kendall rank correlation - Phi Coefficient (both variables are nominal and dichotomous). Correlation coefficients range from -1.00 to 1.00, with the weaker the relationship the closer the coefficient is to zero. The following rule of the thumb for interpreting the strength of the correlation: > 0.7 is strong, > 0.3 is moderate, and < 0.3 is weak. The Spearman rank-order correlation was used to check for correlation in the research objectives because the data collected was ordinal in nature.

Though both sports success and sports scholarships were found to have a positive effect on university student enrolment in Kenyan private universities, this study found a weak correlation ($r = 0.2$; <0.3 weak) between the responses given for sports success and sports scholarships as the two independent variables in the study. The implications of this is that though both contribute positively to enrolment, one cannot be a good substitute for the other. They singly and jointly contribute differently to student enrolment. See Table 4.17.

Table 4.17: Spearman Rank Correlation Coefficient

Spearman Rank Correlation Coefficient. Sports Scholarships vs Sports Success						
	Scholarships Results	Success Results	Scholarship Rank	Success Rank	D	d ²
Strongly Disagree	3	2	4	5	-1	1
Disagree	2	4	5	4	1	1
Neutral	4	11	3	3	0	0
Agree	14	22	2	1	1	1
Strongly Agree	35	19	1	2	-1	1
Total	58	58				4
<i>Given $r=0.2$, At 0.05 level of significance, Sports Success and Sports Scholarships are thus not Correlated as $r<0.3$, weak.</i>						

This results implies that the responses for sports scholarships and those of sports success are not substitutable. This study therefore suggests that a university must consider both sports success and sports scholarships as distinctly important factors in the effort to use sports to attract students' enrolment to a university. They may not be substitutable as independent variables, they both contribute unrelatedly but similarly positively to university student enrolment.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendations of the study. The general objective of the study was to assess the effect of university sports on student enrolment in private universities in Kenya. The objective is discussed along with the three specific objectives in light of the research findings.

5.2 Summary of the study

In light of recent private university enrolment challenges in Kenya, a conceptual gap on the effect of sports on enrolment as evidenced by conflicting empirical studies' findings as well as a contextual gap due to the fact that to the best knowledge of the researcher there are limited studies on the subject of sports and enrolment in Universities in Kenya; this study became a necessary and relevant area for the researcher to explore. Specifically, the study sought to determine the effect of sports success on student enrolment in private universities in Kenya. It also, sought to establish the effect of sports scholarships on student enrolment in private universities in Kenya. Relevant literature was reviewed, a theoretical framework was developed and a conceptual framework was provided to guide the study to its logical conclusion.

The study targeted a select 6 private Universities drawn from Nairobi, Embu, Kajiado and Kiambu counties. They were among the top private universities in the Ranking by CPS Research International in 2016. The study employed purposive sampling method to target 6 deans of students, 5 sports students (captains) in each select private university and 5 coaches in each select private university; drawn from the 6 select universities to target a total of 66 respondents. Two questionnaires were developed and administered in a survey to coaches and students, while an interview guide was developed and used to interview the deans of students.

The overall response rate was 88 percent: 100 percent for deans of students, 80 percent for coaches and 93 percent for students (captains). The response rate was found adequate for analysis. Data was analyzed using the Statistical Package for Social Sciences (SPSS) to process the frequencies and descriptive statistics which were used to discuss the findings. The following were the findings of the study.

5.3 Summary of findings

5.3.1 Effect of University Sports Success on Student Enrolment

The first objective of the study was to determine the effect of university sports success on student enrolment in private universities in Kenya. It was established in triangulation from the survey and the interview that majority of the deans of students, coaches and student captains were of the view that there sports rankings particularly the National Leagues and KUSA were found to have a positive effect on students enrolment in private universities; especially those who are interested in developing their sports talents and those who are financially needy. This study therefore supports the position of empirical studies by herein referenced among others who see a significant and positive effect of sports success on student enrolment in universities.

5.3.2 Effect of University Sports Scholarships on Student Enrolment

The second objective of the study was to determine the effect of university sports scholarships on student enrolment in private universities in Kenya. It was established in triangulation from the survey and the interview that majority of the deans of students, coaches and student captains were of the view that there sports scholarships particularly the Full and Partial sports scholarships had a positive effect on students enrolment in private universities; especially those who come from needy backgrounds and have sports talents. The study conforms to expected outcomes of the Net-Price and Rational Choice theories that were picked to anchor this study. In matters student enrolment, students will often make a rational decision and will mostly be influenced by the cost of attendance net any financial aid or such other inducements that bring their costs down.

