INFLUENCE OF SOCIO-CULTURAL ENVIRONMENT ON TALENT IDENTIFICATION FOR RUGBY PLAYERS IN RUGBY CLUBS IN KENYA

Michael David Otieno

A Thesis Submitted in Fulfillment of the Requirement for the Degree of Doctor of Philosophy (PhD) in Physical Education and Sport University of Nairobi

DECLARATION

This thesis is my original work and has not been presented for award of a degree in any

other University				
Signature		Date		
Michael David Otieno				
Registration No. E	88/52224/203	17		
This thesis has been presented for Supervisors	or examination	on with our approval as University		
Signature		Date		
Prof. Winston J. Akala				
Associate Professor				
Department of Educational Adn University of Nairobi	mmstration a	nd Planning		
·				
Signature		Date		
Prof. Vincent Onywera				
Associate Professor				
Department of Physical Educati	ion, Exercise	and Sports Science		
Kenyatta University				

DEDICATION

I dedicate this thesis to my late mother Lorna Aguttu Sadia who valued and supported my education and my beloved wife Jessica Achieng Mugenya for her support and encouragement throughout this study.

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the study

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ABBREVIATIONS AND ACRONYMS

C.L Championship League

K.C.L Kenya Cup League

K.R.U Kenya Rugby Union

K.S.S.S.A Kenya Secondary School Sports Association

N.L Nationwide League

P.E Physical Education

W.R World Rugby

ABSTRACT

The role of the socio-cultural environment on talent identification for sports has been a topical issue among sports researchers for decades. The purpose of the study was to investigate the influence of the socio-cultural environment on talent identification for male rugby clubs in Kenya with regard to how the players are recruited to join the clubs. More specifically the roles played by families, peers, coaches, schools, and club infrastructure were examined. A descriptive survey research design was used for the study to establish the roles. A total sample of n=95 rugby players and n=15 coaches drawn from the 76 rugby clubs registered with the Kenya Rugby Union and participating in the 2016-2017 league competition, took part in the study and were obtained through stratified sampling, quota sampling and simple random sampling. The data for this study were collected using questionnaires for the players and interview schedules for the coaches. A test-re-test technique was used to test reliability. The data collected were analyzed using both descriptive and inferential statistics. The Chi- square test was used to test all the hypotheses at 0.05 significant levels. Findings indicate that the role of peers with a P value of 0.556 was found to have significant relationship on talent identification for rugby clubs in Kenya. However the familial influence (P value =0.4778), role of coaches (P value=0.285), players' secondary school rugby playing experience (P value = 0.379) and club infrastructure (P value = 0.341) had no significant relationship with talent identification for rugby clubs in Kenya. From the study findings, it is recommended that that peering in rugby needs to be strengthened through clubs. This can be done by encouraging players to bring along their rugby playing friends during training and match days to enable them to integrate and associate with the club. There is also need to look at ways of engaging parents and ensuring that they are incorporated in the talent identification process while club rugby coaches should be encouraged and facilitated to attend the school rugby competitions from the grassroots to national levels through a formal partnership between the clubs and K.S.S.S.A. There is however need to diversify and also use other means of talent identification to capture players who might not have attended secondary schools or whose schools do not participate in the K.S.S.S.A rugby competitions. The study also recommended the use of intramurals like inter house or inter class competitions in a bid to capture players who might have not played for the school teams but have the potential to play and excel at club rugby and the provision and use of appropriate facilities..Other studies involving physiological, anthropometric and psychological attributes of talent identification that could lead to the establishment of an all inclusive talent identification model were recommended by the study. Finally a study involving female rugby players was recommended as it would elicit some aspects of gender differences that may impact on the talent identification process which were not addressed by this study

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The identification of talent has become a critical component in a number of sport programs. (Falk, Lander, Lang and Lido, 2004). Abisai (2014) refers to talent identification as the process of recognizing current participants with the potential to become elite players. Schorer, Baker, Bush, Wilhelmz and Pabst (2010) also further clarify that talent identification is the process of selecting and examining young talented players and accelerating their progress. This is usually achieved by assessing a number of variables via a battery of tests such as anthropometry, physiology, psychology, sociology, physical abilities, motor abilities and game specific skills. The significance and purpose of identification of talent can therefore be figured out as the determination to discover those persons who are likely to be successful in the future so as to acquire their full abilities (Williams & Reilly, 2000).

Rugby, being a popular sport, is played globally from elementary school to high school in over a hundred countries all over the world (Gent & Spammer, 2005). There are certain anthropometric, physical, motor skills and sport-specific variables that can distinguish between talented and less talented rugby players (Gent & Spammer, 2005). Having researched the identification of talent in the senior secondary school phase, Hare (1997) nonetheless found out, that all elite rugby players have certain anthropometric

characteristics, rugby specific skills and physical and motor components that distinguish them from average players.

A study based on identification of rugby talent among 10 year old boys was conducted by Pienaar, Spammer & Steyn (1998). Their objective was to enable coaches identify 10-year old boys with certain physical, motor and anthropometric variables that would facilitate them become successful rugby players. They randomly selected 173 10-year old boys with very little rugby experience and subjected them to certain physical and motor tests based on anthropometric measurements. Their findings indicated a success rate of 88% in prediction of talent and this was deduced to be a successful and practical method to aid the teacher and the coach in selecting and developing talent among 10-year old rugby players in South Africa. The study nevertheless did not address the impact of parents, schools, clubs and coaches in talent identification.

Kenya has affirmed her authority at playing the rugby sevens version of the game. Since 2004, when Kenya became a core member of the World Rugby sevens series, the players have played in 3 successive sevens world cups. They got to the semi finals of the 2009 sevens world cup held in Dubai and managed to achieve fourth position in the world cup held in Moscow in 2013. The peak of their performance ,however, was when they won the world rugby series held in Singapore in April 2016.

Kenya, being amongst other third world countries nevertheless, continues to lag behind the top Rugby playing Nations such as South Africa, Australia, New Zealand, Ireland, Wales and England in the fifteens version of the game. This could be due to the absence of structured youth development curricula both nationally and at club level. The absence of a sponsored league also indicates that a number of of the country's most talented players stop playing early either immediately after secondary school or in their early twenties, due to lack of motivation and support. In South Africa, according to Parker (2013), the nurturing of talent has been based on having competitive and well structured school competitions countrywide. Talented players are selected for their provincial age group teams which participate at national tournaments at the age of 13 years (Craven week), 16 years (Grant Khomo week) and 18 years (Craven and Academy weeks). There is however no specific talent identification process currently being applied in South African rugby (Parker, 2013). This view is supported by Hugo (2004) who identifies a school based model as the talent identification procedure used in South Africa and mostly in the schools within the higher socio-economic communities.

The national talent identification and development program or talent search is a program used in Australia, another tier one rugby playing nation, and developed by the Australian Institute of Sport. The program is designed to help identify talented athletes between the ages of 11 and 20 years and to prepare them for participation in local and international competitions (Australian Institute of Sport). Yet Australia is currently ranked at position six in the world in comparison to the number one position they held in 1999 when the last won the world cup competition (Retrieved from www.world rugby.org). In New

Zealand, the culture and environment of the national teams is introduced at school level as a first step towards the high performance ladder. A New Zealand schools team is formed under New Zealand Rugby Schools Council and is closely associated with the New Zealand rugby's talent identification program which is integrated with the five super rugby teams. Every year approximately 300 players under the age of 17 years, are invited to the Super Rugby region-based camps from right across the region, with players selected from within the Heartland unions. Emphasis on education and personal development, rather than assessment of how the players' families will take part, are prioritized in those camps (New Zealand Rugby Union). New Zealand Rugby Union however take family involvement as crucial to developing good players and by providing support and information to the families, they know that its players will have help making the decisions they need to, including where to play, how to train, what to eat and what their life outside rugby looks like. The next phase in their development of players is Under 17 and 18 camps, which involve around 250 players each year. About 100 are nominated for the New Zealand Schools and New Zealand Barbarians Schools teams, with 50 as a final selection (New Zealand Rugby). So even in New Zealand, a tier one rugby playing nation, the implication is that talent identification is based on partnership with schools with no clear inclination towards a specific process

The London Irish Academy is the cornerstone of the talent identification programme and success in Ireland (London Irish.com). The function of the London Irish Academy is to identify and develop talented young athletes from age 13 to 23 and engage them in a High Performance development programme. Players join the academy through a variety

of routes and are assisted in their rugby development to attain their ultimate goal - joining the first team squad. This is underpinned by education from a variety of partners, thus providing the necessary structure for each player to reach their full potential. On the contrary, Ireland have an institution tasked with talent identification and could be one of the factors responsible for their consistent good performance in the annual six nations rugby tournament while in England an observation in Sport England (2004) indicates that talent identification in rugby football need to meet standards of equity in the sphere of representative and elite sport by investing much more in identifying potential rather than simply assessing performance. In this regard Glogg (2012) states that the first challenge confronting the sport in creating and operating an elite player development pathway for rugby in England is to establish a viable conceptual process for talent identification and concludes that long term gathering of data and further research are vital for this to happen.

The Dutch sports system seems unique according to Elferink-Gemser (2013). 27,000 sports clubs under the representation of 90 national sports federations are clustered under the Dutch Olympic Committee. The children are trained to become elite athletes by means of a system primarily based on talent identification by the sports clubs and the federations in the form of district and national youth selection teams. Around 3% of Dutch youth athletes, found to be talented, are called up as teenagers to join a district selection team in order to achieve their full potential. Less than 0.5% enters a national youth selection. These young athletes are provided with strong all-round trainers, excellent training facilities, medical care and high-level competition. The goal of availing

these extra opportunities is to increase their chances of reaching the top. However, an important part of childhood development takes place before they choose a particular sport or reach the age at which talent identification starts. Hence in the Netherlands emphasis is more around the Olympic Games which probably eliminates a number of athletes who may not have their focus on participation in the Olympics.

The use of a scientifically amassed test battery to pinpoint positional requirements in rugby will help coaches in identification of rugby talent at specific ages. (Gent & Spammer, 2005). Research work in this field is however minimal in Kenya, though there are a few researchers who have focused on this area in Kenya such as. Oketch (2012) who did a study on psychological satisfaction of male rugby players in Kenyan universities and Abisai (2014) who researched on assets and modes of identification and development of talented student athletes in selected sports disciplines in Kenyan universities. They however did not pay attention to the criteria used in identifying talent in rugby clubs in Kenya. The scanty knowledge in Kenya in this regard is a factor that has contributed to the reasons for this study.

Turnbull (2011) identified the major influences on achieving elite performance in field hockey as support from families, schools and clubs while quality support from parents, family, siblings, coaches and teachers are all important in the development of a young athlete as they journey towards elite performance (Connaughton, Hanton & Jones ,2010). Literature shows that for junior elite athletes, parents and coaches provide different types

of support though the most significant role of emotional and tangible support through development to elite performance is provided by parents (Wolfenden & Holt, 2005).

Videon (2002) established that a child's participation in sport can have a significant impact on their siblings participation in the same sport. Cote (1999) found this to be most prevalent with older siblings acting as role models for their younger brother or sister while positive parental influence has been associated with greater attraction to sport and physical activity and higher levels of sport involvement (Brockman, Jago, Fox, Thompson, Cartwright & Page, 2009). White & Teer (2012) defined family as the first unit with which children have a continuous contact and the first context in which socialization patterns develop. Crawford, Hesketh, Hinkley, Okely & Salmon (2008) further state that among familial characteristics that influence children's physical activity are parents education level and income. Bloom, Grant & Watt (2005) underscore the major influence of the family at the different stages of talent development in science, art and athletics. They reported that in the early years a child's involvement in an activity, parents tended to be supportive allowing him freedom to decide whether or not to practice formally. This was followed by a period of dedication for the performers and the parents. Finally the latter years were characterized by the individual's full time commitment to improve performance and the parent's role was restricted to mainly financial support. Thus the Bloom et al (2005) study provided a development perspective on the influence of family on talent development. However sibling relationships and the influence of siblings were not discussed. There is therefore need to examine more in

depth the influence of the whole family environment in talent identification in sports and specifically rugby in clubs in Kenya

A number of leading researchers have also commented on the important role coaches can play in inducing and sustaining participation in sport. The support of the coach has continually been stated as essential for the transition and support to elite performance (Gould, 2010). Biddle & Mutrie (2001) suggest that the coach leader could be the single, most influential factor for sporting exercise adherence while Weinberg & Gould (2003) identify the fact that the coaches' encouragement, enthusiasm and knowledge are critical when starting a program that needs extra motivation. They also state that good coaches show concern for safety and psychological comfort, develop expertise in answering questions about exercise and have personal qualities that participants can identify with. Fraser Thomas & Cote (2005) conclude that coaches have a critical role to play in inducing and sustaining children and young peoples' participation as well as their wider sporting and life skill development regardless of culture, gender, ethnicity or socioeconomic status. However the extent to which coaches influence recruitment and talent identification in rugby clubs in Kenya remains to be verified hence the need for the study

It is conceived that the type of school attended by the individual will have an impact upon the direction that their career will take (Turnbull, 2011). Bailey & Morley (2006) observed the important role that schools and extracurricular clubs and in particular physical education teachers and coaches play as providers of opportunities in sport. In

terms of schooling, existing research demonstrates that elite sports performers have extremely positive feelings towards their school experiences often crediting their school physical education teachers with identifying their talent and enabling them to nurture this (Johnson, 2003). There is therefore need to investigate how the school impacts on the decision by a rugby player to join a club in Kenya

Access to available resources and peer influence are also major factors in attaining expertise in sports and attracting talent. The resources range from equipment and facilities to competent coaching (Durand-Bush & Salmela, 2001). The 10 years or 10,000 hours of deliberate practice proposed by Ericsson, Krampe & Tesh-Romer (1993) is heavily dependent on the performers exposure to appropriate equipment and resources while according to Brockman et al (2009), where an individual lives, their socioeconomic status and facilities available to them will affect the kind of sport that athletes are selected for and subsequently participate in. If an athlete does not have the necessary facilities or simply cannot afford to participate in a sport, it will be of little consequence in which sport they are identified as potential champions (Rosandich, 2008). Wold & Anderssen (1992) also established that peers have a greater influence over participation in a particular sport than any family members and should therefore be considered as important factors in sports participation. Zeijl, Te Poel, Du Bois-Reymond, Ravesloot & Meulman (2000) went further and ascertained that peer influence became more prominent as children got older, generally after the age of 14 possibly as the influence of parents and siblings diminishes. Coleman (2008) also established that friendship groups were the primary participatory influence and this may have heightened effects in

adolescent rugby players, when individual rugby players are more likely to be influenced by team mates as a result of reduced parental involvement.

In conclusion, talent appears to depend on genetics, environment, opportunity, encouragement, and the effect of these variables on physical and psychological traits. The question is no longer whether genetic or environmental factors determine behavior, but how they interact (Wolstencroft, 2002). It must be recognized however that the identification of talent is complex, with many factors that must be catered for if the process is to be optimally effective. There is therefore need for this study to investigate the influence of the socio-cultural environment on talent identification and development for rugby clubs in Kenya and more specifically the roles that parents, coaches, schools, peers and clubs play in identifying this talent

This study consequently aims at identifying the socio-cultural variables that influence player talent identification and development in the clubs that play rugby in Kenya focusing on familial influence, coaches, secondary school playing experience, peers and clubs.

1.2 Statement of the Problem

Accessible statistics (Kenya Rugby Union Technical Plan, 2010) show that there is a decline in the number of rugby players playing at club level as compared to those who participate at secondary school level in Kenya. This suggests that there is a challenge with the transition between the time the players leave school and the time the clubs recruit their players. Although the K.R.U. has made significant efforts to expand the

game by opening up the once prominent and elitist Prescott cup to schools beyond Nairobi and its environs, as well as introducing the Damu Pevu cup, a second level competition for schools (Kenya Rugby Union Technical Plan, 2010), more work still needs to be done on the identification of talent. The periodic failure by the Kenya under 19 rugby team to qualify for the junior rugby world cup competition is also a challenge that needs to be addressed. It is therefore evident that Kenya, lacks specific talent identification processes in rugby best suited for its situation and has instead fallen back on sending talent scouts to school competitions to identify talent. The problem being investigated is therefore the gap that exists between rugby played in schools and the transition to club rugby probably as a result of lack of a structured talent identification process for use in rugby in Kenya. The focus on the interaction with the socio-cultural environment is in line with Elferink-Gemser & Vischer's (2012) model of talent identification which highlights the interaction with the environment as a possible determinant of talent identification.

In the study, all the hypotheses were tested against the talent identification index. According to Crossman, Kulis, Marsiglia, Kopak, & Oimsted (2012), an index is a composite measure of variables using more than one data item. The talent identification index was therefore used to create a composite measure that summarized the responses from the participants of the study.

1.3 Purpose of the Study

The aim of this study therefore was to examine the influence of the socio-cultural environment on talent identification for rugby clubs in Kenya. The socio-cultural variables selected were familial influence, peers, coaches, schools and club infrastructure

1.4 Objectives of the Study

The study was guided by the following specific objectives:

- 1) To determine the familial influence on talent identification and development among rugby players in Kenyan rugby clubs.
- 2) To determine the role of peers in talent identification of rugby players in Kenya
- 3) To establish the role of coaches on talent identification for rugby clubs in Kenya
- 4) To investigate the role of secondary schools attended on talent identification for rugby clubs in Kenya
- 5) To determine the influence of the club infrastructure on talent identification for rugby clubs in Kenya.

1.5 Research Questions

The following were the research questions:

- 1) To what extent does the family influence talent identification for rugby clubs in Kenya?
- 2) To what extent do the peers influence talent identification for rugby clubs in Kenya?
- 3) What role do the coaches play in talent identification of rugby players in clubs in Kenya?

- 4) To what extent do the players' secondary school playing experience influence talent identification in rugby clubs in Kenya?
- 5) What is the effect of club infrastructure on talent identification in rugby clubs in Kenya?

