

**PROMOTION OF PHYSICAL ACTIVITY PARTICIPATION AMONG  
STUDENTS AT THE UNIVERSITY OF DAR ES SALAAM IN TANZANIA**

**BY**

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**A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF EDUCATION,  
DEPARTMENT OF EDUCATIONAL MANAGEMENT AND POLICY STUDIES  
IN PARTIAL FULFILLMENT FOR THE AWARD OF MASTER OF  
EDUCATION IN RESEARCH OF MOI UNIVERSITY**

**2019**

## DECLARATION


### Declaration by Candidate


I declare that this research thesis is my original work and has never been presented before for a degree in any other University. No part of this thesis may be reproduced without prior permission of the author and/or Moi University.

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## DEDICATION

As a matter of first importance, I might want to broaden my earnest grateful thanking to Might God, my beloved father **Mr. Andrew Rwehumbiza** and mother **Mrs. Valeria Andrew** that foresight in education and constant encouragements have brought me to this level of Education. I am also proud to dedicate this research to my siblings, **Mr. Ansbert K. Andrew, Fr. Abdon B. Andrew, Ms. Alfreder M. Andrew, Ms. Elionora S. Andrew, Ms. Assela F. Andrew and Mr. Aniset T. Andrew** for whom their prayers, support, help, and encouragement made this research thesis successful.

The Almighty God blesses you.

## ACKNOWLEDGMENT

It is hard to prepare and complete writing a research thesis without help from the able-minded people. Special thanks go to **DAAD** and **CERMESA** for having granted me a scholarship and the opportunity to further my studies. I thank my supervisors, **Dr. Joyce S. Ndabi** and **Dr. Joyce Kanyiri** for their guidance and scholarly advice to ensure that, this thesis is successfully completed. I also acknowledge the support from Ann Wanjiku, Evans Mos, Nelson Mandela, and other my fellow master of Research scholars, whose constant advice, guidance and encouragement made me strong enough to finish writing this work on time. Last but not least, I am indebted to those who always offered me a timely word of encouragement and inspired me throughout my studies and completion of my Master's Thesis.

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**ABBREVIATIONS AND ACRONYMS**

<b>PA</b>	Physical Activity (ies)
<b>LMICs</b>	Low and Middle-Income Countries
<b>SPA</b>	Sports and Physical Activities
<b>SLT</b>	Social Learning Theory
<b>SCT</b>	Social Constructive Theory
<b>TCU</b>	Tanzania Commission for Universities
<b>URT</b>	United Republic of Tanzania
<b>PYD</b>	Positive Youth Development
<b>NCDs</b>	Non- Communicable Diseases
<b>NCAA</b>	National Collegiate Athletic Association
<b>DBP</b>	Diastolic Blood Pressure
<b>WHO</b>	World Health Organization
<b>SPSS</b>	Statistical Package for Social Sciences
<b>CERM-ESA</b>	East and South African-German Centre of Excellence for Educational Research Methodologies and Management

## Abstract

Sustainable Development Goal number three aims to ensure healthy lives and promote well-being for all at all ages. World Health Organization recommends Physical Activity (PA) promotions in every institution for each individual in maintaining their health and wellbeing. Different organizations, public and private respectively in the world, are striving to curb the dangers of inactivity behaviors among populations by enacting PA policies and implementation of the same. The purpose of this study was to evaluate the strategies put to promote physical activity participation among the University of Dar es Salaam students in Tanzania. The objectives of the study were to: examine the utilization of university physical activity facilities and equipments at the University, establish how the university supports students in physical activity participation at the University, assess the university student's perceptions of physical activity participation, examine the benefits, challenges, and solutions to students during physical activity participation. Social support theory of Israel Schrumm and social cognitive learning theory by Albert Bandura were employed in this study. The study embraced concurrent triangulation design of mixed methods which involved collecting and analyzing data at the same time. The study targeted 28,000 University students, 1 University sport and games coordinator, and 1 University social service director. The data were generated using interviews, observation, and questionnaires from 309 participants. The findings indicate the number of strategies put by the university to promote Physical Activity (PA) participation such strategies include; enacting and implementing the sports policy, physical/instrumental support, emotional support, and informational support. Also, 70% of participants established that the support would enable them to participate fully in PA if were well provided by the University. However, 64% of the participants reported time for PA practices to be among the highly rated constraints for PA participation at the University.

On the basis of the theory used in this study, to enable one to take part in PA there is a need for the provision of visible time in the university curriculum that will permeate full attention for PA for health benefits. However, the study concludes with the implication of the findings, indicating what is needed for the improvements in PA participation rates among individuals in higher learning education settings. Hence, the findings will help in the achievements of SDG 3 and consequently achieve health target number 3.4.



## **CHAPTER ONE**

### **INTRODUCTION**

This chapter entails the background of the study, statement of the problem, the purpose of the study, objectives, and questions. Also, it explains the justification and significance of the study. Theoretical and conceptual frameworks are presented. Furthermore, scope, limitation, and assumption of the study, as well as operation definition of terms, are presented

#### **1.1 Background**

Education in the 21st century ever more recognizes the function of values and social skills in tackling universal challenges, such as inactivity, obesity, unemployment, and conflict through physical activity (UNESCO, 2017). Physical activity has recently proved to lessen the threat of dementia and improve mental health (World Health Organization [WHO], 2017). Therefore, promotion of physical activity is a priority for health agencies and effective, promising, or emerging interventions from around the world; whereby professional organizations have documented that regular physical activity protects against coronary heart disease, type 2 diabetes, some cancers, hypertension, obesity, clinical depression, and other chronic disorders (Ladabaum, Mannalithara, Myer, & Singh, 2014). However, Physical inactivity is known as the fourth first hazard cause for worldwide mortality coming about to an estimation of 3.2 million deaths around the world (WHO, 2018). Furthermore, Physical inactivity is likely to cause 22% of coronary illness and over 10% of type 2 diabetes and cancers of the breast, colon, and rectum around the world (Danaei et al., 2009).