5.3.3 Effect of Sports Success and Scholarships on Student Enrolment

The third objective of the study was to determine the difference in effect of university sports success and scholarships on student enrolment in private universities in Kenya. It was established in triangulation from the survey and the interview that majority of the deans of students, coaches and student captains were of the view that sports success particularly KUSA and National league rankings had a higher effect on enrolment in private universities in Kenya as compared to sports scholarships particularly the Full and Partial sports scholarships. The study conforms to expected outcomes of the Net-Price and Rational Choice theories that were picked to anchor this study. In matters student enrolment, students will often make a rational decision and will mostly be influenced by reputation as in the form of sports success; and the cost of attendance net any financial aid or such other inducements that bring their costs down as of the form of sports scholarships. The study also established that success and scholarships cannot be good substitutes as variables and that both are required as they differently and jointly contribute positively to student enrolment.

5.4 Conclusion

The research findings established that indeed in the Kenyan context, university sports have an effect on the students' enrolment in private universities. This means that research questions on effect for sports scholarships and sports success were answered to the affirmative by the research findings. Further, we can therefore conclude that it would be a worthwhile strategy for private universities in Kenya to invest in sports success and sports scholarships among other strategies to attract student enrolments in their universities. The study therefore supports similar findings in different contexts and approaches consisting empirical studies herein referenced.

5.5. Recommendations

Based on the finding of the study, the following recommendations were made in relation to the research objectives as discussed in the dependent and independent variables. The recommendations have been discussed as effect of sports success on university student enrolment as well as effect of sports scholarships on university students' enrolment. Further, the theories of Net-Price and Rational Choice are supported by the findings around

Sports Scholarships while empirical studies herein referenced are found to be in agreement with the findings of this study and the recommendations herein.

5.5.1 Recommendations for Effect of Sports Success on Enrolment

Including relevant strategies and budgets to ensure sports success at private universities in Kenya could have a positive effect on students' enrolment. Such investments could include deliberate efforts to support the university teams to qualify and participate in the National League, KUSA and East African Games among other Inter-Varsity Games.

5.5.2 Recommendations for Effect of Sports Scholarship on Enrolment

Considering relevant strategies and budgets to ensure sports scholarships are offered at private universities in Kenya could have a positive effect on students' enrolment. Such investments could include full or partial scholarships for the most talented students qualifying to join programs offered at the university. Universities like Strathmore University and USIU indicated that their investments in sports scholarship have presented them with great results in student enrolment over the years. The findings also indicate that sports scholarships contribute positively to sports success; another pull factor for student enrolment in private universities in Kenya.

5.5.3. Recommendations for Effect of Sports Success and Scholarships on Enrolment

This findings of this study on the difference in the effect of both sports success and scholarships implies that sports success contributes more to enrolment in private universities in Kenya than sports scholarships by 10.9%. Further, both have a positive effect on student enrolment but that they contribute differently singly and jointly to student enrolment. This is evident from the weak relationship established by the spearman rank coefficient between the responses for sports scholarships and those of sports success indicating they cannot make good substitutes to each other. This study therefore suggests that a university must consider both sports success and sports scholarships as distinctly important factors in the effort to use sports to attract students' enrolment to a university.

They may not be substitutable as independent variables, they both contribute unrelatedly but similarly positively to university student enrolment.

5.6 Suggestions for Further Research

Based on the finding of the study, the following suggestions are made for further research: A delimitation of the study to include all universities in Kenya could paint a bigger and better picture on the effect of university sports on student enrolment. A study on the factors contributing to sports success in Kenyan universities may also provide universities with more information on how to improve their sports performance. Additionally, with verifiable enrolment data from the universities and updated scholarship data from the same universities, it would be possible to carry-out in-depth correlation statistics on the subject for a more enriched empirical study on the subject that can be compared with the respondent views in this study for significant differences and relationships. Finally, a comparison of private and public university sports on student enrolment in Kenya may also contribute to the contextual gap in relevant literature in the context of Kenya and Africa.

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APPENDICES

Appendix I: Letters of Introduction to Respondents



7th March 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: REQUEST TO CONDUCT RESEARCH

This is to certify that **Kevin Muchemi** is a final term Masters of Science in Educational Management (Msc.EM) student at Strathmore University. To complete his Masters, he is required to write a dissertation applying the knowledge and skills he has acquired.