1.6 Research Hypothesis

Based on the objectives of the study, the following null hypotheses were tested:

- Ho1 There is no significant difference in the mean rugby talent identification index when the familial influence of the rugby players' is classified as high or low
- Ho2 There is no significant difference in the mean rugby talent identification index when rugby players' peers' influence is classified as high or low
- Ho3 There is no significant difference in the mean rugby talent identification index when the rugby players' coaches' influence is classified as high or low.
- Ho4 There is no significant difference in the mean rugby talent identification index when the influence of the rugby players' secondary schools' rugby playing experience is classified as high or low.
- Ho5 There is no significant difference in the mean rugby talent identification index when the influence of the rugby players' clubs' infrastructure is classified as high or low

1.7 Significance of the Study

It is expected that the findings of this study will provide information upon which the Kenya Rugby Union can make informed decisions talent identification for rugby clubs in Kenya and be able to determine some of the parameters used by players to join clubs. The study is anticipated to provide the coaches with findings based on socio-cultural factors for use in identifying talent in their clubs. They will therefore be in a better position to recruit players at the beginning of the rugby season. The study unearths knowledge gaps on some of the socio-cultural factors which can be investigated to determine talent identification strategies and the knowledge can be cascaded to other sports such as cricket, hockey and basketball where Kenya was once a global power house

The results of the study are also beneficial to sports practitioners and stakeholders in ensuring the understanding of the characteristic and intricate association between talent identification, talent development and performance in sports since the study has offered practical knowledge on the model used for talent identification in rugby though based on socio-cultural factors. The findings of the study therefore have practical insinuations on parents, coaches, teachers, schools and mass media and will go a long way in providing important insights that may lead to the establishment of a talent identification model that could be used by rugby clubs and other sports in Kenya

The results of the study also contribute to the never ending debate over the extent that talented performances are results of nature versus nurture whereby some proponents of talent identification believe that environment plays a minimal role.

Given the tremendous value of involvement in sports and the need for more investment in sports by the Government of Kenya the results of the study should form a strong foundation for the articulation of a comprehensive policy to steer talent identification in clubs and elite teams in Kenya.

1.8 Assumptions of the Study

The study was carried out under the following assumptions:

- 1) That the ranking in the 2016-2017 K.R.U. League will be the best available indicator of good performance.
- 2) That recruitment of rugby players in clubs in Kenya is based on some form of talent identification

1.9 Limitations of the Study

The study was affected by the following limitations:

- 1) Out of the 12 clubs that participated in the K.C. division 1 league, 9 clubs were based in Nairobi. This was foreseen as a factor that could limit the ability to generalize the results. After purposeful stratified sampling was done and subsequently followed by quota sampling of the clubs within the strata, the researcher was able to neutralize this limitation.
- 2) There were also other socioeconomic factors like family resources and the types of schools attended and their culture which were not part of the study but might have had an implication on the talent identification process.

1.10 Delimitations of the Study

The study was conducted in male rugby clubs and only clubs registered with the K.R.U. participated in the study. As there were no female rugby clubs registered with the K.R.U at the time the study was conducted, it was not possible to include them in the study.

1.11 Operational Definition of Terms

The following key terms are defined as used in the study:

Club infrastructure The facilities and equipment used for training in the rugby clubs

Coaches. Personnel who teach and train the players in a rugby team and

make decisions about how the team plays at competitions.

Family. A basic unit in society consisting of parents or guardians rearing

their children

Familial. An attribute relating to or occurring in a family or its members

Influence The capacity to have an effect

Peer. An individual who belongs to the same age group or social group a

as someone else

Rugby Club A place where players converge for training and are registered with

The Kenya Rugby Union for purposes of competition

Secondary School An institution of learning in Kenya that participates in rugby

competitions organized under the K.S.S.S.A

Socio-cultural Societal and cultural factors in rugby namely family, peers,

environment schools, coaches and club infrastructure

1.12 Organization of the Study

The thesis is arranged into five chapters. Chapter one the introduction, consists of background to the study, statement of the problem, purpose of the study, objectives of the study, significance of the study, assumptions of the study, limitations of the study, delimitations of the study, definition of key terms and organization of the study. Chapter two deals with literature review of the role played by family and peers; the impact of the socio-economic status, education and occupation of parents; the role played by coaches; the impact of the schools attended; the influence of the club infrastructure; talent identification strategies used by club; theoretical framework; conceptual framework and summary. This is followed by chapter three as research methodology and consists of introduction; the research design; target population; the sample and sampling procedures; the research instruments; validity and reliability of the research instruments; validity of research instruments; reliability of research instruments; data collection procedure and data analysis. Chapter 4 consists of data analysis and is made up of data interpretation, analysis techniques and discussion of research findings while chapter five focuses on the summary, conclusions and recommendations of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The literature associated with talent identification and development of rugby in clubs in Kenya is presented in this chapter. The chapter will specifically highlight the purpose of talent identification, research related to rugby as a sport, influence of family in talent identification for rugby clubs in Kenya, role played by peers in talent identification of rugby players in Kenya, role played by coaches in influencing the identification of rugby talent in Kenya, roles secondary school rugby playing experience plays in talent identification of rugby players in Kenya, influence of club infrastructure on detection of talent of rugby players in Kenya, talent identification strategies theoretical framework, conceptual framework and summary.

2.2 The Purpose of Talent Identification

Identifying attributes that characterize exceptional performers has interested researchers for many years (Abbot, 2006). Smith (2003) reflects on whether or not such performers are as a result of certain factors like superior coaching, access to good facilities and age of commencement of training. These factors are devised to predict performance capacity, taking into account the child's level of fitness. In Europe, talent identification is considered as a crucial task for soccer coaches. Subsequently high clubs in Europe clubs recognize soccer talent at an increasingly earlier age (Roderick, 2006). By identifying players earlier, the clubs get to prepare them at an early age and thereby producing

players according to their own playing structures based on required skills. However, even though researchers have concentrated on talent identification, few have paid attention to the format the coaches' use to identify the soccer talents (Pankhurst & Collins, 2013).

Saelher (2014) observes that Norwegian soccer coaches seem to have clear views on how to identify the most talented players. Comparing several results, the coaches have, however, experienced difficulties on which specific criteria to use

It is currently accepted that necessary support and training are essential if talented individuals are to fully exploit their potential. It is partly for this reason that the early identification of talented athletes is an increasingly critical consideration for researchers and practitioners. Once talented individuals have been identified, important but limited support resources can be optimally organized to further refine and develop their talents. Consequently a useful talent identification system is a key precursor to talent development as it will directly support those individuals who have the greatest potential to accomplish international success in sport. Therefore in establishing and developing talent identification models, Abbot, Collins, Martindale, & Sowerby (2002) identified characteristics that indicate that an individual has the potential to develop in sport and become a successful senior athlete as an important question. Since the objective is to predict future accomplishments, the distinction between performance levels at the time of testing and the capacity an individual has to develop is critical. However, evaluation of the philosophies supporting both practical and empirical talent identification models show that this distinction is rarely recognized (Abbot et al, 2002).

Romania, Bulgaria, the German Democratic Republic and the Soviet Union are some of the former Eastern bloc countries that carried out state run systematic talent identification programs as early as the 1960s and 70s (Bompa, 1994). A review of the typical methods embraced by these nations highlights a talent identification approach that encourages systematic and objective measures on physical and performance factors seen to be correlated with success in sport. The increased deployment of systematic talent identification process worldwide is viewed to have resulted into the sporting success attained by Eastern Europe. Unfortunately however, the theoretical principles that underpin this approach to talent identification remain uncertain.

It is also crucial to note that relatively very little research has focused on the ways in which elite athletes actually accomplish their status in sport as stated by (Tebbenham, 1998) a statement supported by (Wolstencroft, 2002).) who indicates that, insufficient detail about how talented performers develop to elite status has , led to limited investigations.

2.3 Research related to Rugby Talent as a Sport

(Gent & Spammer, 2005) view rugby as a popular sport played from primary school and has certain physical, motor and game specific variables that can provide a basis for talent identification while according to (Smart, 2011), rugby is a powerful contact based team sport that necessitates players to have a diverse range of physical attributes.

In Kenya, since the inclusion of the seven aside team in the World Rugby sevens circuit competition in 1998, demands from the public and media for the success of team has intensified. Not only is the pressure felt by the players, but coaches and team management are also exposed to the 'cut throat' nature of the professional game. Research into rugby aspects has therefore increased so as to keep up with the increased demand for optimal performance (Smart, 2005).

Gent and Spammer (2005) compared rugby players assembled into groups using rugby-specific skills, physical, motor components and anthropometric measurements amongst age groups. These age groups, of under 13, under16, under 18 and under 19, were separated into four positional groups: tight forwards, loose forwards, half backs and back line players. The study results disclose that the forwards develop much later in terms of anthropometric characteristics while back line players show many more differences in terms of rugby-specific skills, physical and motor components. It was also interesting to note that the older players had the less the differences that were apparent in terms of rugby-specific skills, physical and motor components. However the above cited, did not illustrate the influence of family members, did not take cognizance of the influence of the schools attended, did not look at the involvement of the coaches and also did not investigate the role played by the club infrastructure on talent identification

Spammer and De la Port (2006), in another rugby related study, recognized the characteristics of under 16 and under 18 school boy rugby players in South Africa with reference to physical and motor abilities, game specific skills anthropometric variables.

The research group was made up of under 16 year old and under 18 year old elite South African school boy rugby players who were tested on five game-specific skill tests, six anthropometric, seven physical and motor ability tests. No big changes were recorded over the two season period in both age groups in reference to anthropometric variables, while number of medium and high practical significant improvements of the elite player were detected in line with physical and motor abilities. Subsequently when the game-specific skills were considered, the handling skills of the elite players were not as good as those of the regional players probably due to a scarcity of game-specific skills in their program. Similarly this study failed to address the criteria used for talent identification but focused more on anthropometric variables in relation to motor ability and game-specific skills.

Gabbet (2002) also conducted a study on a semi-professional first grade rugby league team in which 66 rugby league players between age 20 to 28 years were observed over two seasons. The purpose of the study was to establish whether or not the physiological characteristics of players influence selection. A week before their first match, the players undertook measurements of muscular power, speed, body mass, anticipated maximal aerobic power and agility. The findings suggested that the physiological capacities of players did not influence selection in a semi-professional first grade rugby league team. Player selection seemingly appeared to be based on, playing experience, skill and body mass. The findings therefore endorse the need for a standardized skills performance test for semi-professional rugby league players and the need for further research especially on the roles played by family and coaches.

In another study by Gibson, Okely, Webb and Royall (1999) 231 rugby coaches with level 2 certification were requested to identify individual skills and attributes that should be incorporated in a rugby union talent identification program. The individual skills and attributes that were investigated were: passing and catching whilst running at speed;; self discipline; the side-on tackle; decision making; determination; aerobic fitness; the front on tackle; balance whilst running with the ball; the basic catch; speed; strength; catching a kick; drawing a defender and picking up the ball on the run. The results concluded that the skills and attributes should be taken into account in a rugby union talent identification program but again failed to address any characteristics of the socio-cultural environment that might have had an impact on the talent identification process.

In discussion with the Australian Rugby Union, Hartwig (2009) subsequently undertook to serially monitor participation among three levels of adolescent rugby union players to better understand factors contributing to positive performance and participation outcomes while curtailing unfavorable effects including injury training errors, fatigue, and overtraining in the context of the development of talented young athletes. 75, 106 and 118 participants were enlisted from various levels of adolescent rugby involvement that included school, sport selective school and state representative rugby. Results of training volume and intensity, game and training practices and stress and recovery were collected and the findings implied that growth, maturation and adolescent sports participation created complex challenges for training and developing young athletes. The influence of other critical factors like family, coaches, schools and club environment was not dealt with in this study. It is therefore apparent that most research in the area of talent

identification has demonstrated a focus only on the anthropometric and physiological dimensions with minimal or no consideration of other variables or crucial interactions that might also have an influence as stated by (Wolstencroft, 2002), hence the need for this study

2.4 Influence of Family on Talent Identification

The family environment is an important variable that will affect the identification of talent in many domains including sports (Ericsson, 1996). Cote (1999) described patterns in the dynamics of families of talented athletes throughout their development in sport. Four families including three families of elite rowers and one family of an elite tennis player were examined, He used a theoretical framework provided by Ericsson, Krampe and Tesch-Romer (1993) to explain expert performance as operating within three types of constraints namely: motivational, expert and resource. A total of 15 in-depth interviews were conducted with each athlete, parent and sibling explaining how they dealt with the three constraints. The findings identified three phases of participation from early childhood to late adolescence: the sampling years, the specializing years and the investment years. The sampling years occurred between the ages 6 and 13 for all the participants. The results suggested that the main emphasis during this stage was to experience fun and excitement through the sport. The second stage, the specializing years occurred between the ages of 13 and 15 years whereby the athlete decreased their involvement in various extracurricular activities and focused on one or two sporting activities. While fun and excitement remained central elements of the sporting experience, sport specific skill development emerged as an important characteristic at this

stage. At around the age of 15 the athlete moved into the investment stage in which the athlete was expected to commit to achieving an elite level of performance in a single activity. The strategic, competitive and skill development of the sport emerged as being the most important elements during this stage. The study revealed that the investment stage was a period of investment not just for the child but also for the parents. In the four families investigated, the child athlete was central to all family activities during this stage. Cote (1999) concludes by suggesting that from the results of the study, providing an account of the childhood and family conditions of an elite athlete is a necessary step towards the development of explanatory theories about the causes and origins of excellence in sports. The state of knowledge about family conditions that are precursors of sport expertise is however limited as the family conditions that emerge from this study are an incomplete picture of the family dynamics of talented performers. Hence the study discloses that the role of the family in children's sport involvement is a complex phenomenon because of the diversity of the family context.

In another study, Csikszentmihalyi, Rathunde and Whalen (1993) analyzed over 200 talented teenagers and their parents. They initiated the concept of complex families to describe families who were found to be the best stimulus to their teens' talent development. Complex families were characterized as being both integrated and differentiated. The stable condition among family members was referred to as integration whereby the children felt a sense of support and stability while differentiation was attributed to members of the family who were encouraged to develop their individuality by seeking out new challenges and opportunities. While Csikszentmihalyi et al's (1993)

notion of a complex family is conceptually attractive for explaining the parents' role in children's talent development; their study offers limited information regarding the specific types of parental behaviors that have the most beneficial socialization effects on their children's participation in sport throughout their development.

A more contemporary study by Mills, Butt, Maynard and Harwood (2012) also recognized parents as one of the key players in youth player development. Interviews with coaches were carried out to identify factors that influence development in elite youth football players. All participants mentioned that parents have one of the most crucial roles in youth player development. A positive correlation between parental support and likelihood to advance to professional level was indicated by results based on the coaches' responses. Yet again this study does not provide the whole family dynamic and how this dynamic influences talent identification.

Research on family socialization in the sport context is relatively limited regardless of the critical role that parents play in youth sports as stated by Woolger and Power (1993). This observation is supported by a reassessment of research on sport socialization where, Greendorfer (1992) reasoned that parent socialization of sports participation should be one of the essential areas for future work

Okioga (2014) has nevertheless provided a framework by examining the different family variables that influence talent identification. He indicated that socio-economic status is a combined economic and sociological measure of a person's work experience and of an

individual's or family's economic and social position relative to others based on income, education and occupation. Marmet (2014) as (cited by Okioga, 2014) further states that when studying a family's socio-economic status, the household income, combined income, education and occupation are examined. This view is supported by Kannan, 2016 who points out that socioeconomic status depends on a combination of variables including occupation, education, income, wealth and place of residence and confirms that socioeconomic factors play a vital role in an individual's performance in sports. Coakley (1986), in fact, goes back to historical antecedents by narrating that in ancient Greece, the competitors in the early games were from wealthy and respected families as they had the resources to hire trainers and coaches. It is therefore evident that socioeconomic status has a profound influence on sport and physical activity (Bloom, Grant & Watt, 2005). In addition to this, the findings consistently show that the higher the socioeconomic status, the more the involvement in sport and physical activity while individuals with low socioeconomic status participate less in sport (White & McTeer, 2012). This can be attributed to environmental factors such as proximity, cost and availability of facilities being salient factors for youth living in low socio-economic areas to be involved in physical activity

In a study conducted by Nezhad, Rahmati, and Nezhad, (2012) to determine the relationship between socio-economic status of family and adolescent student sport participation in Rasht city, Iran, data was collected from third grade high school students (n=415, 159 male & 255 female) in 3 fields in 10 high schools chosen randomly from 2 areas in Rash city, Iran. The results of the study indicated that the socio-economic status

of the parents had significant correlation with the amount of sports participation per week among adolescent students' level of income of father, level of father's education and level of mother's education. However the level of mother's income was found not to have any significant correlation with sports' participation.

Mota and Silva (1999), in addition, studied the association of socioeconomic status and parental partnering with participation in sports and physical activities by adolescents in Portugal. The study was important because of the relatively rare literature on the subject of the influence of socioeconomic status on sports participation. According to the study, no evidence was found regarding the influence of socio-economic status of parents on adolescents' self-reported physical activity. However mothers and fathers seem to have a significant influence on adolescents' physical activity despite the fact that no evidence was found on the specific influence on talent identification.

Duncan, Woodfield, Al-Nakeeb and Nevill (2006) conducted a study on British secondary school children to examine their level of physical activity based on age, gender and socioeconomic status. 301 children from school years 7, 8 and 9 took part in the study. Physical activity was evaluated using the four by one day recall questionnaire. Findings suggest that the majority of children were categorized as inactive but did emerge to accumulate at least 30 minutes moderate activity daily. Significant differences were patent in average daily energy expenditure, time spent in moderate and vigorous activity, with all aspects declining with age. Males registered greater average daily energy expenditure, time spent in vigorous activity

than females. High socio-economic status children showed greater levels of average daily energy expenditure and time spent in both moderate and vigorous activity. The study affirmed that the physical activity levels of older children, females and children from low socio-economic status groups may be a cause for concern.

Seabra, Mendonca, Thomis, Peters and Maia (2008) in another study, focused on the associations between sport participation, demographic and socio-cultural factors in Portuguese children and adolescents. A random sample of 3352 Portuguese children/adolescents, 10–18 years, their parents and siblings was surveyed. The assessment of sport participation was based on a psychometrically established questionnaire. Multivariable logistic regression was used in data analysis. The results showed that age did not influence participation in sports. The children and adolescents with higher socioeconomic status were more likely to participate in sports. Also, they were likely to participate in the activity when the family was doing so. Boys appeared to participate in sports irrespective of parents' involvement but girls seemed to do so when their mothers were involved. Conclusions of this study suggest that there are important demographic and socio-cultural influences on the sports participation of children/adolescents - in particular, gender, socioeconomic status, family members' sports' participation and peer influence.

A study involving exploring social and environmental factors affecting adolescents' participation in physical activity in the UK was conducted by Dagkas and Stathi (2007). They explored the social factors that impact on young people's participation in school and out of school physical activities. Fifty-two 16-year-old adolescents from various socioeconomic backgrounds took part in interviews where their perceptions about

physical activity and the constraints they had undergone, were investigated. The findings of the study implied that participation in physical activity is associated with students', home environment, economic status and social class. The level of participation of students from lower socioeconomic backgrounds was limited compared to their higher socioeconomic counterparts. Furthermore, adolescents' 'economic' 'cultural', physical' and capital were salient factors in their involvement in physical activity settings. The study results stressed the requirement for better and wider provision of structured physical activity in schools in economically deprived areas to make up for lower participation levels.