Physical activity creates a room for the release of emotion through physical effort and furthermore advances a feeling of psychological wellness (Gidlow, Johnston, Crone, Ellis, & James, 2006; Armstrong & Edwards, 2004; Lubans, Plotnikoff, & Lubans, 2012). Likewise, partaking in physical movement is basic for self-advancement and gives chances to societal associations (Boustani, Peterson, Hanson, Harris, & Lohr, 2003; Holt & Neely, 2011). The use of movement, games, and sport as active and participatory tools in combination with verbal expression has proved to provide a significant way to foster health in individuals living in contexts of schedules (Ley & Rato, 2013).

Farooq et al. (2018) and Kohl III, Fulton, and Caspersen (2000) disclose the sharp decline of physical activity participation during teenage and young adult years due to the rise in the rate of progress from secondary education to tertiary training as of late. Similarly, tertiary-education campuses are settings where there are important opportunities to influence the physical activity habits of young adults, however, they are partially neglected (Osipov et al., 2018 & Leslie, Sparling, & Owen, 2001a). As a group, university students spend considerable time in a setting of activities that promotes sedentary behavior (particularly computer and Internet use) and are largely being educated for sedentary occupations (Owen, Leslie, Salmon, & Fotheringham, 2000). Therefore, by virtue of the educational level of the young adults, today's university students are our future social opinion leaders and policymakers and as such, their habits, beliefs, and attitudes will be influential in shaping the community norms and values. If sedentary activity patterns are developed and reinforced during young adulthood, it is probable that they will persist through adult life.

According to (Kohl, Harold, Craig, Lynn, 2000; Lambert, et al, 2015; Kohl 3<sup>rd</sup> et al, 2012), a systems approach to physical activity beyond a reliance on behavioral science, needs coordinated changes at the individual, social, cultural, environmental and policy levels. It is important to realize that, the building of intersectoral is especially required in nations with low-to-middle earnings, where the unintended results of advancement may contrarily influence transport-related and occupational-related physical activity.

To emphasize physical activity, the United States of America (USA) made Physical Education a compulsory course for all university students as revealed by (Leslie, Sparling, & Owen, 2001b) in their study. Furthermore, Racette, Cade, and Beckmann (2016) portray that, school-based physical activity promotion programs resulted in improvements in students' physical activity levels, cardiorespiratory fitness, and cholesterol levels as well as a reduction in time spent watching television, hence improved students' academic achievements.

Sallis et al. (2016) argue that expanding the number of intercessions, studies from low and Middle-Income countries (LMICs) provide initial evidence that community-based interventions can be effective. Although, about 80% of countries reported having national physical activity policies or plans, and such policies were operational in only about 56% of the countries. More so, there are more important barriers to policy implementation that must be overcome before progress in increasing physical activity than can be expected. Despite signs of progress, efforts to improve physical activity surveillance, research, capacity for intervention, and policy implementation are needed, especially among LMICs.

The study done in Kenya, Magutah, (2013) found that most young adults (university students) are at higher risk of cardiovascular diseases due to inactivity and suggested that exercise regimes should be emphasized amongst university students, albeit with less regard to regularity, which should be encouraged for those in higher study years and those with higher Diastolic Blood Pressure (DBP) at exhaustion. In support of that Baalwa, Byarugaba, Kabagambe, and Otim, (2010) in their study found the dominance of obesity among young adults in Uganda and suggested that there must be significant timing for laying strong primary prevention interventions for students' health problems such as for overweight and obesity.

In Tanzania, John et al. (2017) found the prevalence of PA in the rural population was high compared to the urban population. Also, the studies found out that, farmers are active compared to people with professional jobs. However, there is a need for PA programs to maintain a high level of compliance during and following the transition to a more urban-based culture. Furthermore, Mayige and Kagaruki (2013 p.34) report that "overweight and obese (26%), raised cholesterol (26%) and raised triglycerides (33.8%)" among young adults. In the same study, the predominance of diabetes found to be 9.1% and 25.9% for hypertension among young adults and adults Tanzanians.

The Tanzanian government established an equipped policy, strategy, or action plan intended to diminish physical idleness or energize physical inactivity or encourage physical activity as recommended by (WHO, 2019). In making sure that Tanzania populations are physically active, different strategies were put in place to enhance the health and mental well-being of the population. Despite all the efforts and initiatives that the government

put to accelerate physical activity participation, little is known about how different institutions do to promote Physical Activity particularly, higher educational institutions, which have a considerable number of populations pertaining to it. This prompted the study which aims at exploring the strategies put by the university in promoting physical activity participation among students at the University of Dar es Salaam in Tanzania.

## **1.2 Statement of the problem**

Physical activity in Tanzania recently is of high priority due to the fact that the nation wishes to meet the physical activities global vision of 2025 that aims at maintaining people's health and prevention of non-communicable diseases, which are the results of human inactivity. Different government leaders, including the vice president of Tanzania in partnership with the Ministry of Health, other organizations have embraced several strategies to enhance physical activity participation which are named 'Afyayakomtajiwako' (your health your capital), and "kata wese" (reduce fats) campaigns launched in 2016. Despite the above government and nongovernment efforts, increased student enrolment rates and fixed timetables limit students to participate in PA. Therefore, if PA participation is not given enough attention, inactivity will remain a leading factor to the death of 3.2 million people globally as reported by (WHO, 2018).