Kevin has titled his dissertation '*Effect of University Sports on Students' Enrolment in Kenyan Private Universities*'. We shall be grateful for any assistance you can give him.

He commits to follow all confidentiality regulations and submit the findings to your institution's management before publishing or disseminating them.

We shall appreciate any assistance given to him.

Yours truly,

Dr. Magdalene Dimba Phd.
RESEARCH DIRECTOR
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

Ole Sangale Rd, Madaraka Estate. PO Box 59857-00200, Nairobi, Kenya. Tel +254 (0)703 034000 Email mdimba@strathmore.edu www.strathmore.edu

27th February, 2019,

Kevin Muchemi
P.O. Box 9496-00300

Nairobi, Kenya

To:

Institution:

Dear Sir/Madam

RE: SURVEY DATA FROM STUDENTS AND STAFF


I am a Masters student at Strathmore University pursuing a Master of Science in Education Management degree. I am conducting a research study on “Effect of University Sports on University Student Enrolment decisions”.

As part of my study requirements, I am required to conduct a survey interviewing university sports staff, student aid staff, students and past students of select private universities in Kenya. Your organization has purposefully been selected as one of the participating organizations in the study. The purpose of this communication therefore is to seek official permission/authorization to administer my survey questionnaire in your organization.

Attached please find a copy of an introduction letter from the university and the questionnaire to be administered. I intend to administer the questionnaire in the months of February and March, 2019.

I look forward to your support.

Yours faithfully,



Kevin Muchemi, MSc. EM Student,
Strathmore University.

Appendix II: Participant Information and Consent Form

PARTICIPANT INFORMATION AND CONSENT FORM

Effect of University Sports on Students' Enrolment in Kenyan Private Universities.

SECTION 1: INFORMATION SHEET

Investigator: Kevin Wairagu Muchemi

Institutional affiliation: Strathmore University (SU)

SECTION 2: INFORMATION SHEET–THE STUDY

2.1: Why is this study being carried out?

As part of my study requirements, I am required to conduct a survey interviewing university sports staff, student aid staff, students and past students of select private universities in Kenya.

2.2: Do I have to take part?

No. Taking part in this study is optional and the decision rests only with you. If you decide to take part, you will be asked to complete a questionnaire to get information on effect of sports on private university students' enrolment in Kenya. You are free to decline to take part in the study from this study at any time without giving any reasons.

2.3: Who is eligible to take part in this study?

- ✓ Kenyan Private University Sports Captains
- ✓ Kenyan Private University Sports Coaches
- ✓ Kenyan Private Universities Deans of Students

2.4: Who is not eligible to take part in this study?

1. Anyone not captured under 2.3 above.

2.5: What will taking part in this study involve for me?

You will be approached and requested to take part in the study. If you are satisfied that you fully understand the goals behind this study, you will be asked to sign the informed consent form (this form) and then taken through a questionnaire to complete.

2.6: Are there any risks or dangers in taking part in this study?

There are no risks in taking part in this study. All the information you provide will be treated as confidential and will not be used in any way without your express permission.

2.7: Are there any benefits of taking part in this study?

The information will be used to improve higher education enrolment management strategies for private universities in Kenya.

2.8: What will happen to me if I refuse to take part in this study?

Participation in this study is voluntary.

2.9: Who will have access to my personal information during this research?

Only the people who are closely concerned with this study will have access to your information. All your personal information will be kept confidential.

2.10: Who can I contact in case I have further questions?

You can contact me, Kevin Muchemi, at Strathmore University, or by e-mail kmuchemi@starthmore.edu, or by phone 0727857777. You can also contact my supervisor, Dr. Magdalene Dimba at the Strathmore University, Nairobi, or by e-mail mdimba@starthmore.edu.

If you want to ask someone independent anything about this research please contact:

The Secretary–Strathmore University Institutional Ethics Review Board, P. O. BOX 59857, 00200, Nairobi, email ethicsreview@strathmore.edu Tel number: +254 703 034 375.

I, _____, have had the study explained to me. I have understood all that I have read and have had explained to me and had my questions answered satisfactorily. I understand that I can change my mind at any stage.