Nielsen, Hermansen, Bugge, Dencker, and Andersen (2011) carried out a study on the daily physical activity and sports participation among adolescents from cultural minorities in Denmark. The aim of the study was to examine whether or not Danish children from immigrant environments were less physically active than children from the ethnic majority, and to investigate the probable reasons for any differences found. Data on physical activity, organized sports and family demography was gathered from 594 children when the children were 6–7 years old and later on at 9–10 years old. It was established that there was no difference in physical activity between children from immigrant backgrounds and other children when their quantities of daily physical activity were measured by direct objective measures, despite their participation rate in organised sports being much lower. The study deduced that lack of parental experience with organised sports and lack of economic/material resources explained much of the difference in sports participation. Children of immigrant background had significant

lower participation in club sports but this did not affect their overall physical activity level.

Toftegaard, Nielsen, Ibsen and Andersen (2010) collected data from four Danish municipalities and examined the parental socio and cultural aspects related with adolescent sports participation. The study investigated correlations between adolescent sports participation and, socioeconomic status, socio-cultural factors and demographic factors. A school-based cross-sectional sample consisting of 6356 Danish adolescents were included. Differences between municipalities in adolescents' sports participation remained significant when controlled for specific factors such as gender, age, parents' background or parents' physical activity. The relationship between socio-cultural and socioeconomic status was stronger for girls than boys. In summary, demographics, socioeconomic status and socio-cultural variables were found to be the best determinants of adolescent sport participation in Denmark. Could this then be the same for rugby clubs in Kenya?

Lee (2012) studied the effects of socioeconomic factors on physical activity participation in Hong Kong adolescents. A total of 181 adolescents of age 12–18 years were selected for the study. Physical activity was studied using both accelerometers and also through self-reports. Individual, economic and school-related factors were studied using validated self-reports. The socioeconomic status was determined by the parents' reported monthly income as well as census data on median household income of the neighborhoods selected for the study. Generalized linear models with robust standard errors were used to

assess the bearing of various factors on the adolescents' physical activity. The results indicated that individual, socioeconomic and even environmental factors had an impact on subjects' participation of physical activity.

Brockman, Jago, Fox, Thompson, Cartwright and Page (2009) conducted a study on family and socioeconomic influences on the physical activity of 10-11 year old children in Bristol, UK. Seventeen groups were used with 113, children who were between age 10 and 11 years from 11 primary schools in Bristol, UK. The study observed, the way parents encourage their children to be physically active, the degree to which physical activity is slotted in as a family and the types of non-family based physical activities year 6 children regularly take part in. Participants from all socioeconomic groups stated that parents encouraged them to be physically active though methods differed. Children from middle/high socioeconomic schools were supported through actions such as logistical and financial support, co-participation and modelling. Parents of children from low socioeconomic schools mainly confined their input to verbal encouragement and demands. Participation in family-based activities was stated to be higher in children from middle/high socioeconomic schools than children from low socioeconomic schools. All socioeconomic groups registered time to be a limiting factor in family-based activity participation. Cost was reported as a significant barrier by children from low socioeconomic schools. Children from middle/high socioeconomic schools reported engaging in more sports clubs and organised activities than children from low socioeconomic schools, who reported participating in more unstructured activities or 'free play' with friends. The study concluded that the family is important for encouraging

children to be physically active, but families from different socioeconomic backgrounds took care of their children in different ways. The research therefore implied that the design of physical activity interventions, which might consist of working with families, entails tailoring to groups from different socio-economic backgrounds.

In summary, despite numerous studies reporting the crucial supporting roles of parents in children's involvement in sport, few authors have attempted to study the whole family dynamic and how this dynamic influences participation in rugby in Kenya. Thus, there is a need to investigate with more in-depth the whole family environment of athletes hence the focus on the socio-economic status of the parents in this study.

2.5 Role Played by Peers in Talent Identification

The peer group serves as a powerful socializing agent for sports participation especially as the child moves into adolescence (Eitzen & Sage, 1982). Weiss, Smith and Theeboom (1996) suggested that children turn to their friends for the following positive dimensions: companionship; pleasant play association; enhancement of self-esteem; help and guidance; loyalty; things in common; emotional support. This view was upheld by Kubayi, Jooste, Toriola and Paul (2014) who concluded that peers are not only significant in sport but also other aspects of life. Alika (2012) further emphasized that the quality of the relationship between adolescents and their peers, as well as the type of peers they are involved with, play critical roles in aiding or impeding their career choices.. The role played by peers is therefore a very critical variable in this study

The study by Kubayi et al (2014) was intended to examine the influences of family and peers on sport participation amongst adolescents in secondary schools at Hlanganani rural area of Limpopo Province, South Africa. A total of 172 participants consisting of 108 females and 64 males attending three public secondary schools in Hlanganani rural area took part in the study. The results suggested that for both boys and girls, friends encouraged them to take part in sports with the boys reporting more peer support than the girls. Could this therefore also work for rugby players in Kenya?

Another study by Orunaboka and Deemua (2011) examined the peer group influence on sports involvement of female athletes in Rivers State Secondary Schools of Nigeria. Data was collected from a sample of 102 female athletes, randomly selected from17 secondary schools that took part in the 2003 All Secondary Schools Sports Festival in Rivers State. Results from the study indicated that peer groups significantly influence the sports involvement of female athletes in Rivers State Secondary Schools. Research has however not examined this influence on talent identification for rugby clubs in Kenya hence the need for the study of this variable.

The purpose of a study by Keresztes, Piko, Suzsana and Pulnar (2008) was to ascertain the role of social influences in early adolescents' leisure time sports activity and to look at gender differences. Data, using randomly chosen classes from four schools in distinct school districts in Szeged, Hungary, were collected from middle school students The findings indicate significant others as an important influence on sport-related behaviors and suggest that during early adolescence girls' sports participation is particularly

influenced by the social influence of peers. The results imply that health promotion programs should build on possible social influences, i.e. the role of peers, parents and significant others in general, in fostering adolescents' physical activity.

Carnes (2014) in a study in which the aim of investigation was to establish the effect of the presence of a same sex and fitness, matched peer, versus an alone condition, on recreational runners' behavior and liking during an acute bout of sub maximal exercise. Three experimental trials were conducted on 12 male and 12 female recreational runners at random and held under different social conditions. Each trial consisted of self-paced running for a duration voluntarily determined by the participant. The three social conditions were: alone, with a sex and fitness matched familiar peer, or with a sex and fitness matched unfamiliar peer. The results showed no significant effect of social condition or interaction effects for any of the dependent variables indicating that the presence of either a familiar or unfamiliar peer does not appear to affect recreational runners' satisfaction or voluntarily selected duration or intensity of a single submaximal exercise regimen.

The objective of another study by Rittenhouse (2008) was to ascertain the amount and intensity of physical activity children perform in a regulated setting, by themselves, with a peer who is of similar weight and with a peer of different weight. The children, who had access to both physical and sedentary activities for a total of 30 minutes, were provided with an accelerometer during each of the three conditions, the total number of accelerometer counts, sedentary and physical activity time for each condition were noted

down and compared across all three conditions. Overweight boys amassed fewer accelerometer counts and participated in greater amounts of sedentary time than lean boys in the alone condition with no differences in the with-peer conditions. These results signify a potentially greater need for peer interaction in the at-risk-for/overweight boys to increase physical activity and liking of that activity.

Though most of the studies have shown that peer influence has an impact on physical activity, the influence of peer groups on talent identification is still a relatively unexplored area. More specifically there is lack of information of the peer influence and how it impacts on talent identification for rugby clubs in Kenya and hence the need for the study.

2.6 Role Played by Coaches in Influencing the Identification of Talent

Coaches occupy a central and influential leadership role within the athletic environment and their influence often extends beyond the sports domain into other areas of the athletes' lives (Smoll, Smith & Cumming, 2007). This is supported by Hedstrom and Gould (2004) who stated that the young athletes' development and enjoyment of sport can be significantly influenced by the coach. In fact, Smith, Small and Curtis (1978) who were among the initial researchers to examine youth coach's behaviors, established that coaches who showed more technical, instructional and mistake contingent reinforcement behaviors were very popular. In a more recent study by Barnett, Smoll and Smith (1992), it was verified that coaches who were trained to proliferate these behaviors were better liked, generated an atmosphere that athletes perceived as more fun, had lower dropout

rates and created more team unity than untrained coaches. Another study by Martin, Jackson, Richardson and Weiller (1999) found that coaches who demonstrate child-involved democratic coaching styles were preferred by the youth. Unfortunately, research has not extensively examined who the 'youth sport coach' is in rugby in Kenya thus limiting knowledge in this area.

Nevertheless Misasi, Morin and Kwasnowski (2016) carried out a study that examined the coach-athlete relationship as it pertains to athletes and coaches of different genders at Division I and II Universities in New Haven, USA. They used electronic surveys which were sent to 50 Division I and 50 Division II head coaches in the Northeast. Coaches were asked to respond to the survey and then send to their respective athletes. These surveys were filled by both coaches and athletes. The questionnaires were categorized as Coach-Athlete Relationship Questionnaire (CART-Q) and Leadership Scale for Sports (LSS) while the Coaching Behavior Scale for Sports (CBS-S) was completed by only the athletes. There study found no significant differences with the CART-Q while the LSS illustrated several areas of significances in the categories of training, social support democratic behavior and autocratic behavior. Although there was no significance found in positive feedback an interesting finding reveals that female coaches felt they were less likely to provide positive feedback than their male counterparts. The CBS-S has subscales which incorporate: mental preparation, competition strategies, physical training and planning, technical skills, personal rapport and negative personal rapport. Statistical significance was found in the following subscales: competition strategies, personal rapport and negative personal rapport. The coach was found to be a meaningful person in the lives of athletes and the role they play is critical in the athlete's sport experience. The results show that the level of competitive division appears to play a role in how athletes perceive their coaches and how coaches perceive themselves. In addition, gender differences among coaches' affect responses of the athletes and the coaches. The study therefore concluded that the only way coaches could lead was to get to know their athletes and work hard to understand their goals, motivations and needs.

Kim and Cruz (2016) also suggest that as a team leader, a coach plays a significant role in helping his/her players obtain high levels of performance and success and a coach should therefore possess skills to help his/her athletes accomplish whatever they target. They conducted a study to evaluate the relationship between coaching behaviors, athlete satisfaction, and team cohesion and also examined gender as a possible moderating variable. Two-hundred eighty-eight effect sizes were obtained from 24 studies that used Chelladurai's sports leadership scale. The results imply a moderate relationship between leadership and cohesion, and a large relationship between leadership and satisfaction. Training/instruction was the highest contributor for both relationships. Gender moderated both relationships. The findings therefore confirm that it is important to recognize the influence leadership behaviors coaches have on the psychological state of players, especially as sports evolve to be more challenging and multifaceted.

Oketch (2012) investigated the psychological satisfaction amongst male rugby teams in Kenyan Universities with regard to technical and institutional support. A total of 91 rugby players drawn from 3 public and 4 private universities and registered with the

Kenya Rugby Union took part. One of the findings indicated that the role played by coaches contributed immensely to player satisfaction. The inclusion of the role of a coach as one of the variables to be investigated in this study is therefore well supported

2.7 Roles of Players' School Rugby Playing Experience in Talent Identification

Turnbull (2011) suggested that the direction an individual's profession takes is influenced by kind of school attended. Bailey and Morley (2006) further clarified how influential schools can be on young performers and this is supported by Gunnel and Priest (1995), Redgrave (2000) and Johnson (2003) who have singled out elite performers from a variety of sports who have made it clear how positively they felt towards the experiences they had at school.

Ozturk, Ozbey and Camilyer (2015) investigated the positive impact of sport-related games, which are carried out as extracurricular activities, on high school students' communication skills. The study used 30 high school students and categorized 15 as the experimental group while the other 15 formed the control group. The experimental group was given sport- related 20 applications for 10 weeks while the control group was instructed not to deal with any extracurricular activities. Meanwhile, before and after the applications, data was collected by means of "The Communication Skills Scale" developed by Korkut (1996) and then evaluated through "two-way ANCOVA" test methods. The findings clarify that the considerable gap in scores of the students' pre and post-tests perception concerning their communication skills are clearly attributed to sport-related games and it was also established that scores of the students in the experimental

group were meaningfully higher than ones in the control group. However, there was no significant difference in the perception of communication skills by males and females in both groups. In addition, the common effect of sex and participation on sport-related games was found not to be statistically meaningful in terms of communication skills. Consequently, it could be said that sport-related games impact positively on communication skills.

In a study more specific to rugby Cotton and O'Connor (2013) carried out a latent study of 984 Australian Schoolboy Rugby Union players. The investigation included the, the type of school (Government versus Non-Government), the State in which they attended school and the number of years the players had been selected. Players were categorized into three groups namely: those who did not participate in senior representative level; those who represented at Provincial level and those who represented at National level. In addition, 267 players who debuted for the Australian National Rugby Union team between 1977-2012 were also analyzed retrospectively and separated into another two categories; those who had represented the Australian schools' national team and those who had not. The findings indicated that 12.7% of Australian schoolboy players moved on to represent at the senior national level. Within these results it was singled out that attendance at Non-Government schools was advantageous for selection at both the schoolboy and senior representation. The inclusion players' rugby playing experience in school as a variable in the study was found to be very relevant and was justified, a finding that was supported by Mills et al (2012) who stated that school experience leads to the

development of resilience, attitude and emotional competence all of who are required to do extremely well at the top level in sport.

2.8 Influence of Club Infrastructure on Talent Identification

According to Roger (2005) (as cited by Abisai, 2014), a positive environment that promotes good training is supported by excellent and reachable training facilities. This observation is supported by Gore (2004) through a study which sought to reach a better understanding of how access to particular services, facilities and team mate roles affect athletic talent development. The findings of the study indicated that access to facilities was important to all athletes.

Rosandich (2008) suggests that the application of information technology to sports management has dramatically changed the way business is done in the field of sports. This kind of equipment and tools can be widely used to enhance outcomes. He emphasizes that the tools are briskly becoming a prerequisite for the sports administrator at whatever level and that they are a compelling force for social inclusion in sport and recreational occupation and for the profession as a whole.

Adeyeye and Kehinde (2013) sought to examine the influence of motivation and availability of facilities on athletes' performance in Nigeria University Games with the aim of finding the areas of success and failure. Questionnaires were administered to 210 participants from 6 Nigerian universities in south western Nigeria. The participants included sports administrators, male and female athletes. The findings of the data showed

that equipment and facilities were not adequate and funds were not enough while athletes were not well motivated in Nigeria University Games,

In the study conducted by Oketch (2012), whose aim was to investigate the psychological satisfaction of male Kenya Rugby Union registered university rugby players with technical and institutional managerial support, the findings of the study indicated that universities need to invest more on equipment, facilities, incentives and financial support. This therefore supports the need for a study on how club infrastructure influences talent identification for sports in Kenya and specifically for rugby clubs in Kenya as research in this area is limiting.

2.9 Talent Identification Strategies

Abisai (2014) researched on assets and modes of identification and development of talented student athletes in selected sport disciplines in Kenyan universities. The results indicate that identification of talented student athletes in Kenyan universities is based on observations by the coach. This finding is in agreement with that of Williams and Reilly (2000) who found out that those identifying talented sports performers rely heavily on the intuition of expert coaches and talent scouts. On factors that were likely to hinder identification of talented student athletes, Abisai (2014) concluded that absence of talent identification structures and modalities was the second most hindering factor at university level

Since the Universities form 60% of the target population in this study, the study by Abisai (2014) was found to be relevant in concluding that there are no clear cut talent identification strategies used by clubs in Kenya to recruit players. Furthermore research in this aspect in rugby in Kenya seems to be limiting and hence the need for the study.

2.10 Theoretical Framework

The theoretical framework is based on a model named" Model of talent identification and development in sports" as developed by Elferink-Gemser and Visscher (2012) which shows an explicit relationship between performances attributes on the individual side and the environment on the other. The model divides personal performance characteristics into, technical skills, anthropometry, tactical skills, psychological skills and physiological characteristics. The environmental characteristics are mapped as parents, teachers, coaches, managers, trainers, talent development programs, competition and training facilities. According to Elferink- Gemser (2013), a child always grows in and with his or her own environment and this view is supported by Philips (2010) who states that the environment acts as a critical role in developing these individual performance characteristics, In addition Coutinho, Mesquita and Fonseca (2016) state that when development of learning activities for children in sport is considered, many personal and environmental factors interact to determine an individual's talent development trajectory.

Valuable insight can be achieved on identification of talent and subsequent training of that talent by charting out these environmental characteristics. From previous research it is already known that parents are key players in academy player identification (Mills et al, 2012; Nezhad et al, 2012) while other research show peers as a crucial group in facilitating identity development (Alika, 2012; Holt et al, 2008; Kubayi et al, 2014), coaches as a group having dramatic influence on young athletes' development (Hedstrom & Gould, 2004; Small et al, 2007) and schools attended having an impact on the talent identification process (Bailey & Morley, 2006; Johnson, 2003; Turnbull, 2011). Elferink-Gemser and Visscher (2012) model highlights the relevance of these socio-cultural variables and the interaction between genetics and the environment as probable determinants of talent identification. Wolstencroft (2002) in summary states that "the recognition of the influence of environment on innate components of talent and the multiplicative influence of these components provides a unique contribution to the area of talent detection and identification. (Page 30)

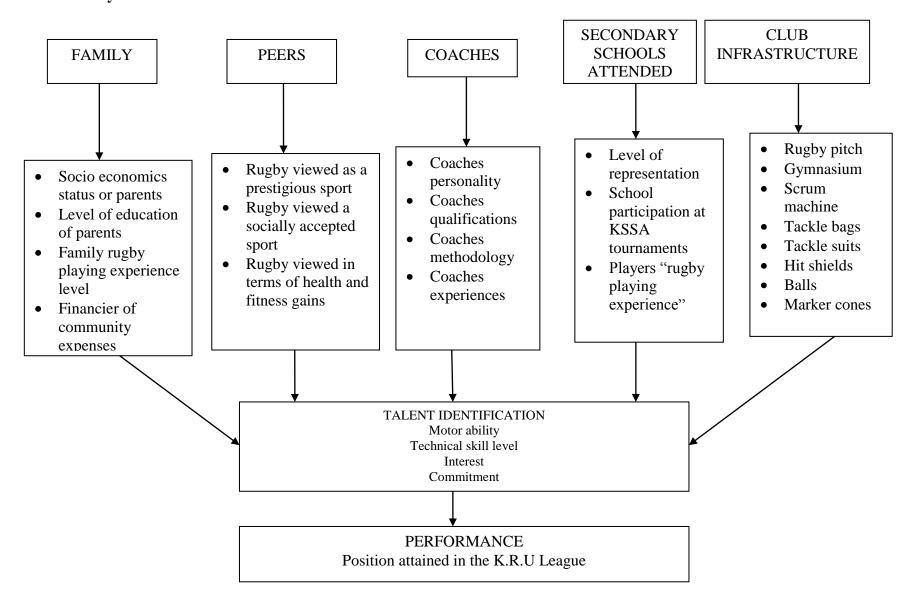
Guided by the theoretical framework based on this model the study therefore sought to establish the impact of the socio-cultural environment (family, peers, coaches, schools and club infrastructure) on talent identification for rugby clubs in Kenya

2.11 Conceptual Framework

A conceptual framework is a succinct description followed by a graphic or visual portrayal of the major concepts of the study and their perceived relationships as indicated by Mugenda and Mugenda (2003). The conceptual framework illustrated in Figure 2.1 shows the relationship between the socio-cultural variables that are likely to influence the talent identification of rugby players for clubs in Kenya. Talent identification is the dependent variable. The framework indicates that if the variables are found to

significantly influence talent identification then there is a likelihood that the clubs will perform better in the league competitions. This would then give coaches an opportunity to develop a model by manipulating those variables in a bid to improve the performance of their teams in their respective leagues.