In the United Republic of Tanzania, the Education Sector Development Programme insists that time ought to be made accessible in the education institutions' timetable for physical exercises for all under studies (URT, 2004). However, studies done in Tanzania determine that there is a slight association by under studies in out-of-class activities such as music, sports, and other physical activity. Tluway, Leyna, and Mmbaga, (2018); John et al., (2017) and Frantz and Ngambare, (2013) reveals limited access to and

participation by young adults and adults in physical activity, which is contrary to the Education Sector Development Programme directions. It is against this foundation that this study evaluated the strategies put to promote physical activity participation among students at the University of Dar es Salaam in Tanzania. Therefore, the discoveries of this investigation will be useful to the ministry of Education for curriculum developers on how PA can be considered to be included in the curriculum, also the Tanzania Commission for Universities, students and university leaders will be made aware of ways on how to create awareness of the strategies to enhance PA participation, and use of space and facilities available.

### **1.3 Purpose of the study**

The study aimed at evaluating the strategies put to promote physical activity participation among students at the University of Dar es Salaam in Tanzania

### **1.4 The study objectives**

The specific objectives of the study are as follows:

- i. To examine the utilization level of university physical activity facilities and equipment at the University of Dar es Salaam in Tanzania
- ii. To establish the level of the university support to students in physical activity participation at the University
- iii. To assess the university student's perceptions of physical activity participation
- iv. To examine the challenges and solutions to students during physical activity participation

### **1.5 The study questions**

- i. How physical activity facilities and equipment are utilized at the University of Dar es Salaam in Tanzania?
- ii. What are the supports offered by the university to promote physical activity participation among students at the University?
- iii. How do students perceive physical activity participation at the University?
- iv. What are the benefits, challenges, and solutions to students' physical activity participation?

### **1.6 Justification of the study**

The increase of non-communicable diseases leads the Tanzanian government to establish a variety of policies to increase physical activity participation among citizens which are implemented by both public and private organizations. Different organizations have increasingly shown responses to those policies. Universities are among the rational organizations in the country which have recently experienced the increase in students' enrolment rates that leads to the overcrowding of the facilities and resources like, class schedule hours (Damasa, 2016). In addition to that, the level of transition from secondary school to university, is often accompanied by healthy behavior changes such as, decreasing physical activity and increasing sedentary behavior because, university students spend most of their time on sedentary activities such as studying, watching television, online gaming, computer activities, sitting and talking, shopping and hanging out (Deliens, Deforche, De Bourdeaudhuij, & Clarys, 2015a). Therefore, if the action will not be taken individuals will continue suffering from NCDs hence, deficiency in the laborforce.

It is well known that deskbound life is not healthy, as it is said by Plato “...*a healthy mind in a healthy body*”, as in the future, these students will be the leaders and manpower of the nation and the world at large. Therefore, there is a need to support them to be active-minded and maintain healthy bodies because, if there is no any encouragement to active life in body and mind, probably there will be a loss in education investment as the current and future workforce is the learned population and the economic benefits come from costs savings and productivity gains which are associated with population wellness. Lately, little is known about the extent universities stimulate physical activity participation. This prompted the study to explore the strategies put by the university in promoting physical activity participation among students at the University of Dar es Salaam in Tanzania.

### **1.7 Significance of the Study**

This study will be significant in various ways:

- i. The study will create awareness among university leadership, students, and sports personnel on the ways on how to create awareness of the strategies to enhance PA participation and use of space and facilities available, which will enable them to find appropriate means to guarantee PA to be promoted in Higher Education institutions.
- ii. The study will inform the Ministry of Education, the Tanzania Commission for Universities and the Education Sector Development Programs on revising the university curriculum and can consider how to include PA programs appropriately in the curriculum. Also, the study will inform them of what is supplemented by physical activity in the university and the significant role played in relation to

scholarly, financial, social, and political accomplishments of both individual understudies and society.

- iii. The study will further help the Ministry of Health and other Health organizations in considering partnering with Universities in promoting PA participation.
- iv. The study will inform policy-makers to formulate policies that will stimulate PA participation among individuals in the institutions of higher learning.
- v. Also, the study will help educational practitioners such as lecturers and educational program designers, who are seeking to advance all-encompassing training, to physical activity programs that will carry into being proficient people with various aptitudes.

## **1.8 Theoretical framework and conceptual framework**

### **1.8.1 The Theoretical framework**

Theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions. The theoretical framework is the structure that can hold or support a theory of a research study (Van de Ven & Johnson, 2006). Also, Grant and Osanloo (2014) point out that, the conceptual framework can be explained as the 'blueprint' or guide for research. It is a framework based on an existing theory in a field of inquiry that is related and/or reflects the hypothesis of a study.

#### **a) Social support theory**

Social support theory by (Israel & Schurman, 1990) was employed in the study. As per the theory, support shields people from the dreadful prosperity impacts of boisterous dealings



(i.e., stress-buffering) by affecting good behaviors or moderate or buffer the impact of psychosocial strain on physical and mental health.