Please tick the boxes that apply to you;

Participation in the research study

☐

I AGREE to take part in this research

☐

I DO DON'T AGREE to take part in this research

Storage of information on the completed questionnaire

☐

I AGREE to have my completed questionnaire stored for future data analysis

☐

I DO DON'T AGREE to have my completed questionnaire stored for future data analysis

Participant's Signature:

Date: ____/____/____

Participant's Name:

I, _____ (Name of person taking consent) certify that I have followed the SOP for this study and have explained the study information to the study participant named above, and that s/he has understood the nature and the purpose of the study and consents to the participation in the study.

Investigator's Signature:



Date: ____15th/March/2019____

Investigator's Name: Kevin Muchemi____

Appendix III: Student Enrolment Survey

A. Sports Students (Captains) Questionnaire:

Introduction

The following is a survey questionnaire for an ongoing independent research study by a Masters student who is interested in your impression on the effect of University Sports on University Student Enrolment. We invite current sports captains who are university students and whose schedule will allow participation in a (10 minute) survey. The purpose of this study is to determine if university sports success and sports scholarships in particular have an effect on the decision to enroll at your university and how that compares with other universities in Kenya. The tallied results of this survey could potentially be published in peer reviewed academic journals and may have influence on enrolment strategies for Kenyan universities. The information you provide in this survey will be used for the sole purpose of this research as stated above and it be treated in confidence as per the general guidelines of academic research work ethics. Your participation implies consent. Thank you once again for choosing to participate in this study.

Part I: Participant's Data:

1. University Name: _____
2. Participants' Gender: _____
3. Are you the Captain of your Team? _____
4. Course of study _____
5. Year of Study _____
6. Former High School _____
7. Mean Grade in KCSE _____
8. Sports Played in High School _____
9. Sports Played in university _____
10. Field Position _____

Part II: Sports and University Enrolment

11. Does a university's top rankings in sports have any effect on a student's enrolment decisions in Kenya? (Select One)

- ☐ Yes
- ☐ No

12. The following is a list of university sports tournaments that various universities in Kenya participate in. In your opinion, how strong is a university's ranking on each of the tournament an important reason for potential students to join a university? (Tick appropriately)

In your opinion:	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly Agree 5
a) National league ranking may attract potential students to a university.					
b) Kenya Universities Sports Association, (KUSA) ranking may attract potential students to a university.					
c) Other (Specify here)					
d) Other (Specify here)					
a) Other (Specify here)					

13. Which students do you think maybe attracted to a university based on the university's sports ranking?

14. Does a sports scholarship have any effect on a student's enrolment decisions in Kenya? (Select One)

- ☐ Yes
- ☐ No

15. In the table below you will find a list of types of university sports scholarships that various universities in Kenya offer. In your opinion, how strong is a university's ranking on each of the tournament an important reason for potential students to join a university? (Tick appropriately)

In your opinion:	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly Agree 5
b) Major Scholarships 50-100%					
c) Partial Scholarships (Less than 50%)					
d) Other (Specify here)					
e) Other (Specify here)					
f) Other (Specify here)					

16. Which students do you think maybe attracted to a university based on the university's sports scholarships?

Do you have any other relevant information to add to your survey submission?

(Tick appropriately) Yes_____ No_____

If yes, kindly email any relevant information, reports, suggestions, enquiries or

additional data to: kevinmuchemi@gmail.com on or before 1800 HRS 30th

December, 2018. Please quote ‘Sports and University Student Enrolment in Kenya, 2018 in the subject of your email).

Thank you once again for choosing to participate in this study!

B. Sports Coaches Questionnaire:

Introduction

The following is a survey questionnaire for an ongoing independent research study by a Masters student who is interested in your impression on the effect of University Sports on University Student Enrolment. We invite current university sports coaches and whose schedule will allow participation in a (10 minute) survey. The purpose of this study is to determine if university sports success and sports scholarships in particular have an effect on the decision to enroll at your university and how that compares with other universities in Kenya. The tallied results of this survey could potentially be published in peer reviewed academic journals and may have influence on enrolment strategies for Kenyan universities. The information you provide in this survey will be used for the sole purpose of this research as stated above and it be treated in confidence as per the general guidelines of academic research work ethics. Your participation implies consent. Thank you once again for choosing to participate in this study.