Figure 2.1: Conceptual framework on the influence of socio-cultural environment on talent identification for rugby clubs in Kenya



2.12 Summary of Literature Review

In summary, parents occupy a favorable position in terms of influencing their children's physical activity (Tremblay, Lorsin, Zecevic, & Lariviere, 2011) and they nurture a child's psychological development through their association in their child's athletic experience (Cote & Hay, 2002). They are therefore an aspect that should not be disregarded in the identification of talent. While research is only beginning to emerge on the role parents play in children's sports, it has been revealed that parents affect young athlete's motivation and competence as well as emotional responses (Hedstrom & Gould, 2004). Coaches also play a critical role in putting into practice the structure and design of sport programs. Specifically, coaches should reinforce reasonable practice schedules to allow for other activity involvement, create fun and motivating climates, delay specialization until athletes are physically, psychosocially, and cognitively ready, provide individual attention to all program participants, and facilitate effective communication with parents (Côté & Fraser-Thomas, 2007). It is also clear that very few studies have been carried out in Kenya on the influence of peers, schools and club infrastructure on talent identification for rugby clubs in Kenya.

The proposed study consequently aims to fill the gaps above by incorporating a sample of rugby players in Kenya and more specifically the role played by parents, coaches, schools, peers and clubs as the socio-cultural factors that may influence their decisions to join the rugby clubs

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methods and procedures that were used in the study and includes, the research design, the target population, the sample and sampling procedures, research instrument, validity and reliability of the research instrument, data collection procedures and data analysis techniques.

3.2 Research Design

The study examined the influence of socio-cultural environment on talent identification for rugby clubs in Kenya. According to Nachmias and Nachmias (1996) a research design is the program that guides the investigator as he or she collects, analyzes and interprets observations. They further reiterate that it's a logical model of proof that allows the researcher to draw inferences concerning casual relations among variables under investigation. The design that was therefore chosen for this study was a descriptive survey research design. Descriptive survey research studies are established to obtain precise and pertinent information about the current status of situations and whenever possible draw valid general conclusions from the identified facts (Lokesh, 1984). This design was found to be appropriate as it allowed for collection of descriptive data regarding the characteristics of a population, conditions, current practices and experiences in a way to systematically present factual information for decision making as stated by Kothari (2004). The study employed the descriptive survey to establish opinions, attitudes and knowledge about the relationship between the socio-cultural

environment, namely family, peers, coaches, players' secondary school rugby playing experience, club infrastructure (independent variables) and talent identification for rugby clubs in Kenya (dependent variable)

3.3 Target Population

Population refers to an entire group of individuals, events or objects having a similar observable characteristic (Mugenda & Mugenda, 2003). In addition, Ross (2005) specifies that, it is essential to differentiate between the population for which the results are ideally required, the desired target population, and the population which is actually studied, the defined target population. Given that the main purpose of the study was to examine the influence of the socio-cultural environment on talent identification for rugby clubs in Kenya, the study targeted players playing for rugby clubs in Kenya as the desired target population while the defined target population were players playing for rugby clubs in Kenya who were registered with the K.R.U. to participate in the 2016/2017 national leagues. The study also targeted coaches who coached in the 76 clubs as the desired target populations while the defined population were 52 as only 52 clubs had employed coaches. This data is indicated in Table 3.1

Table 3.1
Target Population

	K.C.L	C.L	N.L	Total	
Total clubs	12	12	52	76	
Players	1300	652	2383	4335	
Coaches	12	12	52	76	

3.4 Sample Size and Sampling Procedures

A sample is a small proportion of a population selected for observation and analysis (Best & Khan, 2006). A large sample consists of a sample of 30 or more (Best & Kahn, 2006) and is also big enough to detect a significant effect (Kerlinger & Lee, 2000). The sample size for this study was obtained through stratified sampling and was used to choose the clubs. Stratified sampling implies dividing the population into homogenous groups with each group having subjects with similar characteristics (Cohen & Manion, 1994). Since Rugby in Kenya was played by 76 clubs in 3 categories in the 2016 – 2017 League competition, the clubs were stratified into 3 strata on the basis of league participation and then players sampled through simple random sampling as shown on Table 3.2. 5 players were sampled from each club while the head coaches from each club became automatic participants.

Table 3.2 Sample Size

Sample Size	K.C.L	C.L.	N.L	Total
Total clubs	12	12	52	76
Sampled clubs	6	6	13	25
Players	30	30	65	125
Coaches	6	6	13	25

Since the clubs playing in the K.C league were not represented equally on a regional basis, quota sampling was used within this stratum. Quota sampling involves selecting typical cases from diverse strata of a population. The quotas are based on known characteristics of the population to which you wish to generalize (Ary, Jacobs, Razavieh

& Sorenesen, 2006). Nakuru and Western Bulls rugby clubs were selected through quota sampling. All the other teams in the K.C league were from Nairobi and were selected through simple random sampling. A simple random sample was also used to identify 5 players from each of the sampled clubs totaling to a sample size of n=125. A sample size of n=125 was found appropriate as this corresponds to the table for determining sample size values as developed by Bartlell, Kotrlik and Higgins (2001) (Appendix 3). Every registered player per club was assigned a number on a piece of paper was placed in a container and then picked at random.

3.5 Research Instruments

The researcher used two types of instruments; questionnaires and interview schedules. The objective of an instrument or tool in research is to measure the variables of the study (Mugenda, 2011). If a questionnaire is well constructed, it can provide data economically and in a form that lends itself perfectly to the purposes of the study (Verma & Mallick, 1999) while according to Bryman (2012), interview schedule is a prominent data collection strategy used in both quantitative and qualitative research where a set of questions are asked by the interviewer to the respondent.

The questionnaire was used for collecting data from the players and it combined both open ended and close ended questions, Section A of the questionnaire included demographics like age, playing experience, academic qualifications and occupation. Section B focused on the education level of parents, parents' gross monthly income and the person responsible for the players' commuting expenses to training. Section C

contained questions on whether or not any family members played rugby, their highest rugby playing level and their influence on the players' decision to join their rugby club. Section D had the age at which the players started playing rugby and whether or not this influenced the talent identification process. Section E was the section that dealt with aspects of peer influence that may have influenced talent identification in the rugby clubs and a ranking of most influential, influential, fairly influential and not influential, was used. Section F elicited for the aspects of the coach that had an influence on the players' decision to play rugby at their clubs and those aspects of the coach were also ranked using the same scale of most influential, influential, fairly influential and not influential. Section G addressed the issues concerning the secondary schools attended including the level of the players' participation at K.S.S.S.A competitions and the influence of this level of participation on the talent identification for the rugby clubs. The last section H contained the availability of rugby equipment in the clubs and a ranking of the level of influence of these equipment on talent identification were also indicated.

The interview schedule was used for collecting data from the club rugby coaches using both structured and in depth interviews. The interview schedule was employed in the study to allow for a face to face interaction and discussion on the topic. The interview schedules were constructed in line with the study objectives after discussion with the supervisors. The first part of the interview schedule consisted of demographic information on the interviewee such as age, educational background, coaching certification level and coaching experience. In the second part the interviewees were asked whether or not the following had an influence on the decision by their players to

join their clubs; the parents' socio-economic status, parents' level of education and the parents' and siblings' rugby playing experience. The third part focused the peer influence and whether or not this may have influenced the talent identification process while in the fourth section aspects of the coaches' influence were addressed. In the fifth and sixth part of the interview schedule, the focus was on the influence of the players' playing experience in the secondary schools attended and the influence of the club infrastructure respectively.

3.6 Validity of the Research Instruments

Validity is the extent to which results attained from the data analysis essentially represents the phenomena under study (Nachmias & Nachmias,1996) while Best and Kahn (2006) referred to content validity as the extent to which a measuring instrument provides adequate coverage of the topic under study. The researcher requires all the help that he or she can get as ideas from colleagues and experts in the field of enquiry may reveal some ambiguities that can be done away with and also items that do not contribute to its purpose (Best, 1981). The content validity of the research instruments was therefore determined by the researcher discussing the items in the research instruments with the supervisors and other lecturers in the School of Education who were selected on the basis of their expertise. The questionnaire was modified by the introduction of a ranking format in sections E,F and H as follows; most influential, influential, fairly influential and not influential while the interview schedule was properly aligned to the research objectives by allocating the objectives into the various sections so as to capture all the data required

for the study. The ranking format of most influential, influential, fairly influential and not influential was also used in the interview schedule.

3.7 Reliability of the research instruments

Reliability acts as a measure of the extent to which a research instrument gives uniform findings or data after replicated trials (Mugenda & Mugenda, 2003). Fraenkel and Wallen (2000) similarly described reliability as the level of internal consistency or stability over time of a measuring instrument. Subsequently, as stated by Roscoe (1969), a pilot study is an effective way of testing the reliability by helping to determine possible causes of error variance which could occur as a result of wording of the instrument, respondents' mood during instrument administration, ordering of the instrument items or content of the instruments. Punch (2005) further indicated that consistency over time reliability can be assessed by administration of the same instrument at two points in time to the same respondents during the pilot study. This is called a test-retest method and requires administration of the same instrument after a particular period to the same respondent. Considering the number of respondents used during the pilot study, Borg and Gall (1989) recommended that researchers pilot 5 to 10 % of the final sample and this was supported by Mugenda and Mugenda (2003) who indicated that a pre-test sample of between 1 and 10 % of the sample is sufficient.

In line with this, instruments' reliability was established through a pilot study which was carried out in 3 clubs that did not participate in the main study and were purposely selected. From each club 5 players were randomly selected while the head coaches per

club became automatic participants. A test-re-test technique was subsequently used whereby the questionnaires were administered to the 5 players per club and one coach per club interviewed using the interview schedule. The same respondents per club were permitted a time lapse of 3 weeks between the initial and second test. The tests were therefore done on a total of 15 players and 3 coaches which indicated a percentage of 12 of the total sample for both the players and the coaches. The Pearson's Product-Moment Coefficient of Correlation (r) formula was utilized to correlate the pre-test and post-test results in order to establish the coefficient of reliability based on the formula below according to Best and Kahn (1998):

$$r = \frac{N \Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{N \Sigma X^2 - (\Sigma X)^2} \sqrt{N \Sigma Y^2 - (\Sigma Y)^2}}$$

where E X = sum of the X scores

E Y = sum of the Y scores

E X2 = sum of the squared X scores

E Y2 = sum of the squared Y scores

E XY = sum of the products of paired X and Y scores

N = number of paired scores

A coefficient of 0.7 and above implies a high degree of reliability of data (Best & Kahn, 2006). Results of the pilot study showed that some items needed modification while others were done away with. Reliability coefficient of the remaining items was 0.78 and was therefore adopted for the study.

3.8 Data Collection Procedure

Permission and authority to carry out the study was requested for from the National Commission for Science, Technology and Innovation. County commissioners from the relevant counties were informed before embarking on the research in line with the research authorization letter. A letter of introduction was then sent to the club secretaries notifying them of the intended visit and describing the purpose of the study. Prior to the data collection exercise 3 research assistants were trained on the methodology of data collection by a research expert in order to familiarize them with sampling procedures and techniques for administration of the test instruments. The training included aspects of research ethics, data collection and management, how to conduct interviews and familiarization with the research topic. The training lasted 2 days

The researcher and the research assistants personally visited the sampled clubs and personally identified the sampled players. The players were asked to remain behind after training and were addressed in a suitable and comfortable environment depending on the situation. They were then briefed on the purpose of the research and also on the aspects of confidentiality. The questionnaires were then distributed, filled under the supervision of the researcher or the research assistants and collected. This was done to purposefully done to guard against collusion.

The interviewing of coaches took place at comfortable venues within the training grounds depending on the situation. Where possible the interview of coaches took place before the training sessions as the research assistants were advised to book appointments well in

advance. The researcher and research assistants ensured that matters to do with confidentiality and the purpose were explained to the coaches. The duration of the interviews was 60 to 90 minutes.

3.9 Data Analysis Techniques

Data analysis is the process of examining the characteristics of the object under study and for establishing the patterns of relationships among the variables relating to it (Krishnaswami & Ranganatham, 2011). The data collected from the questionnaire was edited, coded, classified and tabulated. Quantitative data gathered from closed ended questions were first post- coded and organized into related themes in line with the research questions. It was then analyzed, tabulated and presented using descriptive statistics. To incorporate the qualitative data gathered from open ended questions into inferential data, post coding and tallying of similar responses of each item was done. Analysis of data was accomplished with the assistance of the Statistical Package for Social Sciences (SPSS).

Data from the interview schedule was analyzed qualitatively through coding and description. The coded data was then classified, summarized and tabulated. The question of statistical inference arises whenever we wish to generalize from a sample to some larger population (Punch, 2005). According to Best and Kahn (2006), the Chi-Square is a non parametric statistical test often used for categorical data (frequency data.). If the calculated value of the Chi-Square is found to be higher than the critical value then the association between the variables is considered as significant. If, on the other hand, the

Chi- square value is found to be lower than or equal to the critical value, then the association is not significant. To test the hypotheses developed from the objectives, the Chi-Square test was subsequently used in the study. The test was used to establish whether or not a significant influence existed between the independent variables and the dependent variable of the study. The significant level was set at alpha = 0.05. Levels of significance found to be greater than 0.05 indicated that the influence was significant while if the level of significance was less than or equal to 0.05 than the influence was considered not to be significant.

3.10 Ethical Consideration

Prior to data collection, permission to carry out the study was requested from the National Commission of Science, Technology and Innovation through a letter and a research permit was granted. Copies of the research permit were availed to the club secretaries during the introductory stage. Each participant was served with a copy of an introduction letter informing them about the nature, purpose and importance of the research. The researcher and research assistants explained the objectives of the research to the participants in each of the rugby clubs visited. They were informed that there were no risks or financial gain involved in the study and that their participation was voluntary. They were also assured of the anonymity and confidentiality of the responses by not being required to write their names on any of the research instruments.

CHAPTER FOUR

ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents an analysis of data collected from the field and draws interpretations based on descriptive and inferential analysis. The data presented analyses the demographic characteristics and the influence of social cultural environment on talent identification for rugby clubs in Kenya. The chapter covers the response rate, demographic characteristics, influence of family in identifying rugby talent, role of peers in talent identification among rugby players in Kenya, role of coaches in influencing the talent identification process, influence of the players' rugby playing experience at secondary school level on the talent identification process and finally the influence of club infrastructure also on the talent identification process.

4.2 Response rate

Questionnaire response rate refers to the number of respondents who returned usable instruments for the study out of the total number contacted (Mugenda & Mugenda, 2003). The questionnaires were administered to 125 players from 25 clubs who played in the K.R.U 2016/2017 league competitions and 95 questionnaires were returned. On the administration of the interview schedule, 25 coaches from the 25 clubs were contacted but only 15 were available for the interviews during the visits.

The lower response rate was that of the coaches' interview schedule at 60.0 % while the higher response rate was that of the players' questionnaire at 76.0 %. The low response rate from the coaches was attributed to the absence of some of the coaches as most of them were part timers and were therefore not available at the specific time agreed upon. Both response rates however indicated that the sample characteristics were representative of the population parameters in conformity with Kothari's (2004) stipulation that a response rate of 60.0 % and above is acceptable.

4.3 Demographic data

In order to acquire an understanding of the participants who took part in the study, each participant was required to indicate their personal data. The background information from the players included names of their clubs, age bracket, highest level of education and occupation while the background data from the coaches incorporated their age bracket, highest level of education, highest level of coaching certification and coaching experience level. Information that was included in the coaches' personal data was age bracket, highest level of education, coaching certification and coaching experience. This information was to enable the researcher to categorize the coaches and establish their qualification levels.

4.3.1 Reponses of the distribution of players by age

The players were requested to indicate their age bracket. The data is displayed in Table

4.1

Table 4.1: Distribution of players by age

	Frequency	Percent
10-19years	13	13.7
20-29years	75	78.9
30-39years	7	7.4
Total	95	100.0

The findings in Table 4.1 indicate that most of the players were in the age-category of 20-29 years at 78.9 % followed by 10-19 years at 13.7 % and then 30-39 years at 7.4 %. Most of the players involved in the study are therefore relatively young at an age bracket of 20-29 years though the expectations would be that talent identification should take place at an earlier age bracket in line with the study by Spammer and Steyn (1998) whose study concentrated on identification of rugby talent among 10 year old boys. This view is supported by Roderick (2006) who reasons that by identifying players at an early age, the clubs get to prepare them early thereby generating players according to their own playing structures or required skills. Peltola (1992) confirms this by suggesting that the first stage of talent selection could be at the age of 12-14 years with basic field tests. Those selected in this stage are invited to do more sophisticated tests, after which the young athletes are advised as to the sports to which they are considered best suited and are given the opportunity to join various talent development squads from age 13-17

4.3.2 Distribution of players by their highest level of education

Gorton (2010) suggests that there is a correlation between sports participation in school and higher academic achievement though he notes that there is no evidence to prove causation. For this reason the players were also required to indicate their highest level of academic qualifications and the findings are shown in Table 4.2.