More so, health behaviors are linked with this theory including bodily activity (physical activity). Also, it is commonly used in social and behavioral research. However, Israel and Schurman (1990) disclose that there is a significant deviation in the way social support is measured and conceptualized. Additionally, Social support for physical activity can include; instrumental/ equipment and facilities/resources, as in giving the students playgrounds, gymnasiums, swimming pools physical activities equipment like balls, giving students the opportunity to participate in sports and PA by giving them available time schedules for SPA. Informational, especially in telling someone about sports and physical activities programs available at the University. Emotional support is through calling to see how someone is faring with a new sports and physical activity program or Evaluating by giving input and support in adapting new aptitudes (Israel and Schurman, 1990). Wellsprings of help for physical exercises incorporate college chairmen, companions, neighbors, universities, and exercise program pioneers, and members. Doing so will motivate students' self-efficacy that will lead to participation in the SPA.

#### **b) Social cognitive theory**

The social support theory was reinforced by Social cognitive theory, which started as the social learning theory (SLT) in the 1960s by Albert Bandura. It developed into the SCT in 1986 and places that learning happens in a social setting with dynamic and proportional cooperation of the individual, condition, and conduct. (SCT), utilized in psychology, education, and correspondence, holds that parts of a person's information

securing can be legitimately identified with watching others inside the setting of social connections, encounters, and outside media impacts;

The theory has the following components

**i) Modeling:**

Social cognitive theory spins around the procedure of information obtaining or adapting straightforwardly associated with the perception of models. The models can be those of a relational impersonation or media sources. Successful displaying shows general tenets and methodologies for managing distinctive circumstances. Modeling does not confine to just live exhibitions but rather additionally verbal and composed conduct can go about as roundabout types of demonstrating. Displaying not just enables understudies to learn conduct that they should rehash yet in addition to repressing certain practices. For example, if an educator frowns at one understudy who is talking out of turn, different understudies may smother this conduct to maintain a strategic distance from a comparable response. Educators demonstrate both material destinations and basic educational modules of prudent living. Educators ought to likewise be devoted to the structure of high self-viability levels in their understudies by perceiving their achievements.

**ii) Outcome expectancies:**

To learn a particular behavior, people must understand what the potential outcome is if they repeat that behavior. The observer does not expect the actual rewards or punishments incurred by the model but anticipates similar outcomes when imitating the behavior (called outcome expectancies), which is why modeling impacts cognition and behavior. These expectancies are heavily influenced by the environment that the observer

grows up in. For example, in the case of a student, the instructions the teacher provides help students see what outcome a particular behavior leads to. It is the duty of the instructor to teach a student that when a behavior is successfully learned, the outcomes are meaningful and valuable to the students.

**iii) Self-efficacy:**

The social cognitive theory posits that learning most likely occurs if there is a close identification between the observer and the model and if the observer also has a good deal of self-efficacy. Self-efficacy is the extent to which an individual believes that they can master a particular skill. Self-efficacy beliefs function as an important set of proximal determinants of human motivation, affect, and action which operate on the action through motivational, cognitive, and affective intervening processes. According to (Bandura, 1986) self-efficacy is "the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations". Bandura and other researchers found that an individual's self-efficacy plays a major role in how goals, tasks, and challenges are approached. Individuals with high self-efficacy are more likely to believe they can master challenging problems and they can recover quickly from setbacks and disappointments. Individuals with low self-efficacy tend to be less confident and don't believe they can perform well, which leads them to avoid challenging tasks. Therefore, self-efficacy plays a central role in behavior performance. Observers who have a high level of self-efficacy are more likely to adopt observational learning behaviors. Self-efficacy can be developed or increased by **Mastery experience**, which is a process that helps an individual achieve simple tasks that lead to more complex objectives. **Social modeling** provides an identifiable model that shows the processes that accomplish

behavior. **Improving physical and emotional states** refers to ensuring a person is rested and relaxed prior to attempting a new behavior. The less relaxed, the less patient, the more likely they won't attain the goal behavior. **Verbal persuasion** is providing encouragement for a person to complete a task or achieve a certain behavior. Self-efficacy has been used to predict behavior in various health-related situations such as weight loss, quitting smoking, and recovery from a heart attack. In relation to exercise science, self-efficacy has produced some of the most consistent results revealing an increase in participation in exercise.

**iv) Identification:**

Identification enables the onlooker to feel balanced comparability with the model, and would thus be able to prompt a higher shot of the spectator finishing the demonstrated activity. Individuals are bound to pursue practices demonstrated by somebody with whom they can relate to. The more shared characteristics or enthusiastic connections saw between the spectator and the model, the almost certain the onlooker learns and re-sanction the modeled conduct.