Part I: Participant's Data:

1. University Name: _____
2. Participants' Gender: _____
3. Are you the Coach of your University Team? _____
4. Which Sports do you coach? _____
5. Years of University Coaching Experience _____

Part II: Sports and University Enrolment

6. What is your 2017 Team Ranking in the KUSA league? _____
7. Does your university offer Sports scholarships? _____
8. Do you have Sports Scholarships Students in your Team? _____
9. Does a university's top rankings in sports have any effect on a student's enrolment decisions in Kenya? (Select One)
 - Yes
 - No

10. The following is a list of university sports tournaments that various universities in Kenya participate in. In your opinion, how strong is a university's ranking on each of the tournament an important reason for potential students to join a university? (Tick appropriately)

In your opinion:	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly Agree 5
e) National league ranking may attract potential students to a university.					
f) Kenya Universities Sports Association, (KUSA) ranking may attract potential students to a university.					
g) Other (Specify here)					
h) Other (Specify here)					
g) Other (Specify here)					

11. Which students do you think maybe attracted to a university based on the university's sports ranking?

12. Does a sports scholarship have any effect on a student's enrolment decisions in Kenya? (Select One)

- ☐ Yes
- ☐ No

13. In the table below, you will find a list of types of university sports scholarships that various universities in Kenya offer. In your opinion, how strong is a university's ranking on each of the tournament an important reason for potential students to join a university? (Tick appropriately)

In your opinion:	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly Agree 5
h) Major Scholarships 50-100%					
i) Partial Scholarships (Less than 50%)					
j) Other (Specify here)					
k) Other (Specify here)					
l) Other (Specify here)					

14. Which students do you think maybe attracted to a university based on the university's sports scholarships?

15. Do you have any other relevant information to add to your survey submission?

(Tick appropriately) Yes_____ No_____

16.1 If yes, kindly email any relevant information, reports, suggestions, enquiries or additional data to: kevinmuchemi@gmail.com on or before 1800 HRS 30th December, 2018. Please quote ‘Sports and University Student Enrolment in Kenya, 2018 in the subject of your email).

Thank you once again for choosing to participate in this study!

C. Dean of Students' Interview Guide:

Interviewer's Instructions

The following is an interview guide for an ongoing independent research study by a Masters student who is interested in your impression on the effect of University Sports on University Student Enrolment. We invite current Dean of Students whose schedule allows participation in a (20 minutes) interview. The purpose of this study is to determine if university sports success and sports scholarships in particular have an effect on the decision to enroll at your university and how that compares with other universities in Kenya. The tallied results of this survey could potentially be published in peer reviewed academic journals and may have influence on enrolment strategies for Kenyan universities. Be sure to inform the Dean of Students that the information you receive from them in this interview will be used for the sole purpose of this research as stated above and it be treated in confidence as per the general guidelines of academic research work ethics. Also, do let them know that their participation implies consent. Thank them once again for choosing to participate in this study.

Part I: Participant's Data:

Begin by getting the following information from the Dean of Students. You can fill out the obvious ones; only ask for what is not apparent.

1. University Name: _____ (obvious)
2. Participants' Gender: _____ (obvious)
3. For how long have you been the Dean of Students at this university?

4. What are your highest academic qualifications?

Part II: Sports and University Enrolment

5. What is the current total university student enrolment? _____
6. What was the student enrolment last year? _____
7. What has been your enrolment trend in the past five years? _____
8. What do you attribute the enrolment trend to? _____
9. What are some of the enrolment strategies employed by your university? _____
10. What sports are played in your university? _____
11. How do you fair in the sports ranking relative to other universities in each of the sports? _____
12. Are rankings in sports important to your university? _____
13. Why? _____
14. Which sports ranking is important to your university? _____
15. Why? _____
16. Where do you get your sports students from? _____

17. How do you attract top sports talents? _____
18. How do you retain the top sports students? _____
19. Is sports success important to your university? _____
20. Why? _____
21. Do you have a Sports Scholarship? _____
22. Why? _____
23. What types of sports scholarships do you offer? _____
24. Would you encourage your university to invest in sports if there was research to indicate that it contributes positively to student enrolment?

25. Ask the Dean if they have any other relevant information to add to your survey submission?

(Tick appropriately) Yes_____ No_____

17.1 If yes, kindly email any relevant information, reports, suggestions, enquiries or additional data to: kevinmuchemi@gmail.com on or before 1800

HRS 30th December, 2018. Please quote 'Sports and University Student Enrolment in Kenya, 2018 in the subject of your email).