Table 4.2

Distribution of players by highest level of formal education

	Frequency	Percent
Secondary education	17	17.9
Certificate	4	4.2
Diploma	15	15.8
Bachelors	56	58.9
Masters	3	3.2
PhD	0	0
Total	95	100.0

Data on academic qualifications of the players indicated that the majority of them had a bachelors degree (58.9 %) followed by secondary education (17.9 %) and diploma (15.8 %). Relatively few had certificates (4.2 %) as the highest level of academic qualifications while only 3.2 % had masters' degrees. The findings demonstrate that over 65 % of the rugby players who play for rugby clubs in Kenya have attained university education and are therefore well educated though very few aspire to do post-graduate studies and the findings are therefore consistent with a study conducted in England by Bradley, Kean and Crawford (2013) who posit that adults with a degree level qualification are more likely to participate in sports compared to those with no tertiary education.

4.3.3 Distribution of players' occupation type

Table 4.3 illustrates the distribution of players by occupation

Table 4.3

Distribution of players by occupation type

	Frequency	Percent
Accountant	1	1.1
Administration	2	2.1
Student	60	63.1
Teacher	3	3.1
self employed	2	2.1
Businessman	6	6.3
ICT officer	4	4.2
Engineer	1	1.1
Unemployed	1	1.1
Coach sports	1	1.1
No response	14	14.7
Total	95	100

According to Table 4.3, the majority of players who play for rugby clubs in Kenya are students (74.1 %) while accountants, engineers, sports coaches and the unemployed are the minority at 1.1 % respectively. This finding is not surprising as most of the rugby clubs in the C.L and N.L leagues are university teams. Interestingly 6.3 % of the players were found to be businessmen while 14% did not respond to this item in the questionnaire.

4.3.4 Distribution of coaches by age

The coaches of the rugby clubs were required to indicate their age brackets. The data is presented in Figure 4.1.

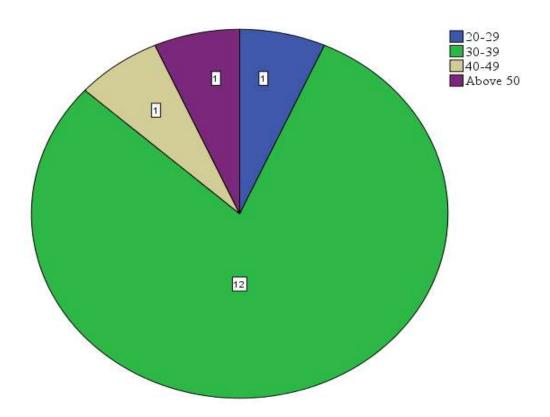


Figure 4.1: Distribution of rugby coaches by age

Figure 4.1 demonstrates that 12 of the coaches who coach rugby in rugby clubs in Kenya are in the age bracket of 30-39 years while the other age brackets of 20-29 years, 40-49 years and above 50 years have 1 coach each. These results imply that coaches in rugby clubs in Kenya are relatively young and therefore posses the vigor and precision that are required when dealing with young players

4.3.5 Coaches' highest levels of formal education

Data on the coaches' highest level of formal education is shown in Table 4.4

Table 4.4

Distribution of coaches by highest level of formal education

	Frequency	Percent
PhD	0	0
Masters	1	6.7
Bachelors	9	60.0
Diploma	2	13.3
Certificate	1	6.7
Secondary level	2	13.3
Total	15	100

Table 4.4 illustrates that 66.7 % of the coaches are graduates with a bachelors' degree and above. Indeed the findings indicate that up to 86.7% of the rugby coaches have attained post- secondary school education. This information demonstrates that coaches in rugby clubs in Kenya are well educated and are therefore be in a position to effectively plan, conduct and implement talent identification processes that maybe required by the clubs. This view is supported by Sisungo, Buhere and Sang (2011) who stated that education enhances the proficiency, operational and conceptualization skills of an individual.

4.3.6 Coaching certification attained by coaches

The club coaches were also required to indicate the coaching certificate they have attained in rugby. The data is presented in Figure 4.2.

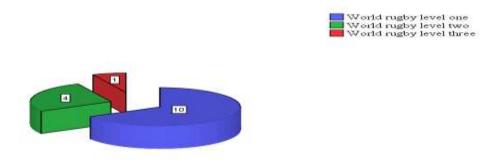


Figure 4.2: Distribution of rugby coaches by coaching certification level

Figure 4.2 displays the results that majority of the coaches 66.7% had world rugby level 1 certification followed by 26.7% coaches with level 2 certification and 6.7% coach with level 3 certification. These findings suggest that most of the coaches are not highly qualified in rugby coaching as level one certification does not qualify a person to coach but is an introductory course as per World Rugby requirements. This according to the researcher's observation is an attribute that could influence the talent identification process as players naturally want to be coached by coaches with high coaching certification

4.3.7 Coaching level of experience

The rugby club coaches were also required to indicate the number of years they have coached rugby at club level. The data is presented in Table 4.6.

Table 4.5

Distribution of coaches by level of experience

	Frequency	%	
1-10	13	86.6	
11-20	1	6.7	
21-30	1	6.7	
Total	15	100.0	

Table 4.5 shows that majority coaches 86.6% had a coaching experience of between 1-10 years with only 6.7% stating a coaching experience of 11-20 years and 6.7% an experience level of 21-30 years. This was of value to this study as experience level was one of the coach's attributes likely to influence the talent identification process

4.4 Influence of family on talent identification for rugby clubs in Kenya

The first objective was to determine the influence of family on talent identification for rugby clubs in Kenya and the study findings are presented in the following sub-sections:.

4.4.1 Influence of parents' socio-economic status on the talent identification process.

The coaches were asked to rate in their view the influence of parents' socio economic status on the talent identification process. The results are presented in Table 4.6

Table 4.6

Responses by coaches on the influence of parents' socio economic status on talent identification

	Frequency	Percent
Very Influential	4	26.7
Influential	3	20.0.
Fairly Influential	7	46.6.
Not influential	1	6.7
Total	15	100.0

Table 4.6 displays that majority of the coaches (46.6 %) indicated that parents' socioeconomic status was fairly influential, followed by 26.7 % who rated it as very
influential, with 20.0 % giving it a rating of influential and only 6.7 % of the coaches
indicating that it was not influential. The findings imply that according to the club
coaches' view, parents' socio-economic status had an influence on talent identification
going by the cumulative percentage of 93.3 from the rating of very influential, influential
and fairly influential by the coaches The findings are therefore consistent with the results
of the study by Nezhad, Rahmati, and Nezhad, (2012) which indicated that the socioeconomic status of the parents had significant correlation with the amount of sports
participation per week among adolescent students' level of income of father, level of
father's education and level of mother's education and also supported by Mills, Butt,
Maynard and Harwood (2012) who in their study coaches came to a conclusion, that that

there is a positive correlation between parental support and chance of players could advance to professional level.

4.4.2 Parents' highest level of formal education

The players were asked to provide the highest level of education of their parents. The results are shown in Table 4.7.

Table 4.7

Distribution of parents by highest level of formal education

Father			Mother		
Level	Frequency	Percent	Level	Frequency	Percent
Ph.D.	10	10.5	Ph.D.	2	2.1
Masters	13	13.7	Masters	11	11.6
Bachelors	25	26.3	Bachelors	33	34.7
Diploma	21	22.1	Diploma	15	15.8
Certificate	6	6.3	Certificate	10	10.5
Secondary	14	14.8	Secondary	18	18.9
Primary	2	2.1	Primary	3	3.2
No Resp	4	4.2	No Resp	3	3.2
Total	95	100	Total	95	100

Table 4.7 exhibits the finding that over 50 % of the fathers had a bachelors degree and above as their highest level of formal education with a cumulative percentage of 50.5 (PhD 10.5 %, Masters 13.7 %, Bachelors 26.3 %) while only 16.8 % had secondary school level and below as their highest level of education. This trend is repeated for the mothers with 48.4 % being indicated as having a bachelors degree and above (PhD 2.1 %,

Masters 11.6 %, Bachelors 34.7 %) while 22.1 % were reported as having secondary school level and below. The results show that the players' parents, both fathers and mothers, were well educated. The parents' level of education forms an important variable for familial influence according to the framework provided by Okioga (2014) which indicated that socio-economic status is a combined economic and sociological measure of a person's work experience and of an individual's or family's economic and social position relative to others based on income, education and occupation.

4.4.3. Influence of parents' level of education on the talent identification process

The coaches were required to show whether or not parents' level of education had any influence on talent identification. The results are presented in Figure 4.3.

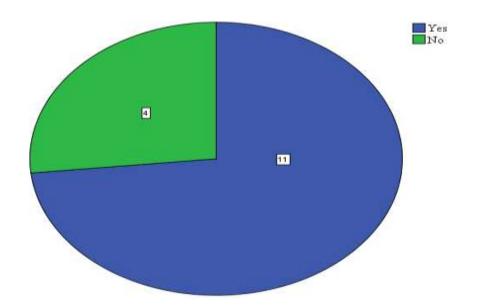


Figure 4.3: Coaches' response on influence of parents' level of education on talent identification

Figure 4.3 shows that majority (11) coaches reported that the level of education of the parents of the rugby players influenced talent identification while only 4 coaches

indicated that the level of education of parents did not influence the talent identification process. The researcher found it necessary to sought the coaches' view on this variable as indicated that they were in contact with the parents especially during the talent identification exercise conducted during the K.S.S.S.A rugby competitions and a lot of consultations took place with the parents.

4.4.4. Parents' occupation

The players were required to indicate their parents' occupation. The results of what is reported as the fathers' occupation are shown in Table 4.8 while the results for the mothers' occupation are displayed in table 4.9

Table 4.8

Distribution by Fathers' occupation

	Frequency	Percent
Surveyor	1	1.1
Ex-chief	1	1.1
Doctor	2	2.1
Teacher	17	17.9
General fitter	1	1.1
Retired	5	5.3
Driver	1	1.1
Casual worker	3	3.1
Administration	14	14.7
Businessman	22	23.1
Peasant farmer	10	10.5
Mechanic	1	1.1
Soldier	4	4.2
Lawyer	1	1.1
Banker	2	2.1
No Response	10	10.4
Total	95	100

Table 4.9 shows that majority (23.2 %) of the fathers of the players was businessmen, followed by teachers (17.9 %) and administrators (14.7 %). Lawyers, mechanics, drivers, general fitters, surveyors and ex-chief occupations had only 1.1 % respectively.

Table 4.9

Distribution by Mothers' occupation

	Frequency	Percent
Nurse	6	6.3
Business	31	32.6
News Anchor	1	1.1
Teacher	21	22.1
Retired	2	2.1
Casual worker	2	2.1
Administration	5	5.3
Peasant farmer	10	10.4
Housewife	6	6.3
Politician	1	1.1
Dean	1	1.1
Beautician	1	1.1
Doctor	1	1.1
No Response	7	7.3
Total	95	100

Table 4.9 indicates that majority of the mothers were business ladies (32.6 %) with teachers taking a %age of 22.1 and peasant farmers at 10.5 %. Doctor, beautician, dean, politician and news anchor had only 1.1 % respectively. These findings indicate that none

of the parents were unemployed. Parents' occupation was also another familial variable identified by Okioga's (2014) framework hence the focus on this variable in the study

4.4.5. Family members who played rugby

The players were also required to show if they had any family members who played rugby and if so to indicate their highest playing level. The results are presented in Figure 4.4

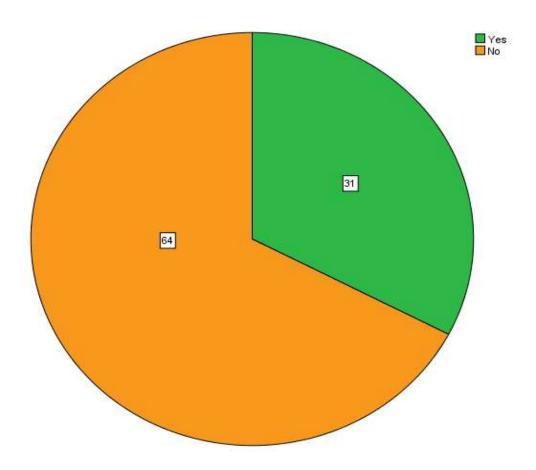


Figure 4.4: Players' response on family members who played rugby

Figure 4.4 shows that majority (64) players had no family members who played rugby while 31 players had at least one family member who played rugby. Family members' influence is also another key familial variable that is likely to influence the talent identification process hence the inclusion by the researcher

4.4.6. Familial influence on talent identification

The players were required to indicate if the family had any influence on the talent identification process and if so, to name them. The results are presented in figures 4.5 and 4.6 respectively. Figure 4.5: Responses on familial influence on the talent identification process the players were required to indicate if family influenced the talent identification process and if so to name them. The results are presented in figures 4.5 and 4.6 respectively.

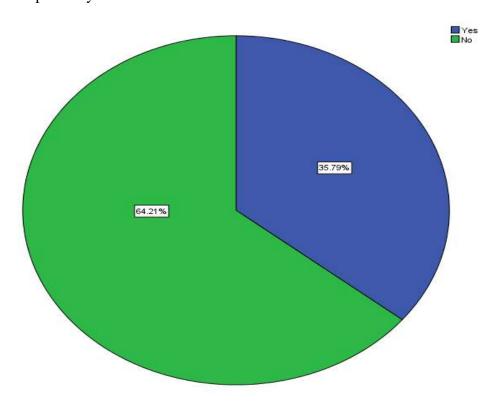


Figure 4.5: Players' response on family influence on talent identification

Figure 4.5 shows that the majority (64.21%) said that the members of their family had no influence on the talent identification process.

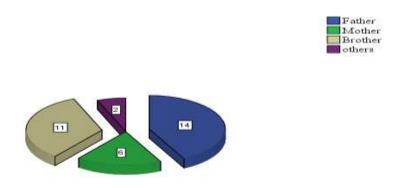


Figure 4.6: Players' response on which family member had an influence on talent identification

Figure 4.6 shows that out of the players who indicated that members of their family had an influence on the talent identification process, 14 players (42.4 %) were influenced by their fathers, 11 players (33.3 %) by their brothers, 6 players (18.2 %) by their mothers and 2 players (6.1 %) pointed out that they were influenced by other members of their family. The results signify that the key influencers are the fathers followed by the brothers.

4.4.7 Summary on familial influence on talent identification for rugby clubs in Kenya

The study's first objective sought to determine the influence of family in identifying rugby talent for rugby clubs in Kenya. The results of the chi square test on the relevant family attributes is presented in Table 4.10

Table 4.10 Cross tabulation of the familial influence on talent identification for rugby clubs in Kenya

	Influenced the talent							
		identification process						
		Yes			No		Total	
		\mathbf{F}	Perce	\mathbf{F}	Percen	\mathbf{F}	Percent	
			nt		t			
Which means do	Public	36	67.9	17	32.1	53	100.0	
you use to commute	Private	8	72.7	3	27.3	11	100.0	
to your club?	Walking	3	75.0	1	25.0	4	100.0	
	Total	47	69.1	21	30.9	95	100.0	
Did any members	Yes	15	65.2	8	34.8	23	100.0	
of your family play rugby?	No	32	71.1	13	28.9	45	100.0	
	Total	47	69.1	21	30.9	95	100.0	
Did any member of	Yes	17	81.0	4	19.0	21	100.0	
your family have any influence in	No	29	63.0	17	37.0	46	100.0	
your club?	Total	47	69.1	21	30.9	95	100.0	
If the answer to the	Father	14	93.3	1	1.1	15	100.0	
above is yes, then	Mother	6	100.0	0	0.0	6	100.0	
indicate which	Brother	11	84.6	2	2.1	13	100.0	
member?	Others	2	2.1	0	0.0	2	100.0	
	Total	47	69.1	21	30.9	95	100.0	

The study established that four sets of attributes had effects towards the talent identification process. Table 4.10 demonstrates that 67.9% used public means of transport to their clubs and this had influenced the talent identification process while 32.1% use public means but it had no influence on the talent identification process. 73% of those who used private means indicated that this had influenced the talent identification process while 3 players who walk to their clubs indicated that this had influenced the talent identification process. 65.2 % of the players reported that they have family members who play rugby and that they had an influence on the talent identification process the while 34.8 % who have family members who play rugby indicated that they had no influence the talent identification process.

The findings on which family member influenced the talent identification process indicated that 93.3 the players were influenced by their fathers while only 6 % players reported that their mothers had an influence on the talent identification process.

A chi-square is an important test among the several tests of significance developed by statisticians. It can be used to test the significance of association between two attributes (Kothari, 2011). A chi square test was therefore done to establish whether or not there was a significant difference between the mean rugby talent identification index and when the rugby players' familial influence was classified as high or low. The results are shown in Table 4.11.

Table 4.11 Chi-square test on familial influence on talent identification for rugby clubs in Kenya

	Value	df	P-value
Means used to commute to rugby club	0.167	2	0.920
Family members who play rugby	0.248	1	0.619
Family member who have any influence in	2.149	1	0.143
your club			
Indicate which family members	4.314	3	0.229

 $P \le 0.05$ Reject the null hypothesis

P > 0.05 Accept the null hypothesis

From table 4.11, the p-value 0.920, 0.619, 0.143 and 0.229>0.05 gives an average p-value of 0.4778. The P value of (0.4778) is less than the significance level (0.05), which enables the researcher to reject the null hypothesis. The conclusion was to accept the alternate hypothesis that there is a significant difference in the mean rugby talent identification index when the familial influence of the rugby players from the rugby clubs in Kenya is classified as high or low. This finding implies that that there is no evidence that familial influence plays a significant role in talent identification of rugby players in rugby clubs in Kenya. The results are in concurrence with those of Mota and Silva (1999) where no evidence was found regarding the influence of parents on adolescents' physical activity levels.

Although the study revealed that familial influence on talent identification for rugby clubs in Kenya is not significant, the findings on the influence of the socio-economic status of the parents returned favorable ratings from the coaches. It was expected that

players coming from higher SES would be influenced more by their families. Thus these findings are contrary to studies which have opined that higher the parental SES, the higher a person's chance of starting sport participation (Kraaykamp*et al.*, 2012 Lunn, 2010, Scheerder *et al.*, 2005;). For example, Scheerder *et al.*, (2005) was unequivocal that higher educated parents participate more often in sports than low educated parents. Furthermore, Nezhad, *et al.*, (2012) indicated that the socio-economic status of the parents had significant correlation with the amount of sports participation. It is conventional wisdom that as they participate they are likely to influence their children participation in sport. Evans and Davies (2010) asserted that middle class families invest significant amount of time, money, energy and socio-emotional development in their children and these children become more physically literate and eventual participation in sport.