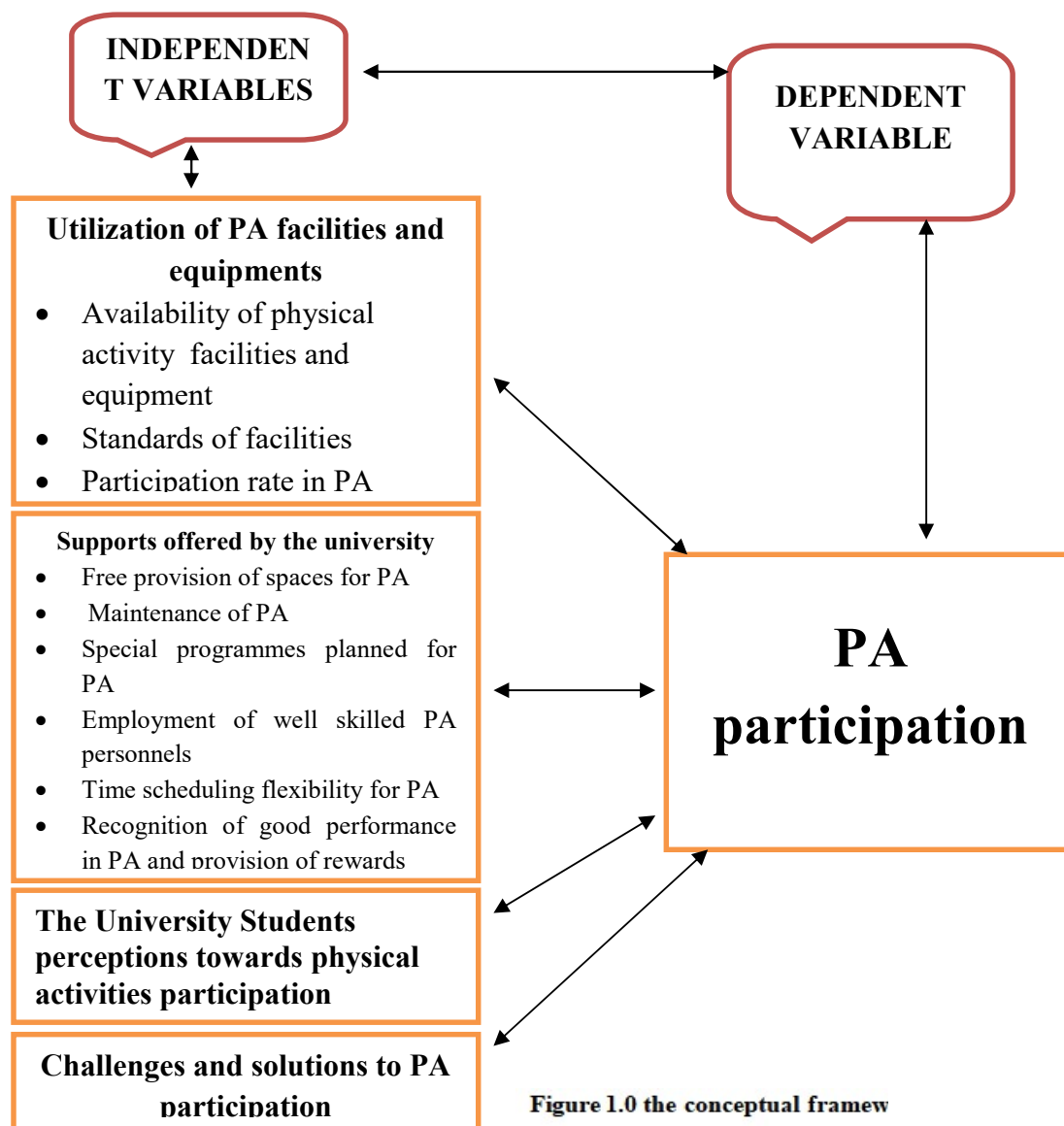
Therefore, an individual Self-efficacy can be expanded in a few different ways, among them by giving clear directions, giving the chance to expertise improvement or preparing, and demonstrating the ideal conduct. To be viable, models must bring out trust, esteem, and regard from the eyewitness; models must not, in any case, seem to speak to a dimension of conduct that the spectator is unfit to picture accomplishing(Bandura, 1986). In the study, models include university sports administrators who are responsible to show good administration for the students to be able to observe and take action responsibly in changing their behavior (from an inactive lifestyle to active lifestyle).

From the above theories;

Social support theory concepts stimulate individual self-efficacy as pointed out by Bandura that, one's self-efficacy usually stimulated by the role model concept of social cognitive theory, then, as a result, physical activity participation rate increases from the support given to the individual/student.

### **1.8.2The Conceptual framework**

Exploring the strategies put by the university to promote PA among university students,required an unmistakable conceptual structure that guided the evaluationof universities' practices in overseeing the arrangementand/or support to students, success in PA participation. A conceptual framework is the way ideas are organized to achieve a research project's purpose (Robson, 2011), it assists a researcher to organize his or her thinking(Odhong, Were, &Omolo, 2014) and (Kombo& Tromp, 2006). The following figures illustrate the conceptual framework of the study as abstracted from the theory used in this study;



**Figure 1.0 the conceptual framew**

Source: (researcher, 2017)

### 1.9 Scope of the Study

The study was a mixed-method, and hence explores the strategies put to promote physical activity among university students. The study also was limited to gathering and generating data from university administrators of social services, sports and games' coordinators and students from only the University of Dar esSalaam in Tanzania.

Observation and triangulation used to validate data obtained from interviews and questionnaires, the techniques of selecting representatives were chosen carefully to avoid biases that might emerge during sampling processes.

### **1.10 Limitation of the study**

The limitations of this study are as follows;

The study conducted in only one Public University in Tanzania hence, the findings cannot be generalized, the study does, however, offer insights of the strategies put to enable PA participation among students, and hence the findings can be transferable to another context.

The participants in this study were university students. However, by the time the study conducted the students were preparing for their Examination and it was difficult to consent for the study hence, the researcher increased randomization to get the target number of participants were required for the study.

Due to the limited time students had, the 10 students initially purposively required for the study were unable to consent for face to face interview. However, the researcher managed to purposively select 45 students for the comprehensive qualitative questionnaire which saved for the face to face interview meant for 10 students.

### **1.11 Basic assumptions of the study**

The researcher assumed that,

There was maximum utilization of university facilities for physical activity at the University of Dar esSalaam in Tanzania.

There was a variety of supports that the university offers to promote students' physical activity participation at the University.

There were more benefits than challenges that affect the students' participation in physical activity at the University.



## **1.12 Operational definition of terms**

**1.12.1 Physical activity:** means the movement of the body that requires energy expenditure which can be either moderate or vigorous, Activities can be viewed as vivacious, moderate, or light in intensity(Rod, et al, 2018).This relies upon the degree to which they influence one to inhale more enthusiastically and the heart thumps quicker. Moderate and vigorous-intensity activities check toward meeting physical activityneeds.However, in this study physical activity applies to any activity performed individually or time-based by students which leads to the use of energy and enablesone to meet the (WHO, 2019) recommendations for PA for health benefit.