Thank the Dean of Students once again for choosing to participate in this study! Ask if they would be interested in a copy of the findings and on which email to send the same.

Appendix IV: 2017 Kenya Accredited Universities CUE List

The Commission for University Education (CUE) was established by an Act of Parliament, Universities Act No. 42 of 2012. It is the Government agency mandated to ensure the maintenance of standards, quality and relevance in all aspects of university education, training and research. In line with Section 28 (4) of The Universities Act, 2012 and amendments thereon, CUE shall cause to be published, the list of universities accredited to undertake university education in Kenya. The following is the list of accredited universities in Kenya:

Public Chartered Universities

1. University of Nairobi (UoN) Established – 1970 Chartered – 2013
2. Moi University (MU) Established – 1984 Chartered – 2013
3. Kenyatta University (KU) Established – 1985 Chartered – 2013
4. Egerton University (EU) Established – 1987 Chartered – 2013
5. Jomo Kenyatta University of Agriculture and Technology (JKUAT)
Established – 1994 Chartered – 2013
6. Maseno University (Maseno) Established – 2001 Chartered – 2013
7. Masinde Muliro University of Science and Technology (MMUST)
Established – 2007 Chartered – 2013
8. Dedan Kimathi University of Technology 2012
9. Chuka University 2013
10. Technical University of Kenya 2013
11. Technical University of Mombasa 2013
12. Pwani University 2013
13. Kisii University 2013
14. University of Eldoret 2013
15. Maasai Mara University 2013
16. Jaramogi Oginga Odinga University of Science and Technology 2013
17. Laikipia University 2013
18. South Eastern Kenya University 2013
19. Meru University of Science and Technology 2013
20. Multimedia University of Kenya 2013

21. University of Kabianga 2013
22. Karatina University 2013
23. Kibabii University 2015
24. Rongo University 2016
25. The Co-operative University of Kenya 2016
26. Taita Taveta University 2016
27. Murang'a University of Technology 2016
28. University of Embu 2016
29. Machakos University 2016
30. Kirinyaga University 2016

Public University Constituent Colleges

1. Garissa University College (MU) 2011
2. Alupe University College (MU) 2015
3. Kaimosi Friends University College (MMUST) 2015
4. Tom Mboya University College (Maseno) 2016
5. Turkana University College (MMUST) 2016
6. Tharaka University College (Chuka University) 2017

Private Chartered Universities

1. University of Eastern Africa, Baraton 1991
2. Catholic University of Eastern Africa (CUEA) 1992
3. Daystar University 1994
4. Scott Christian University 1997
5. United States International University 1999
6. Africa Nazarene University 2002
7. Kenya Methodist University 2006
8. St. Paul's University 2007
9. Pan Africa Christian University 2008
10. Strathmore University 2008
11. Kabarak University 2008
12. Mount Kenya University 2011
13. Africa International University 2011
14. Kenya Highlands Evangelical University 2011
15. Great Lakes University of Kisumu 2012
16. KCA University 2013
17. Adventist University of Africa 2013
18. KAG EAST University Registered -1989 Chartered – 2016

Private University Constituent Colleges

1. Hekima University College (CUEA) 1993
2. Tangaza University College (CUEA) 1997
3. Marist International University College (CUEA) 2002
4. Regina Pacis University College (CUEA) 2010
5. Uzima University College (CUEA) 2012

Institutions with Letters of Interim Authority

1. Kiriri Women's University of Science and Technology 2002
2. Aga Khan University 2002
3. GRE TSA University 2006
4. Presbyterian University of East Africa 2008
5. The East African University 2010

6. Management University of Africa 2011
7. Riara University 2012
8. Pioneer International University 2012
9. UMMA University 2013
10. International Leadership University 2014
11. Zetech University 2014
12. Lukenya University 2015
13. RAF International University 2016

NOTE: Attached to each university name is Year of Accreditation. Members of the public are hereby being notified that any institution purported to offer university education in Kenya and does not appear in this list is not authorized to operate. The public is being requested to report any suspicious institutions to: Commission Secretary/Chief Executive Officer, Commission for University Education, Address: P.O. Box 54999-00200, Email: info@cue.or.ke All information received be handled in strict confidence. Recognition of degree qualifications offered by foreign universities should also be sought for from the Commission. Members of the public interested in accessing information on accredited academic programmes offered in accredited universities should visit the Commission's website www.cue.or.ke