An interesting finding of the study was that 67% of the players did not have family members who played rugby. This is contrary to the numerous assertions that family members are pivotal in socialization into sport of children (Erickson, 1996; Rintaugu, 2005; Melnick & Wann, 2011). For example, Rintaugu (2005) had found that a significant number of successful athletes in secondary schools came from families where members are involved in sport. However, these assertions could be attributed to the over 30 % of the rugby players whose family members were involved in playing rugby. It can only be postulated that the family members of the rugby players could be playing other sport. Due to lack of family members' participation in rugby then finding that family members had no influence on talent identification process was not remote. These findings

imply that as much as the players have the support of the parents in playing rugby, the parents play no role the talent identification process. This suggests a socio-cultural talent identification gap and points to an omission of a very important role that can be played by parents in talent identification for rugby clubs in Kenya.

Findings of the study indicated that it is only the fathers and brothers who are instrumental in the talent identification process of the rugby players. This is not remote as fathers have been reported to be the most influential person responsible for their decision to become active players but also sport fans (Melnick &Wann, 2011. The lack of mothers influence in socialization into sport or talent identification of athletes has been reported in other studies (Thomson ,1999; Rintaugu,2005; Mwanga *et al.*,2017). Thomson (1999) argued that the lack of mothers influence in sport socialization reflects the gendered nature of leisure-based parenting where many mothers took care of domestic and stereotypical feminine duties such as providing transport and washing clothes rather than taking a direct part in the organisation and provision of sporting events. The family members provide transportation to the training and competition venues and this is consistent with studies which have indicated that parents provided athletes with financial support and transportation to competition venues (Rintaugu, 2005; Dagkas& Stathi, 2007)

Indeed, parents occupy a privileged position in terms of influencing their children's physical activity as they are the custodians of their daily schedules and also have a direct influence on their children's physical activity as stated by Zecevic, Tremblay, Lovsin and

Lariviere (2010). Cote (1999) clarifies that the role of the family in children's sport involvement is a complex phenomenon because of the diversity of the family context and therefore to further our understanding of familial influence on talent identification, the complete family environment needs to be studied at each stage of a child's development.

4.5 The role of peers in talent identification for rugby clubs in Kenya

The second objective was to determine the role of peers in talent identification among rugby players in rugby clubs in Kenya. Both the players and coaches were asked to determine whether or not peer influence had any impact on talent identification. In cases where the influence was established, they were further asked to rate which aspects of peer influence were significant. The study findings are presented in the following subsections:

4.5.1 Friends who play rugby

The players were asked to indicate if they had any friends who played the game of rugby.

The results are presented in Figure 4.7.

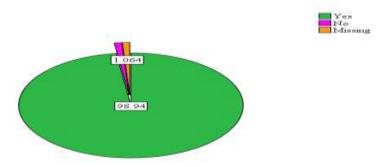


Figure 4.7: Players' responses on friends who play rugby

The players were asked to indicate if they had any friends who played the game of rugby.

The results are presented in Figure 4.7

From the findings in Figure 4.7, the majority of the players 98.9% indicated that they had friends who play rugby while 1.1% reported that they did not have friends who play rugby. This is an indicator that peers could play a significant role in influencing the talent identification process for rugby clubs in Kenya as almost all the players have indicated that they have friends who play rugby. Indeed, peer influence is emerging as a potentially powerful influencing factor in the amount of physical activity a child participates in (Rittenhouse, 2008).

4.5.2 Influence of peers on the talent identification process

The players then asked to indicate if their peers had in any way influenced the talent identification process. The responses are presented in Table 4.12.

Table 4.12

Players' response on influence of peers on talent identification

Response	Frequency	Percent	
Yes	71	74.7	
No	23	24.2	
No response	1	1.1	
Total	95	100	

The findings in Table 4.12 show that majority of the player (74.7 %) indicated that their peers had indeed influenced the talent identification process while 24.2 % of the players indicated that their peers had no influence on the talent identification process.

4.5.3 Coaches' response on the influence of peers on talent identification

The coaches were asked to indicate if there is an element of peer influence when identifying talent in their clubs. All the 15 coaches indicated that the peers had an influence on the talent identification process. They were further asked to identify the attributes of peers that were most influential. The results are presented in Figure 4.8.

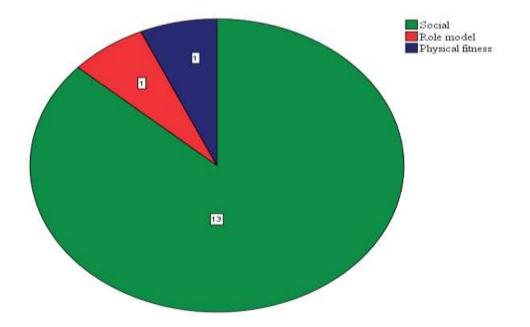


Figure 4.8: Coaches response on influence of peers on talent identification

Figure 4.8 shows that 86 % of the coaches indicated that social activities amongst the peers was most influential attribute while 7 % of the coaches reported the role model attribute as the most influential while 7 % considered physical fitness as the most influential attribute on the rugby talent identification process.

4.5.4 Cross tabulation of the peer attributes on their influence on the talent identification process

The three attributes of peer influence that were specified in the test instruments were rugby viewed as a prestigious sport, rugby viewed as a socially acceptable sport and rugby viewed in terms of fitness and health gains. The attributes were cross tabulated and the results of the cross tabulations are presented in Table 4.14.

Table 4.13
Cross tabulation on role of peers on talent identification

		Peer influence on talent identification			
		Yes			No
		F	%	\mathbf{F}	%
Rugby viewed as	Most influential	26	38.8	7	41.3
a prestigious sport	Influential	25	37.5	4	23.5
	Fairly influential	12	17.9	3	17.6
	Least influential	4	6.0	3	17.6
					100.0
	Total	67	79.8	28	100,0
Rugby viewed as a socially acceptable sport	Most influential	19	28.4	6	33.3
	Influential	37	55.2	7	38.9
	Fairly influential	7	10.4	4	22.2
	Least influential	4	6.0	1	5.6
					100.0
	Total	67	79.8	28	100.0
Rugby viewed in	Most influential	35	52.2	7	41.2
terms of health and fitness gains	Influential	19	28.4	6	35.2
	Fairly influential	4	6.0	2	11.8
	Least influential	9	13.4	2	11.8
					100.0
	Total	67	79.8	28	100.0

The study established that the three sets of attributes had an impact on talent identification for the rugby clubs. Table 4.13 shows that 38.8 % viewed rugby as a prestigious sport and this had an influence when they were being identified while 25 % of the players who viewed it as a prestigious sport indicated that it had no influence when they were being identified to join their rugby clubs. Only 17.6% of the respondents indicated that rugby wasn't viewed as a prestigious sport and that this had no influence on the talent identification process.

55.2 % of the players indicated that rugby being viewed as a socially acceptable sport is influential and that it had an influence when they were being identified. 6 % of the respondents indicated that rugby being viewed as a socially acceptable sport was least influential during the talent identification process while 5.6 % of the players indicated that rugby being viewed as a socially acceptable sport was not influential during the talent identification process.

The results of the study also show that 52.2 % of the players indicated that rugby viewed in terms of health and fitness gains was most influential in the talent identification process while 11.8% of the respondents indicated that the aspect of rugby being viewed in terms of health and fitness gains was least influential in the talent identification process.

A chi-square test was done to determine whether or not there was a significant difference between the mean rugby talent identification index and the when the peer influence was classified as high or low. The results are shown in Table 4.14

Table 4.14

Chi-Square Tests on the role of peers on talent identification for rugby clubs in Kenya

	Value	df	p-value
Rugby viewed as a prestigious sport	2.985	3	.394
Rugby viewed as a socially acceptable sport	2.375	3	.526
Rugby viewed in terms of health and fitness gains	1.217	3	.749

 $P \le 0.05$ Reject the null hypothesis

P > 0.05 Accept the null hypothesis

From Table 4.14, the p-value 0.394, 0.526 and 0.749 > 0.05 gives an average p-value of 0.556. The P value of (0.556) is greater than the significance level (0.05). The conclusion was therefore to accept the null hypothesis that there is no significant difference in the mean rugby talent identification index when the rugby players' peers' influence is classified as high or low. The findings consequently reveal that there is evidence that peer influence plays a significant role in talent identification of rugby players in rugby clubs in Kenya. This is not surprising as rugby in Kenya has been associated with a high level of

social interaction amongst peers. The study results agree with the study by Orunaboka and Deemua (2011) who concluded that peer groups significantly influence sport involvement though their study was based on female athletes. More specifically the findings concur with the results of the study by Kubayi et al (2014) which was designed to investigate the influences of family and peers on sport participation amongst adolescents in secondary schools at Hlanganani rural area of Limpopo Province, South Africa. They concluded that for both boys and girls, friends encouraged them to participate in sports with the boys reporting more peer support than the girls. To support the role of peers in sport participation in Kenya, Mukolwe and Andanje (2009) stated that students should chose friends who will contribute towards positive development in various aspects. They also recommended to parents and teachers to use the powerful influence of students' peer groups to instill positive attitudes towards school life. The findings are therefore consistent with those of Rittenhouse (2008) who indicated that peer influence is emerging as a potentially powerful influencing factor in the amounts of physical activity a child participates in. This is also echoed in Salvy et al (2009) findings that friendships may increase youths' motivation to engage in physical activity.

Secondly the study also aimed at establishing which attribute under the role of peers played a significant role. The findings indicate that the attribute under role of peers with the highest p-value is health and fitness gains at a value 0.749. This result agrees with Keresztes et al. (2008) who reported that health promotion programs should build on possible social influences, i.e. the role of peers, parents and significant others in general, in fostering adolescents' physical activity. Interestingly social interaction has been viewed

by the coaches as the attribute with the most significant peer influence for rugby players but the findings indicate that there has been a shift to health and fitness gains. This is interesting and could be attributed to a better understanding of the health and fitness gains from the sport as most of the players are university graduates are therefore better placed to understand the health and fitness gains

The results of this study have practical implications for promoting talent identification for rugby clubs through the use of peers. The clubs could encourage the players to bring along their friends during training and match days as a way of ensuring that the friends initially associated with the clubs before subjecting them to a talent identification process. This could even work better if the friends were guaranteed free entry during match days. In addition, the rugby clubs could also set aside a specific day every month for social activities involving the players' friends in a bid to strengthen their association with the club.

4.6 The role of coaches in talent identification for rugby clubs in Kenya

The third objective was to establish the role of coaches on talent identification for rugby clubs in Kenya Both the players and coaches were asked to determine whether or not the coaches had any influence on the talent identification process. In cases where the influence was established, they were further asked to rate which specific attributes of the coach had a significant influence on talent identification. The study findings are presented in the following sub-sections:

4.6.1. Clubs with coaches

The players were asked to indicate whether the clubs they play for have a coach or coaches. The results are presented in Figure 4.9.

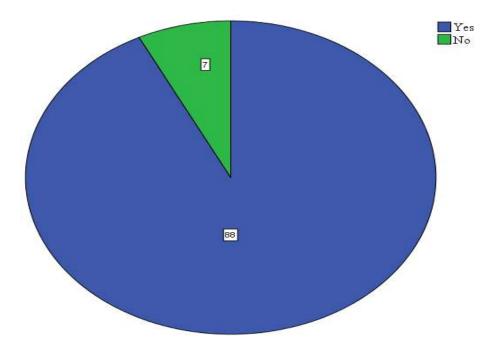


Figure 4.9: Players' response on clubs with coaches

Figure 4.9 illustrates that 92% (88 players) of players confirmed that their clubs have a coach or coaches. Only 8 % (7 players of the players indicated that their clubs have no coaches. This finding is a good indicator as most of the players have confirmed that their clubs have coaches and the role that coaches play in talent identification should not be underrated as suggested by Larkin and O'Connor (2017) who state that the identification of the next generation of sports stars is an important aspect of the coach's role

4.6.2 Players' response on the influence coaches on the talent identification process

The players were also required to indicate whether or not their coaches influenced on the talent identification process. The results are presented in Figure 4.10.

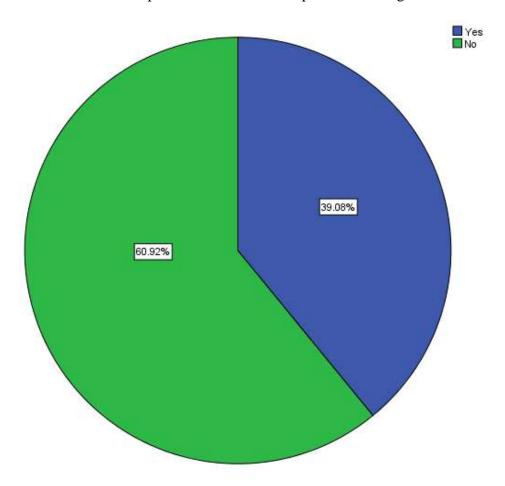


Figure 4.10: Players response on the influence of coaches on talent identification

Figure 4.10 displays the result that 60.92% of the players confirmed that the coaches did not influence the talent identification process while 39.08% of the players were of the opposite view that the coaches had an influence on the talent identification process.

4.6.3 Response by coaches on their influence on the talent identification process

The coaches were asked to indicate if they had any influence on the talent identification process. The results are presented in Figure 4.11.

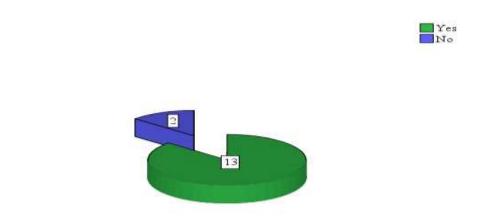


Figure 4.11: Coaches response on coaches' influence on talent identification

Results from Figure 4.11 shows that 13 coaches indicated that they went out of their way to identify rugby talent while only 2 stated that they did not go out of their way to identify talent. When asked how they went about this, most coaches confirmed that they visit schools and colleges to identify rugby players. The findings concur with the system used in South Africa where according to Parker (2013) identification and development of talent has been dependent on having competitive and well structured school competitions around the country and also in New Zealand where talent identification is dependent on a strong partnership with schools.

4.6.4 Cross tabulation of coaches' attributes as indicated by players

Personality, qualifications, methodology and experience were the coaches' attributes that were that were cross tabulated on their role in influencing talent identification and the results are presented in Table 4.15

Table 4.15
Players' response role of coaches' attributes in talent identification

		Influence on talent identification			
		Yes		No	
		F	%	F	%
Coach's personality	Most influential	17	85.0	3	15.0
	Influential	10	83.3	2	16.7
	Fairly influential	2	66.7	1	33.3
	Least influential	1	50.0	1	35.0
					100.0
Coach's	Total Most influential	30 17	81.1 89.5	65 2	18.9 10.5
qualifications	Influential	9	69.2	4	30.8
	Fairly influential	2	100.0	0	56,7
	Least influential	1	50.0	1	35.0
					100.0
Coach's	Total Most influential	30 17	81.1 89.5	65 2	18.9 10.5
methodology	Influential	11	68.8	5	31.2
	Fairly influential	2	100.0	0	0.0
	Least influential	0	0.0	0	0.0
					100.0
	Total	30	81.1	65	18.9
Coach's experience	Most influential	21	91.3	2	8.7
	Influential	7	77.8	2	22.2
	Fairly influential	1	33.3	2	66.7
	Least influential	1	33.3	2	66.7
					100.0
	Total	30	81.1	65	18.9

Key: F = frequency,

After cross tabulation of the role of coaches and the talent identification process, the study identified 85% of the players who showed that coach's personality is the most influential in the talent identification process. 83.3% respondents had it as an influential factor in the talent identification process whereas only 2 % of the players reported it as the least influential factor in the talent identification process. 1% of the players indicated that it had no influence on the talent identification process.

On the coaches' qualifications 89.5% of the players indicated that it was the most influential attribute on talent identification with only 1% of the players showing that it was the least influential attribute. For coaches' methodology, 89.5% of the players reported it as the most influential attribute on the talent identification process with only 2% of the players indicating that it was fairly influential on the talent identification process. For coach's experience 91.3% (21) respondents showed that it was the most influential attribute on the talent identification process with only 1% of the players rating it as not influential.

A chi-square test was done to determine whether or not there was a significant difference between the mean rugby talent identification index and when the rugby player's coaches' influence is classified as high or low. The results are shown in Table 4.17

Table 4.16
Chi-Square Tests on the influence of coaches' various attributes on talent identification for rugby clubs in Kenya

	Value	Df	P-Value
Personality	1.906	3	.592
Qualification	3.704	3	.295
Methodology	2.925	2	.232
Experience	9.632	3	.022

 $P \le 0.05$ Reject the null hypothesis

P > 0.05 Accept the null hypothesis

From the chi-square test as shown in table 4.16, the p-value 0.592, 0.295, 0.232 and 0.022 > 0.05 gives an average p-value of 0.285. The P value (0.285) is less than the significance level (0.05). The conclusion was therefore to reject the null hypothesis and accept the alternative hypothesis that there is a significant difference in the mean rugby talent identification index when the rugby players' coaches' influence is classified as high or low. The findings, as a result, indicate that there is no evidence that the coaches' influence plays a significant role in talent identification of rugby players in rugby clubs in Kenya. The majority of the rugby players in Kenya (60 %) have also pointed out that the coaches had no influence on the talent identification process. The attribute however under role of coaches with the highest p-value is coach's personality 0.592 while the attribute with the lowest p-value is coaches' experience with a p-value of 0.022. Interestingly the findings are inconsistent with views held by Barnett, Smoll and Smith (1992), Hedstrom and Gould (2004) and Smoll, Smith & Cumming, 2007 who all confirm that the youth sport coach can have a significant influence on the young athletes' development and enjoyment of sport. According to Larkin & O'Connor (2017) however,

talent identification has traditionally been based on coaches viewing athletes in a trial game or a training session environment where players aim to impress the coaches. They are of the opinion that this approach to talent identification is not guided by scientific evidence but by the coaches' subjective pre-conceived notion of the ideal player which when used in isolation may result in repetitive misjudgments and limited consistency. Its therefore of interest to further investigate this area to gain a better understanding of the coaches role in talent identification for rugby clubs in Kenya and the attributes that can be used to develop a consistent model .