**1.12.2 Sports:**Are all forms of competitive physical activity or games which, through casual or organized participation, aim to use, maintain or improve physical fitness and skills, mental well-being and social interactionwhile providing enjoyment to participants, and in some cases, entertainment for spectators.

**1.12.3 Sedentary behavior:** Is an activity characterized by a sitting or reclining posture and low energy expenditure such as watching television or sitting in the workplace (Schofield, Quigley, & Brown, 2009; Owen, Healy, Matthews & Dunstan, 2010; and Salmon, et al., 2005). However, in the study sedentary behavior refers to activities performed by students that require very low energy expenditure and where sitting or lying is the dominant posture whereby students accumulate substantial inactive time in their lessons at school and during leisure time, typical sedentary behaviors practiced include watching television, taking motorized transport, playing passive video games and surfing the internet.

**1.12.4 Students' Participation:** Alludes to the demonstration of a person university learner to effectively get involved or on the other hand participate in no less than one or more Sport(s) or/and any Physical Activity. It includes student's capacity to share his or her advantage, knowledge, aptitudes and encounters with others, aside from the classroom lessons activities

**1.12.4 Promotion:** Refers to the whole arrangement of exercises, which convey the item, brand, or administrations to the client. The thought is to make individuals mindful, draw in and incite to utilize the item/ service. However, promotion can be physically real or virtual/ electronic. Physical can include special events such as bonanzas, festivals, concerts and in the fields such as grounds/court/pitches, balls, jersey. Electronics can be through radios, television, Social Media (facebook, twitter, Instagram, Whatsapp) and visual physical like newspapers, and magazines.

### **1.13 Summary of the Chapter**

The chapter characterized the rationale for the study. It secured issues identifying to the background of the problem, the purpose of the study, research objectives and questions, the theoretical and conceptual framework, limitations and scope of the study and operational definition of key terms. The next part audits existing writing identifying with the issues concerning strategies to promote PA.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

Chapter one indicates the purpose of the study. To understand more about the strategies to promote physical activity (PA), this chapter surveys a number of issues including, the concept and status of physical activity, PA Participation, the strategies put to promote PA, stakeholders' perceptions of student participation in PA and the opportunities and challenges obtained from PA. Also, it discusses previous studies and provides the knowledge gap and summary.

#### 2.2.1 The concept of sport

Sport is an area of human relations where respect for rules, teamwork and fair play are the norm (Foddy & Savulescu, 2017). Teamwork, cooperation, abiding by the rules, respect for opponents and similar concepts all feature in the principles of the Charter of the United Nations. Sports include all forms of physical exercise, whether local or imported, amateur or professional, casual or organized (Kenney, Wilmore, & Costill, 2015). There is no doubt that sports could play a critical role in attaining peace, development, and stability. In the words of the famous Roman poet Decimus Junius Juvenalis, "*mens sana in corpore sano* – a sound mind in a sound body". In other words, sports activities can help improve our minds and self-esteem and engender a general sense of well-being. For example, regular exercise can brighten the mood, increase energy and improve sleep, and it can supplement treatment for depression, stress, and anxiety (Bădicu georgian & Balint, 2016). Thus, a physically active population significantly reduces national health expenditure, as fewer people get sick and people are more alert and productive.

Furthermore,(Jarvie, 2014)in Africa, sports is a booming industry internationally (such as the European football clubs and others) which employs large numbers of people and generates significant revenues either directly in sports themselves or indirectly through associated activities, all of which contributes not only to the mitigation of poverty but also to raising the living standards.

### **2.2.2 The Concept of Physical Activity**

According to (WHO, 2019), Physical activity is defined as any bodily movement produced by skeletal muscles that involve energy spending. Regular moderate-intensity physical activity – such as brisk walking, cycling, or participating in sports has significant benefits for health. Furthermore, (Haff& Triplett, 2015) depicts that, the term “physical activity” portrays numerous types of movement, including exercises that include the huge skeletal muscles and exercises that include the little skeletal muscles (for example playing table games, drawing, and composing) are imperative, yet they don't give the medical advantages of exercises that include the vast skeletal muscles and require considerable vitality consumption. For instance, (Piepoli et al., 2016) points out that, physical activitiescan lessen the danger of cardiovascular maladies, diabetes, colon and bosom malignant growth, and sadness. Additionally, satisfactory dimensions of physical activity will diminish the danger of a hip or vertebral crack and help control weight.

There are recommendations given by the WHO, 2018 due to the fact thatphysical inactivity is now identified as the fourth leading risk factor for global mortality. Thus,for children and young people of **5-17age group** physical activity recommendations level includes play, games, sports, transportation, recreation, physical education or planned

exercise, in the context of family, school, and community activities. In order to improve cardiorespiratory and muscular fitness, bone health, cardiovascular and metabolic health biomarkers and reduced symptoms of anxiety and depression, the following are recommended: Children and young people aged 5–17 years old should accumulate at least 60 minutes of moderate to vigorous-intensity physical activity daily; Physical activity of amounts greater than 60 minutes daily will provide additional health benefits; Most of the daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week (WHO, 2016).