Appendix V: Top 20 Universities in Sports Ranking in Kenya (2016)

1. Kenyatta University
2. University of Nairobi
3. United States International University
4. Mount Kenya University
5. Strathmore University
6. Moi University
7. Egerton University
8. Jomo Kenyatta University of Agriculture and Technology
9. University of Eldoret
10. Jaramogi Oginga University
11. Kenya Methodist University
12. St. Pauls University
13. Technical University of Kenya
14. Catholic University
15. Zetech University
16. African Nazarene University
17. Pwani University
18. Daystar University
19. Dedan Kimathi University
20. KCA University

Source: CPS International Survey (2016)

Notes: Highlighted 6 Private Universities to form the Sampling Frame for this study.

Appendix VI: Rhinno SU Ethics Review Submission

RHInnO Ethics -1 of 1

Completion of Online Research Ethics Review Submission

You have successfully submitted your application for ethics review "Effect of University Sports on Students' Enrolment in Kenyan Private Universities"

Certificate awarded to: Mr Muchemi, Kevin

Reference number: SU-IERC0305/19

Date and Time: 2019-01-25 21:00:38

Appendix VII: Rhinno SU Ethics Review Clearance

23rd April 2019

Muchemi, Kevin Wairagu
P.O BOX 9496-00300,
Nairobi.
kmuchemi@strathmore.edu



Strathmore
UNIVERSITY

Dear Kevin,

REF **Protocol ID:** SU-IERC0305/19

EFFECTS OF UNIVERSITY SPORTS ON STUDENTS' ENROLMENT IN KENYAN PRIVATE UNIVERSITIES

We acknowledge receipt of your application documents to the Strathmore University Institutional Ethics Review Committee (SU-IERC) which includes:

1. Study Protocol submitted 24th January 2019
2. Cover letter listing all submitted documents 25th January 2019
3. Proposal declaration page signed by supervisors 31st January 2019

The committee has reviewed your application, and your study *"Effects of University Sports on Students' Enrolment in Kenyan Private Universities"* has been granted approval.

This approval is valid for one year beginning **23rd April 2019** until **23rd April 2020**

In case the study extends beyond one year, you are required to seek an extension of the Ethics approval prior to its expiry. You are required to submit any proposed changes to this proposal to SU-IERC for review and approval prior to implementation of any change.

SU-IERC should be notified when your study is complete.

Thank you

Sincerely,

Prof Florence Oloo
Secretary


Strathmore University Institutional Ethics Review Committee


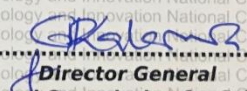


Appendix VIII: NACOSTI Research Permit

THIS IS TO CERTIFY THAT:
MR. KEVIN WAIRAGU MUCHEMI
of **STRATHMORE UNIVERSITY, 0-59857**
Nairobi, has been permitted to conduct
research in Embu, Kajiado, Kiambu,
Nairobi Counties
on the topic: EFFECTS OF UNIVERSITY
SPORTS ON STUDENTS' ENROLMENT IN
KENYAN PRIVATE UNIVERSITIES
for the period ending:
23rd April, 2020

Permit No : NACOSTI/P/19/50401/29338
Date Of Issue : 23rd April, 2019
Fee Received : Ksh 1000


Applicant's Signature




Director General
National Commission for Science,
Technology & Innovation


THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013
The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

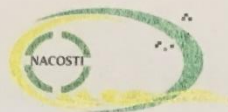
1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
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6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and Innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke


REPUBLIC OF KENYA


NACOSTI
National Commission for Science, Technology and Innovation
RESEARCH LICENSE
Serial No. A 24140
CONDITIONS: see back page

Appendix IX: NACOSTI Research Letter



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349, 3310571, 2219420
Fax: +254-20-318245, 318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref No. NACOSTI/P/19/50401/29338

Date: 23rd April, 2019

Kevin Wairagu Muchemi
Strathmore University
P.O. Box 59857-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Effects of university sports on students' enrolment in Kenyan Private Universities*," I am pleased to inform you that you have been authorized to undertake research in **Embu, Kajiado, Kiambu and Nairobi Counties** for the period ending **23rd April, 2020**.

You are advised to report to **the County Commissioners and the County Directors of Education of the selected Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioners
Selected Counties.

The County Directors of Education
Selected Counties.

National Commission for Science, Technology and Innovation is ISO9001: 2008 Certified