4.7 Influence of the players' secondary schools' playing experience on talent identification

The fourth objective was to investigate the role of the players' secondary schools' playing experience on talent identification for rugby clubs in Kenya. The players were asked whether or not they represented their schools in rugby, at what level they represented their schools, their schools' participation in K.S.S.S.A tournaments and the influence of their participation on the talent identification process. Subsequently the coaches were also asked whether or not they identified talent at secondary school level, how it was done and what impact this had on talent identification. The study findings are presented in the following sub-sections:

4.7.1. Representation of school in school rugby teams

The rugby players were asked to indicate whether they have ever represented their school in rugby at any competitive level. The results are presented in Figure 4.12

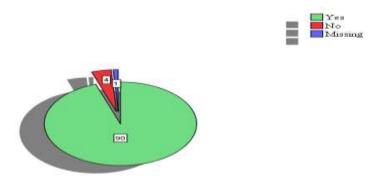


Figure 4.12: Players' response on representation in school rugby teams

The findings in Figure 4.12 show that majority 95 % of the players report that they have represented their schools at a competitive level. This is an indication that most of the players playing rugby at club level in Kenya played for their school rugby teams which suggests that the school rugby playing experience is a relevant variable of the role of the school in the talent identification process.

4.7.2 Player participation at K.S.S.S.A competitions.

The players were asked to indicate if they participated in the K.S.S.S.A competitions. The results are shown in Table 4.17.

Table 4.17

Player participation at K.S.S.S.A competitions

Response	Frequency	Percent
Yes	68	71.6
No	26	27.5
No response	1	1.1
Total	95	100.0

Findings from table 4.17 shows that 71.6 % of the players confirm that they participated in the K.S.S.S.A competitions, 27.5 % report that they did not participate while 1.1 % did not respond to that item. This is an indication that most of the rugby players in clubs in Kenya participated in K.S.S.S.A competitions and therefore had some playing experience.

4.7.3 Number of years players participated in rugby K.S.S.S.A competitions

The players were also asked to indicate the number of years that they had participated in the K.S.S.S.A rugby national competitions during their stay in the school. The results are presented in Table 4.18.

Table 4.18

Number of years the players participated in K.S.S.S.A rugby national competition

	Frequency	Percent
1 year	10	10.5
2years	17	17.9
3years	17	17.9
4years	22	23.2
No participation	29	30.5
Total	95	100

Table 4.18 shows that majority 23.2 % of the players indicated that they participated in the K.S.S.S.A national competition for the four years they were in school, 17.9 % indicated both 3 and 2 years respectively while 10.5 % of the players reported a participation of 1 year. 30.5 % of the players reported that they did not participate in the K.S.S.S.A national competitions. This is an indication that as much as it has been shown the K.S.S.S.A competitions are being used as venues of talent identification by most coaches; there is a likelihood of missing out some players as 30.5 % of the players indicated that they did not participate in the competitions. Other institutions and other competitions in Kenya should also be identified and utilized. The researchers view is that we could be losing a number of players by merely concentrating on the K.S.S.S.A competitions

4.7.4. Talent identification at school level

The coaches were asked to indicate if they were involved in any talent identification at school level. The results are presented in Figure 4.13.

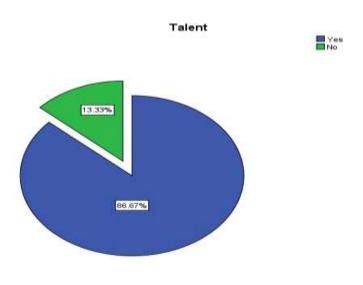


Figure 4.13: Coaches' responses on talent identification at school level

Figure 4.13 demonstrates that 86.7% of the coaches indicated that they identify rugby talent at school level while only 13.3% of the coaches indicated that they did not identify talent at the school level. The results suggest that the majority of the coaches use the secondary schools to identify talent

4.7.5 School competitions' influence on talent identification

The coaches were further required to indicate how they identify talent at school level and all the 15 coaches indicated that they do this during K.S.S.S.A school championships where they pick the best rugby players. On the impact of this talent identification on their clubs, the coaches were asked to rank its influence on talent identification. The results are presented in Table 4.19.

Table 4.19

Coaches' responses on influence of school competitions on talent identification

	Frequency	Percent
Very influential	11	73.4
Influential	2	13.3
Fairly influential	2	13.3
Not influential	0	0
Total	15	100.0

The findings in Table 4.19 illustrate that 73.4 % of the coaches ranked the influence of participation at secondary school level at the K.S.S.S.A competitions on talent identification as very influential while 13.3 % of the coaches had a ranking of both influential and fairly influential respectively. This is an indication that the K.S.S.S, A competitions are commonly used to identify rugby talent for clubs in Kenya.

4.7.6 Cross tabulation of the players secondary school playing experience and talent identification

A cross tabulation was done between the attributes of the secondary schools' rugby playing experience and their influence on the talent identification process. The cross tabulations are presented in table 4.20.

Table 4.20

Cross tabulation of the players' secondary school playing experience and talent identification

		Influence on talent identification				
		Yes			No	
		F	Perce	F	Percent	
			nt			
Did you represent your	yes	47	70.1	20	29.9	
school in rugby at any competitive level?	no	0	0.0	1	100.0	
	Total	47	49.5	48	50.5	
At the time you were in	yes	46	71.9	18	28.1	
school, you ever participate in the Kenya Secondary	no	1	25.0	3	75.0	
School Sports Association						
(K.S.S.S.A) national competition?	Total	47	49.5	48	50.5	
If the answer above is yes,	1 year	6	66.7	3	33.3	
then please indicate how	2 years	12	70.6	5	29.4	
many years you	3 years	13	76.5	4	23.5	
participated during your stay in the school	4 years	15	71.4	6	28.6	
	Total	47	49.5	48	50.5	

Table 4.20 shows that 70 % of the players indicated that they had represented their schools in rugby at competitive levels and that this had influenced the talent identification process. 30 % of the players indicated that they had represented their schools at competitive levels of rugby but this had no influence on the talent identification process. When reporting on whether the schools participated in the K.S.S.S.A competitions 72 % of the players indicated that their schools participated and this influenced the talent

identification process, while 28 % of the players indicated that their schools participated in the K.S.S.S.A but this had no influence the talent identification process.

A chi-square test was done to determine whether or not there was a significant difference between the mean rugby talent identification index and when the influence of the rugby players' secondary schools' rugby playing experience was classified as high or low. The results are shown in Table 4.21

Table 4.21

Chi-Square Tests on the influence of the secondary schools' rugby playing experience on talent identification

	Value	df	p-value
Did you represent your school in rugby at any competitive level?	2.271	1	0.132
At the time you were in school, did you ever participate in the Kenya Secondary School Sports Association (K.S.S.S.A) national competition?	3.875	1	0.049
If the answer above is yes, then please indicate how many years you participated during your stay in the school	0.314	3	0.957

P < 0.05 Reject the null hypothesis

P > 0.05 Accept the null hypothesis

From the chi-square Table 4.21, the p-values 0.132, 0.049 and 0.957 >0.05 give an average p-value of 0.379. The P value (0.379) is less than the level of significance (0.05). The conclusion was therefore to reject the null hypothesis and accept the alternative hypothesis that there is a significant difference in the mean rugby talent identification index when the influence of the rugby players' secondary schools' rugby playing experience is classified as high or low. The findings consequently reveal that there is no evidence that the rugby secondary school playing experience has a significant influence

in talent identification of rugby players in rugby clubs in Kenya. The attribute however with the highest p-value was the numbers of years the player had participated in the K.S.S.S.A competitions which suggests that playing experience is an important variable despite the study rejecting the null hypothesis. This is an interesting result as the majority of the rugby coaches use the K.S.S.S.A competitions to identify rugby talent. Despite this finding the K.S.S.S,A competitions still remains a suitable venue for talent identification for rugby clubs in Kenya but should not be the only one. There is therefore need to identify other institutions and other competitions as not all players participate in the K.S.S.S.A competitions and leading to a likelihood of a talented player missing out on being identified.

4.8 Influence of club infrastructure on talent identification

The fifth objective was to determine the influence of the club infrastructure on talent identification for rugby clubs in Kenya. The players were asked to indicate to what extent the availability of 8 items, identified as part of facilities and equipment required for rugby, influenced the talent identification process. The 8 items comprised of the rugby pitch, gymnasium, scrum machine, tackle bags, tackle suits, hit shields, balls and marker cones. The coaches were however required identify the facilities and equipment used for training at their clubs, indicate whether or not this influenced talent identification and to rank the influence if there was influence The study findings are presented in the following sub-sections.

4.8.1 Players response to influence of club infrastructure on talent identification

The researcher used 8 items in the rugby players' questionnaire to examine the influence of club infrastructure on talent identification. The results are presented in tables 4.22

Table 4.22

Cross tabulation on the influence of club infrastructure on talent identification

Club infrastructure and talent

		Club infrastructure identification p				
		Y	es		No	
Rugby pitch		F	%	F	%	
	Most influential	29	50.0	17	60.7	
	Influential	17	29.3	10	35.7	
	Fairly influential	8	13.8	0	0.0	
	Not influential	4	6.9	1	3.6	
					100.0	
	Total	58	67.4	37	32.6	
Gymnasium	Most influential	19	33.3	12	42.9	
	Influential	14	24.6	11	39.3	
	Fairly influential	6	10.5	3	10.7	
	Not influential	18	31.6	2	7.1	
					100.0	
	Total	58	67.4	37	32.6	
Scrum machine	Most influential	8	15.7	6	25.0	
	Influential	7	13.7	8	33.3	
	Fairly influential	14	27.5	4	16.7	
	Not influential	22	43.1	6	25.0	
					100.0	
	Total	58	67.4	37	32.6	
Tackle bags	Most influential	8	15.1	7	30.4	
	Influential	15	28.3	6	26.2	
	Fairly influential	9	17.0	5	21.7	
	Not influential	21	39.6	5	21.7	
					100.0	
	Total	58	67.4	37	32.6	
Tackle suits	Most influential	4	7.5	6	26.1	
	Influential	9	17.0	5	21.7	
	Fairly influential	8	15.1	2	8.7	
	Least influential	32	60.4	10	43.5	
	<u></u>				100.0	

	 Total	58	67.4	37	32.6
Hit shields	Most influential	4	7.8	5	22.7
	Influential	10	19.6	6	27.3
	Fairly influential	7	13.7	4	18.2
	Least influential	30	58.8	7	31.8
					100.0
	Total	58	67.4	37	32.6
Balls	Most influential	31	55.4	17	58.6
	Influential	16	28.6	6	20.7
	Fairly influential	5	8.9	4	13.8
	Least influential	4	7.1	2	6.9
					100.0
	Total	58	67.4	37	32.6
Marker cones	Most influential	13	23.2	6	26.1
	Influential	21	37.5	9	39.2
	Fairly influential	7	12.5	3	13.0
	Least influential	15	26.8	5	21.7
					100.0
	Total	58	67.4	37	32.6

The findings in Table 4.22 show that 50 % of the players reported that rugby pitch was the most influential facility on the talent identification process while 3.6 % of the players indicated that rugby pitch was the least influential facility on talent identification. 33.3 % of the players however revealed that the gymnasium was the most influential facility on the talent identification process while 7.1 % of the players pointed out that this was the least influential facility on talent identification.

A proportion of 43.1 % of the players specified that the scrum machine was the least influential equipment on the talent identification process while 16.7% of the respondents indicated that the scrum machine was fairly influential equipment on the talent identification process. Additionally 39.6% respondents indicated that tackle bags were fairly influential on the talent identification process.

60.4% of the players indicated that tackle suits were least influential on the talent identification process while 58.8% of the respondents indicated that hit shields were least influential on the talent identification process. 55.4% of the players indicated that the rugby balls were most influential on the talent identification process while 37.5% of the players indicated that marker cones were influential on the talent identification process

4.8.2 Coaches response on the influence of club infrastructure on talent identification

The coaches were required to indicate whether the availability of equipment in their clubs influenced the talent identification process in their clubs. The findings are presented in Figure 4.14.

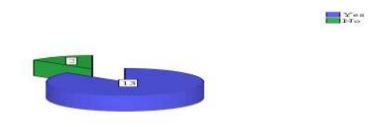


Figure 4.14: Coaches' responses on the influence of club infrastructure on talent identification

The findings in Figure 4.14 show that majority 87 % of the coaches indicated that availability of facilities in their club influenced the talent identification process while only 13 % of the coaches indicated that this did not influence the talent identification process.

The Chi-square test was done to determine whether or not there was a significant difference between the mean rugby talent identification index and when the rugby players' club infrastructure is classified as high or low. The results are shown in Table 4.23.

Table 4.23
Chi-Square tests on the influence of club infrastructure on talent identification for rugby clubs in Kenya

Value	Df	p-value
4.873	3	.181
6.617	3	.085
6.125	3	.106
3.638	3	.303
5.715	3	.126
5.588	3	.133
.923	3	.820
.235	3	.972
	4.873 6.617 6.125 3.638 5.715 5.588	4.873 3 6.617 3 6.125 3 3.638 3 5.715 3 5.588 3 .923 3

P < 0.05 Reject the null hypothesis

P > 0.05 Accept the null hypothesis

From Table 4.23, the p-value 0.181, 0.085, 0.106, 0.303, 0.126, 0.133, 0.820 and 0.972 > 0.05 gives an average p-value of 0.341. The P value (0.341) is less than the significance level (0.05). The conclusion was therefore to reject the null hypothesis and accept the alternative hypothesis that there is a significant difference in the mean rugby talent

identification index when the influence of the rugby players' club infrastructure is classified as high or low. The findings consequently suggest that there is no evidence that the clubs' infrastructure plays a significant role in talent identification for rugby players in rugby clubs in Kenya.

The attribute however under club infrastructure with the highest p-value is marker cones with a p-value of 0.972. The attribute with the least p-value is gymnasium with a p-value of 0.085. This is an interesting finding as the gymnasium is expected to have the highest p value since the players had pointed out that the most influential peer attribute was health and fitness gains.

Despite the coaches view that availability of facilities and equipment has an influence on the talent identification process, the findings indicate that there is no evidence that rugby players' clubs' infrastructure plays a significant role in talent identification for rugby players in rugby clubs in Kenya. This does not agree with views by researchers like Gore (2004) and Roger (2005) who have clearly pointed out that quality and accessible training facilities and equipment create a positive environment that encourages proper training. Oketch (2012) has even identified a need to invest in facilities and equipment to improve the club infrastructure. The situation in Kenya however suggests that the club infrastructure has no significant influence on talent identification as illustrated by a club like Mwamba Rugby Club which has remained very competitive in the league competitions despite being a self supporting club with even no permanent grounds for training. They have still managed to attract some of the best players in Kenya and have

been quite consistent in the ranking in the league competitions. Access to good facilities and equipment will however always act as a powerful force for inclusion in sport and recreational activity as indicated by Rosandich (2008). It is therefore an area that requires investment by the rugby clubs in Kenya not necessarily to influence the talent identification process but to motivate the players and also assure safety when training

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings of the study and draws conclusions in line with the data analyzed in chapter four. The chapter also makes recommendations based on the findings and has also suggested areas for further study after analyzing the contributions of the study

5.2 Summary of the Findings

The purpose of the study was to investigate the influence of the socio-cultural environment on talent identification for rugby players in rugby clubs in Kenya. The objectives of the study were as follows:

- 1. To determine the familial influence on talent identification and development among rugby players in Kenyan rugby clubs.
- 2. To determine the role of peers in talent identification of rugby players in Kenya
- 3. To establish the role of coaches on talent identification for rugby clubs in Kenya
- 4. To investigate the role of players secondary school team playing experience on talent identification for rugby clubs in Kenya
- 5. To determine the influence of the club infrastructure on talent identification for rugby clubs in Kenya.

To measure these objectives, five null hypotheses were developed namely;

Ho1: There is no significant difference in the mean rugby talent identification index when the familial influence of the rugby players' is classified as high or low

Ho2: There is no significant difference in the mean rugby talent identification index when rugby players' peers' influence is classified as high or low

Ho3: There is no significant difference in the mean rugby talent identification index when the rugby players' coaches' influence is classified as high or low.

Ho4: There is no significant difference in the mean rugby talent identification index when the influence of the rugby players' secondary schools' rugby playing experience is classified as high or low.

Ho5: There is no significant difference in the mean rugby talent identification index when the influence of the rugby players' clubs' infrastructure is classified as high or low

All the hypotheses were analyzed through the Chi-square test. The significant level was set at alpha = 0.05. Levels of significance found to be greater than 0.05 implied that the there was a significant influence in talent identification for rugby players in rugby clubs in Kenya while if the level of significance was less than or equal to 0.05 than there was no significant influence in talent identification for rugby players in rugby clubs in Kenya

The results of the chi square test on the significant difference of the mean rugby talent index and when the rugby players' familial influence is classified as high or low had a P value of 0.4778 indicating that there was no evidence that the familial influence played a significant role in talent identification of rugby players in rugby clubs in Kenya. Although the study revealed that there was no evidence that familial influence played a

significant role in talent identification for rugby players in rugby clubs in Kenya, the findings on the influence of the socio-economic status of the parents indicated a rating by the coaches as having some degree of influence on talent identification.

The results of the chi square test on the significant difference of the mean rugby talent index and when the rugby players' peers' influence is classified as high or low had a P value of 0.556 indicating that there was evidence that peer influence played a significant role in talent identification of rugby players in rugby clubs in Kenya. The study further established that the attribute under role of peers with the highest p-value is rugby being viewed in terms of health and fitness gains at a value 0.749. This implied that the rugby players viewed health and fitness gains as a significant attribute of peer influence although from the results of the study, the coaches rated social interaction as the most influential peer attribute.

The results of the chi square test on the significant difference of the mean rugby talent index and when the rugby players' coaches' influence is classified as high or low had a P value of 0.285 indicating that there was no evidence that the coaches' influence played a significant role in talent identification of rugby players in rugby clubs in Kenya. This finding is supported by the majority of the rugby players who have indicated that the coaches had no significant influence on the talent identification process

The results of the chi square test on the significant difference of the mean rugby talent index and when the influence of rugby players' secondary school rugby playing experience is classified as high or low, had a P value of 0.379 indicating that there was no evidence that the secondary schools' rugby playing experience played a significant role in talent identification of rugby players in rugby clubs in Kenya. The attribute however with the highest p-value was the numbers of years the player had participated in the K.S.S.S.A competitions which suggests that playing experience is an important variable despite the study rejecting the null hypothesis The study has also shown that the majority of the coaches use the K.S.S.S.A rugby competitions as a venue for talent identification.