### **18– 64 years of age**

For grown-ups of this age gathering, physical movement incorporates recreational or relaxation time physical action, transportation (e. g. strolling or cycling), work related (for example work), family unit errands, play, amusements, sports or arranged exercise, with regards to day by day, family, and network exercises. So as to improve cardiorespiratory and solid wellness, bone wellbeing and decrease the danger of Non-Transferable Ailments (NCDs) and misery coming up next are suggested: Grown-ups matured 18– 64 years ought to do no less than 150 minutes of moderate-power oxygen-consuming physical movement consistently, or do somewhere around 75 minutes of incredible force high-impact physical action consistently, or an equal mix of moderate- and fiery force action; High-impact action ought to be performed in episodes of no less than 10 minutes length; For extra medical advantages, grown-ups should expand their moderate-force high-impact physical action to 300 minutes of the week, or take part in 150 minutes of vivacious force high-impact physical activity every week, or a

proportionate blend of moderate-and overwhelming force action; Muscle-reinforcing exercises ought to be finished including real muscle bunches on at least 2 days seven days (WHO, 2016).

### **65 years of age or more**

For grown-ups of this age gathering, physical action incorporates recreational or relaxation time physical action, transportation (e. g. strolling or cycling), work related (if the individual is as yet occupied with work), family tasks, play, diversions, sports or arranged exercise, with regards to day by day, family, and network exercises. So as to improve cardiorespiratory and strong wellness, bone and useful wellbeing, and lessen the danger of NCDs, melancholy and psychological decay, coming up next are suggested: World Health Organization, (2016). Adults aged 65 years and above should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week, **or** do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, **or** an equivalent combination of moderate- and vigorous-intensity activity; Aerobic activity should be performed in bouts of at least 10 minutes duration; For additional health benefits, adults aged 65 years and above should increase their moderate-intensity aerobic physical activity to 300 minutes per week, **or** engage in 150 minutes of vigorous-intensity aerobic physical activity per week, **or** an equivalent combination of moderate- and vigorous-intensity activity; Adults of this age group with poor mobility should perform physical activity to enhance balance and prevent falls on 3 or more days per week.

Despite the recommendation, levels made still inactivity exist among the population that results from the development of technologies in daily life deeds as different studies reveal.

### **2.2.3 Sports and physical activity participation**

The efficiency of regular physical activity in primary and secondary prevention of disease and premature death is well documented (DA, 2013; Warburton, Nicol, & Bredin, 2006; Lee & Skerrett, 2001; & Carrano et al, 2008). Despite unquestionable data on the benefits of physical activity, former researchers indicate that half of the high school students, one-third of university students and only a quarter of young people between the age of 25 and 30 do sports regularly. However, its prevalence stands at only 31% globally (Hallal, Andersen & Bull, 2012), and 1 in 3 adults do not exercise enough for their health (Finucane et al., 2011). Worldwide, obesity affects as many as 500 million people and this number is projected to grow to 1 billion by 2030 (Kelly, Yang, Chen, Reynolds, & He, 2008). The behavioral and lifestyle choices that people make early in life have an impact on their subsequent health status (Elsa-Grace, 2009 & Van & Barnard, 2011).

Entering university can be a life-changing experience as it is accompanied by heightened stress levels and the need to adapt to changes in lifestyle (Janse & Surujlal, 2013a). Especially relevant at this time are increased risky behaviors such as drinking alcohol (George, Mugai, Mugai, Mugai, & Nyakwara, 2013), smoking (Janse van Rensburg, 2013b), poor dietary practices (van et al, 2011; George et al., 2013) and lack of physical activity (Delfien, Ilse, Tom, and Benedicte, 2015).

The American College of Sports Medicine empowers normal cardiorespiratory exercises – 150 minutes seven days of moderate-force exercise; or an hour seven days of

overwhelming activity; or some blend of these is recommended for adults to reduce cardiovascular infection hazard factors, such as obesity and premature mortality (Garber et al., 2011). Participation in physical activity in universities differs in terms of cultural and economic development, averaging some 23% in north-western Europe and the United States, 30% in Central and Eastern Europe, 39% in Mediterranean countries, 42% in Pacific Asian countries and 44% in developing countries in general (Haase, Steptoe, Sallis, & Wardle, 2004). While a 44% average in developing countries is relatively higher than elsewhere, there are variations. In South Africa, for example, the prevalence of physical activity among undergraduate students at the University of Free State was found to be a little as 33% (Bloemhoeff, 2010). Further, Pengpid & Keltzer (2013) point out that, almost one-third of the students participate in low physical activity, 47.6% in moderate and 19.4% in high physical activity respectively at the University of Limpopo.

The number of sports participants in the universities are little due to structural constraints (facilities, equipment, money, time and information about sports participation), interpersonal constraints (individual relationships with others such as playmates or partners and reinforcement from significant others) (Ayfer, Ayla, Guven, Levent, Burcu, Cagri & Omer, 2017; Norazlin & Norshahizat, 2016; , Dori, Rosenber, Tara & David, 2014 and Kaimenyi et al, 2017). Intrapersonal constraints include individual dispositions, personal endowments such as stress, physical ability, attitudes, religion, and socio-cultural constraints (traditional beliefs, myths, stereotypes and sex-role orientations (Yusuf & Omar-Fauzee, 2003; Gitonga, Njororai, & Wahome, 2003; Mwisukha, Wahome, & Wanderi, 2011). Despite the low enrollment of students, participation in sport is still vibrant at intramural and intramural programs. Universities in Africa take part in national,



regional, continental and global competitions such as world university championships and world university games. However, African universities' performance in these world events is not comparable to a performance from universities in the West and East. Indeed, university students from America, Europe, and Asia form the bulk of the athletes representing their countries in the Olympic Games and other world events.