The results of the chi square test on the significant difference of the mean rugby talent index and when the influence of rugby players' clubs' infrastructure is classified as high or low, had a P value of 0.341 indicating that there was no evidence that the clubs' infrastructure played a significant role in talent identification of rugby players in rugby clubs in Kenya. From the study findings the club coaches have nevertheless indicated that the availability of facilities and equipment has a significant influence on talent identification

5.3 Conclusions

Based on the findings of the study, the following conclusions were arrived at:

Familial influence on talent identification is not significant for players in rugby clubs in Kenya. There is however need for further research in this area due to the diversity of the family context

Peer influence, as a socio-cultural variable, plays a significant role in talent identification for rugby players in rugby clubs in Kenya and should be used. The peer attribute that is most significant is health and fitness gains.

The influence of coaches on talent identification for rugby players in rugby clubs in Kenya is not significant. Coaching rugby in Kenya is not a full time job but is done on a part-time basis

Secondary school rugby playing experience has no significant influence on talent identification for rugby players in rugby clubs in Kenya. The K.S.S.S.A competitions are however used as venues for talent identification for rugby in Kenya,

Finally club infrastructure has no significant influence on talent identification for rugby players in rugby clubs in Kenya

5.4 Recommendations

Based on the conclusion of the study, the following recommendations were made:

1. Despite familial influence not having a significant influence on talent identification, the rugby players' families should still be involved during the talent identification process that takes place in the rugby clubs in Kenya. This is because of the diversity of the family context. A good strategy would be for the clubs to introduce specific sports days in which parents could be engaged through social activities in a bid to incorporate them into the talent identification process and motivate them to associate with the club.

- 2. Bearing in mind that the study revealed that peer influence has a significant relationship with talent identification for rugby clubs in Kenya, the researcher recommends the use of peers in the talent identification process for rugby clubs in Kenya. The rugby coaches should utilize this finding by encouraging the rugby players to convince their rugby playing friends to join their clubs and use the peer influence as a critical factor in the talent identification process. The clubs could accomplish this by encouraging the players to bring along their rugby playing friends during training and match days to enable them to integrate and associate with the club. A guarantee of free entry to the peers during match days would have a positive impact on the association with the rugby clubs and hence the talent identification process.
- 3. The secondary schools through the K.S.S.S.A rugby competitions should still be used as appropriate environments for talent identification for rugby clubs in Kenya. Club rugby coaches should be encouraged and facilitated to attend the school rugby competitions from the grassroots to national levels. There is however need to diversify and also use other competitions to capture players who might not have attended secondary schools or whose schools do not participate in the K.S.S.S.A rugby competitions.
- 4. Although the study findings reveal that that there is no evidence that a relationship exists between the rugby players' secondary school rugby playing experience and talent identification of rugby players in rugby clubs the schools teams should still be used as a pathway for talent identification. There is also need to look into the intra-

murals in order to capture those who might not play in the school teams for various reasons

- 5. Despite the findings indicating no evidence of a relationship between the influence of the rugby players' clubs' infrastructure and talent identification for rugby players in rugby clubs in Kenya, It is the feeling of the researcher that the rugby clubs should invest in good facilities and equipment his would go a long way in ensuring player safety and minimizing the risk of injury during the talent identification process.
- 6. As a matter of policy, a formal partnership between K.R.U and K.S.S.S.A should be put in place

5.5 Suggestions for further research

In view of the limitations and delimitation of the study, the researcher recommends the following areas for further research:

- Similar studies should be conducted to investigate the influence of primary schools on talent identification for rugby clubs in Kenya. Ideally the talent identification process should commence at primary school level.
- 2. Other studies involving physiological, anthropometric and psychological attributes of talent identification should be carried out. This could lead to the establishment of an all-inclusive talent identification model that could be used as a guideline for rugby and other sports.
- A study involving female rugby players is recommended as it would elicit some aspects of gender differences that may impact on the talent identification process and were not addressed by this study.

- 4. Studies on the role of significant others including socializing institutions and their impact on talent identification should be conducted
- 5. Finally a study on the career transition of the players from school rugby to club rugby and subsequently to the elite level is recommended

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APPENDIX I

LETTER OF INTRODUCTION TO PLAYERS

INTRODUCTORY LETTER TO PLAYERS QUESTIONNAIRE

University of Nairobi
College of Education & External Studies
School of Education
Department of Physical Education & Sport
P.O Box 30197
Nairobi

Dear Sir / Madam

RE: REQUEST TO FILL QUESTIONNAIRE

My name is Michael David Otieno. I am a lecturer at the University of Nairobi, Department of Physical Education and Sport but currently a PhD student. I am carrying out a study on "The Influence of Socio-Cultural Environment on Talent identification and Development for Rugby Clubs in Kenya"

The purpose of this letter is to request you to complete the attached questionnaire as a rugby player in your club which will enable me to collect data regarding the topic of investigation... The answers to the questions asked will be used to analyze the roles played by families, coaches, peers, schools and club environments in the identification of talent in clubs in Kenya and from the findings, I hope to make achievable recommendations on what can be done to develop a formal talent identification model in rugby that can be used in Kenya. The summary of the findings will be made available to the participants on request

Please note that your participation is voluntary, you are assured of anonymity and your responses will be treated with utmost confidentiality

Thank you for your cooperation

Yours faithfully

Michael David Otieno. B.Ed, M.Ed.

APPENDIX II

LETTER OF INTRODUCTION TO CLUB SECRETARIES

University of Nairobi

College of Education & External

Studies

School of Education

Department of Physical Education &

Sport

P.O Box 30197

Nairobi

Dear Sir / Madam

RE: REQUEST TO CONDUCT RESEARCH IN YOUR CLUB

My name is Michael David Otieno. I am a lecturer at the University of Nairobi, Department of Physical Education and Sport but currently a PhD student. I am carrying out a study on "The Influence of Socio-Cultural Environment on Talent identification and Development for Rugby Clubs in Kenya"

The purpose of this letter is to request for permission to conduct research in your club which will enable me to collect data regarding the topic of investigation. The players are expected to fill a questionnaire while your head coach will be interviewed personally. The answers to the questions asked will be used to analyze the roles played by families, coaches, peers, schools and club environments in the identification of talent in clubs in Kenya and from the findings, I hope to make achievable recommendations on what can be done to develop a formal talent identification model in rugby that can be used in Kenya. The summary of the findings will be made available to your club on request

Thank you for your cooperation

Yours faithfully

Michael David Otieno. B.Ed, M.Ed.

APPENDIX III:

TABLE 3.3: TABLE FOR DETERMINING MINIMUM RETURNED SAMPLE SIZE FOR A GIVEN POPULATION

Table developed by Bartlett, Kotrlik, & Higgins (2001).

Population	Sample size						
size	Continuous data (margin of			Categorical data (margin of			
		error=.03)			error=.05)		
	alpha=.10	alpha=.05	alpha=.01	p=.50	p=.50	p=.50	
	t=1.65	t=1.96	t=2.58	t=1.65	t=1.96	t=2.58	
100	46	55	68	74	80	87	
200	59	75	102	116	132	154	
300	65	85	123	143	169	207	
400	69	92	137	162	196	250	
500	72	96	147	176	218	286	
600	73	100	155	187	235	316	
700	75	102	161	196	249	341	
800	76	104	166	203	260	363	
900	76	105	170	209	370	382	
1000	77	106	173	213	278	399	
1500	79	110	183	230	306	461	
2000	83	112	189	239	323	499	
4000	83	119	198	254	351	570	
6000	83	119	209	259	362	598	
8000	83	119	209	262	367	613	
10000	83	119	209	264	370	623	

APPENDIX IV

INTERVIEW SCHEDULE FOR CLUB RUGBY COACHES

My name is Michael Otieno and I am a lecturer at the University of Nairobi in the Department of Physical Education and Sport. I am currently conducting research for my doctoral studies on the influence of socio-cultural environment on talent identification for rugby clubs in Kenya and would like to ask you a few questions in this regard.

The study is expected to provide coaches with a systematic model for talent identification in rugby based on socio-cultural factors and will also be useful in determining the relationship between talent identification and performance

The interview will not take more than 20 minutes and it is my hope that you are available. Let me begin by asking you a few questions on your age, educational background, coaching qualification and coaching experience.

SECTION A: GENERAL DEMOGRAPHIC INFORMATION

- 1) Given the age brackets of 10-19, 20-29, 30-39, 40-49 and over 50 which one do you fall under?
- 2) Please state your educational background by indicating your highest level of academic qualification
- 3) What coaching certification have you attained in rugby?
- 4) How long have you been coaching rugby at club level?

SECTION B: FAMILIAL INFLUENCE

In this section, I would like to ask you about the influence of parents on the recruitment and talent identification of your players

1) What is your view on the influence of the socio-economic status of the parents on your players in joining your club?

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2)	2) Do you think that the parents' level of education also has an influence on talent identification process at your club?			
3)	How about rugby playing families and non-rugby playing families. How does this impact on the talent identification process at your club?			
SECT	ION C: COMMENCEMENT AGE OF PLAYING RUGBY & PEER			
INFL	UENCE			
	section, the focus will be on the commencement age at which your players started			
playing	g rugby and the influence of peers.			
1)	When identifying talent and thus recruiting players for your club, do you consider the age at which they started playing rugby?			
2)	Does this influence your decision in recruiting them?			
3)	Please indicate if there is an element of peer influence when recruiting players in your club?			
4)	What aspect of peer influence would you rate as the most influential if the answer to the above is yes			
SE	CCTION D: COACH'S INFLUENCE			
I a	m now going to ask you questions pertaining to your influence as a club coach and			
ho	w this impacts on talent identification			
1)	Do you go out of your way to identify talent and recruit players for your club?			
2)	Briefly describe how you go about this if you do?			
3)	Do you think you have an influence in the talent identification process at your club?			

4) If the answer to the above is yes, then how would you rank the different aspects of your character that most probably played a role in that influence in terms of your personality, qualifications, experience, methodology etc

SECTION E: SCHOOL INFLUENCE

The focus in this section will be questions based on the influence the schools attended on talent identification.

- 1) Please indicate whether or not you identify talent at school level
- 2) If you do, then please explain how you identify this talent at school level
- 3) How does this method of talent identification impact on your clubs performance?

SECTION F: THE INFLUENCE OF CLUB INFRASTRUCTURE

Finally I am going to ask you questions on the influence of the equipment and facilities in your club in talent identification

- 1) Please identify the equipment and facilities used for training at your club
- 2) In your view, does the availability of the stated equipment influence the talent identification process
- 3) If the answer to the above is yes, then please rank the influence using the ranking order of most influential, influential, fairly influential and least influential

Well, it has been a pleasure interacting with you. Let me briefly summarize the information that I have recorded during our interview and any more information will be welcome. Thank you and I appreciate the time you took for this interview.

APPENDIX V

QUESTIONNAIRE FOR CLUB RUGBY PLAYERS

This questionnaire is expected to elicit information from you as a rugby player on why you joined your current club. The questionnaire will seek information on your personal characteristics like age, sex, role played by your family members, influence of peers and the roles played by your coach, school and club infrastructure. The questions are brief and it is expected that you will either tick the appropriate answer or write out brief responses.

Please do not write your name anywhere on the questionnaire.

SECTION A

1)	Name of club			
2)	Your age bracket			
a)	10 – 19 years	()		
b)	20 – 29 years	()		
c)	30 - 39 years	()		
d)	40 & above	()		
3)	Your highest level of	education		
a)	Primary education	()		
b)	Secondary education	()		
c)	Certificate	()		
d)	Diploma	()		
e)	Bachelors	()		
f)	Masters	()		
g)	PhD	()		
h)	Others, please specify			
4)	Occupation (if studer	nt please indicate)		
	SECTION B			
1)	Father's occupation _			
2)	Mother's occupation			

3) Please tick against your parents' highest level of education using the table below:

	HIGHES	IIGHEST LEVEL OF EDUCATION						
PARENTS	Primary	Secondary	Certificate	Diploma	Bachelors	Masters	PhD	Oth ers
Father								
Mother								

4) How would you rank your parents' gross monthly income in Kenya shillings? Put a tick against the relevant figure by using the table below:

	GROSS	S MONTH	ILY INCO	OME (KSI	HS)				
PARENT	Up to 50,000	51,000 to 100,000	101,000 to 150,000	151,000 to 200,000	201,000 to 250,000	251,000 to 300,000	301,000 to 350,000	351,000 to 400,000	Above 400,000
Father									
Mother									

5) Which of the following means do you use to commute to your club for any rugby

	related activity?	
a)	Public	()
b)	Private	()
c)	Others, please specify	
6)	Who pays for your commuting	ng expenses? Please tick below
a)	Father	()
b)	Mother	()
c)	Brother	()
d)	Sister	()
e)	Self	()
f)	Others please specify	

SECTION C

a) Yes

1) Did any members of your family play rugby?

()

10,010.	y using the table below:		
	HIGHEST	RUGBY PLAYING	LEVEL
PARENT /	SCHOOL	CLUB	INTERNATIONA
SIBLING			
Father			
Mother			
Brother			
Sister			
3) Did any	y member of your family	have any influence i	n the talent identification
process	?		
a) Yes	()		
b) No	()		
4) If the a	nswer to the above is ye	s, then indicate which	member?
a) Father	()		
b) Mother	()		
c) Brother	()		
d) Sister	()		
e) Others,	please specify		
ECTION D			
1) Please	indicate the age at which	you started playing i	rugby by using the ranking
indicate	ed below		
a) Below	6 years ()		
b) 6 to 9 y	rears ()		
c) 10 to 1'	7 years ()		
d) Above	17 years ()		

		you	ur current c	lub			
		a)	Yes	()			
		b)	No	()			
5	SECT	'IOI	N E				
	1)	Die	d you have	friends who play ru	gby?		
	a)	Ye	es	()			
	b)	No	•	()			
	2)	Inc	licate if you	ur friends influenced	d the talent identific	ation process irresp	ective of
		the	answer ab	ove			
	a)	Ye	es	()			
	b)	No)	()			
	3)	Ple	ease rank th	e aspect of peer infl	luence that played a	major role in the ta	lent
		ide	entification	process from the me	ost influential to the	least influential by	using the
		tab	le below if	the answer to the al	bove is yes:		
				RANKING			
	PEF	ER		MOST	INFLUENTIAL	FAIRLY	NOT
	VAI	RIA	BLE	INFLUENTIAL		INFLUENTIAL	INFLUENT
	Rug	by v	riewed as				
		anti a	iona anost	I	1		1

2) Did this influence the talent identification process and subsequently you joining

	RANKING			
PEER	MOST	INFLUENTIAL	FAIRLY	NOT
VARIABLE	INFLUENTIAL		INFLUENTIAL	INFLUENTIAL
Rugby viewed as				
a prestigious sport				
Rugby viewed as				
a socially				
acceptable sport				
Rugby viewed in				
terms of health				
and fitness gains				
Others if any				
(Please specify)				
Others if any				
(Please specify)				

SECTION F

a) Yes

b) No

1) Does your club have a coach / coaches?

()

()

2) If the answer	to the above is yes,	then please marcate	whether or not the	coacn
influenced th	e talent identification	n process		
a) Yes	()			
b) No	()			
3) If the answer	to the above is yes,	then please indicate	what it is about you	ur coach
that influence	ed the talent identific	cation process from	most influential to l	east
influential by	using the table belo	w:		
	RANKING			
COACH'S	MOST	INFLUENTIAL	FAIRLY	NOT
VARIABLE	INFLUENTIAL		INFLUENTIAL	INFLUENTIAI
His personality				
His qualifications				
His methodology				
His experience				
Others if any				
(Please specify)				
SECTION G	1		l	
1) Did you repre	esent your school in	Rugby at any comp	etitive level?	
a) Yes	()			
b) No	()			
2) At the time w	when you were in sch	nool, did the school	ever participate in tl	ne Kenya
Secondary So	chool Sports Associa	ation (K.S.S.S.A) na	tional competition?	
a) Yes	()			
b) No	()			

3)	If the answer to the above is yes, then please indicate now many years they			
	participated during yo	our stay in the school		
a)	One year	()		
b)	Two years	()		
c)	Three years	()		
d)	Four years	()		
e)	Others, please specify	<u> </u>		
4)	If the answer to (2) is	yes, then please indicate whether or not this influenced the		
	talent identification pr	rocess		
a)	Yes	()		
b)	No	()		

SECTION H

1) Please indicate to what extent the availability of the following equipment and facilities influenced the talent identification process (if at all it did) by using the table below:

	RANKING			
EQUIPMENT & FACILITIES	MOST INFLUENTIAL	INFLUENTIAL	FAIRLY INFLUENTIAL	NOT INFLUENTIAL
Rugby Pitch				
Gymnasium				
Scrum machine				
Tackle bags				
Tackle suits				
Hit shields				
Balls				
Marker cones				
Others if any (Please specify)				
Others if any (Please specify)				

2)	were there any other reasons that made you join your current club?		
a)	Yes	()	
b)	No	()	
3)) If the answer to (3) above is yes then please specify		

Thank you for your cooperation

APPENDIX VI RESEARCH AUTHORIZATION



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 9th Floor, Utalii House Uhuru Highway P.O. Box 30623-00100 NAIROBI-KENYA

Ref. No.

NACOSTI/P/17/92494/16125

Date:

15th March, 2017

Michael David Otieno University of Nairobi P.O.Box 30197-00100 NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Influence of sociocultural factors on talent identification for rugby clubs in Kenya," I am pleased to inform you that you have been authorized to undertake research in all Counties for the period ending 15th March, 2018.

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

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

BONIFACE WANYAMA FOR: DIRECTOR-GENERAL/CEO

Copy to:

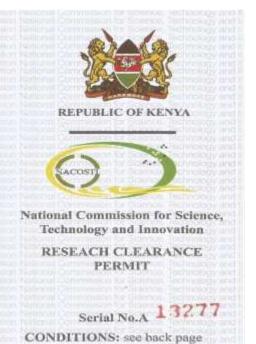
The County Commissioners All Counties.

The County Directors of Education All Counties.

APPENDIX VII RESEARCH PERMIT

CONDITIONS

- You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
- Government Officer will not be interviewed without prior appointment.
- No questionnaire will be used unless it has been approved.
- 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
- You are required to submit at least two(2) hard copies and one (1) soft copy of your final report.
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without police



THIS IS TO CERTIFY THAT:
MR. MICHAEL DAVID OTIENO
of UNIVERSITY OF NAIROBI, 34014-100
Nairobi, has been permitted to conduct
research in All Counties County

on the topic: INFLUENCE OF SOCIOCULTURAL FACTORS ON TALENT IDENTIFICATION FOR RUGBY CLUBS IN KENYA

for the period ending: 15th March,2018

Applicant's Signature Permit No: NACOSTI/P/17/92494/16125 Date Of Issue: 15th March,2017 Fee Recieved: Ksh 2000



RyDirector General
National Commission for Science,
Technology & Innovation