It is notable that competitive sports programs are vibrant in primary schools and secondary schools in Africa. In these institutions, all students are expected to participate in sports at times for those activities that are scheduled and compulsory if not obligatory. However, sport programs in African universities are characterized by the participation of too few students and staff, sporadic engagement in competitions, lack of serious and systematic well scheduled competitions at local, regional and international levels, haphazard training programmes, lack of publicity around the university activities, lack of involvement of senior staff, absence of structured intra and inter-university sport competitions, low female participation and absence of sport programme for students with disabilities has left many students athletes lacking in the necessary nutritional requirements to participate in sports.

### **2.3.1 The usability of physical activity equipment and facilities**

Physical action (PA) infrastructures concede youth dares to take part in PA, as determinants of sorted out and disorderly PA may contrast (MacKenzie, Brunet, Boudrea, Iancu, Bélanger, 2015). However, lack of availability of facilities that enable and promote physical activity may, in part, reinforce the lower levels of activity among populations (Powell, Slater, Chaloupka, and Harper, 2006).

Several studies involving the use of self-reported perceived measures have shown that there is a positive correlation between the availability of physical activity-related facilities and settings and various exercise behaviors (Institute of Medicine of the National Academies, 2005; Booth, Owen, Bauman, Clavisi, Leslie, 2000; Huston, Evenson, Bors, Gizlice, 2003). However, (Prins, Mohnen, van Lenthe, Brug, & Oenema, 2012) shown that the accessibility of parks and sports facilities were not related with games and physical exercises participation, reasonably time allocated for leisure and sports had a great impact on sports and physical activities participation among the population.

The university is an essential setting for PA; the availability of facilities in school settings is associated with students' daily physical activity participation during schooling. Therefore, improving the sports and physical activities environment should be considered in physical activity promotion university programs (Haug, Torsheim, James, Sallis and Samdal, 2010). In the study done in Saudi Arabia indicated that the lack of facilities from the university hindered female students' physical activity participation (Samara, Nistrup, Al-Rammah, Aro, 2015). However, Yong, Hock, and Chee (2018) point out that, if individuals are motivated they are likely to participate in PA where they spend most of their time.

In Africa, most existing sports and physical activities facilities are in very poor condition and they need extremely heavy investment to bring them back to international standards. (Bogopa, 2001) mentions that in South Africa, the schools within the townships and rural areas have no sports and physical activities facilities, unlike those in the rich suburbs in major cities or towns; the urban areas also have world-class stadiums and facilities which benefited from investment in hosting the World Cup in 2010.

### **2.3.2 The supports to promote physical activity (PA)**

The encouragement of PA is an important aspect of any population. Different studies conducted in the area indicated different strategies that can be used;

According to (Telford, Telford, Cochrane, Cunningham, Olive, Davey, 2016) establishment of different sports clubs has a great impact on sports and physical activities among the people. In addition to that, (Knox, Musson and Adams, 2015) point out that bosses who attest systems to support PA ought to empower representatives who have an obligation regarding elevating wellbeing to instruct their associates may help improve the Moderate-to-vigorous PA knowledge of their employees. Furthermore (Hills, Dengel and Lubans, 2014) argue that the university setting and physical educators, in particular, must embrace their role in public health by adopting a comprehensive university PA program.

The arrangement of additional equipment and supervision (Sallis et al., 2003), extra game equipment (Verstraete et al., 2006) and painting the school playgrounds (Stratton & Mullan, 2005) have demonstrated increased physical activity throughout the school day. Capdevila, et al. (2007) set up that, so as to wipe out a portion of the hindrances that frustrate the likelihood of participating in functioning and solid way of life, the members ought to get input on their reasons towards physical exercise together with informing on the improvement concerning wellness.

The study done in China found that, to boost the PA levels in the populace, increasing sports facility proximity is ineffective (Guo, Dai, Xun, Jamieson & He, 2015).

#### **a) The allocation of resources for physical activity**

Sports and physical activities resources are very important in order to facilitate the delivery of sports activities as well as encourage students' participation. The resources

may be in different forms such as physical, financial and human. Looking at the financial budget for sports, (Schlessler, 2004) found that activity programs are an exceptional bargain when compared with the overall education budget. (Shehu, 2001) contended that for sports and physical activities to be fruitful the job of any university is to create sports and PA objectives and operational structure, and preparing instructors, bolster staff and volunteers with learning, abilities, and mentalities that will empower them to work adequately and proficiently as games and diversions exercise facilitators.

Studies have shown that the esteem under studies place on numerous scholarly exercises and their conviction about the helpfulness of school decay as they get more established, (Williams and Stockdale, 2004). When they achieve an abnormal state of learning they set forth the least exertion, they are exhausted with the instructive procedure and they start to see many school assignments with less hugeness. Educators should hence figure out how to persuade unresponsive under studies and become gifted at consolidating viable systems and exercises that will connect with under studies and sparkle interests. Moreover, youngsters, today will, in general, be routinely tested by new encounters and desires (Weisman, 2012). The vast majority of their exercises in this way need to incorporate truly testing and no standard encounters. It is a period in their lives that physical, subjective, enthusiastic, physiological and social changes are profound.

The student should, therefore, be given opportunities to explore their competence in as many different sporting activities as could be allowed, and allowed to contend more where they exceed expectations. The individuals who excel at lower levels ought to be encouraged and supported to face higher challenges. This support definitely requires the utilization of better offices and hardware and current preparing methods from the

teachers. Assorted variety in the sorts of donning exercises accessible is highly essential to give everyone an opportunity to locate an amusement or spot to take an interest in (Nyanjom, 2012a). Low-quality games offices and hardware at school for understudies reduce their capacities to practice and show their ability in any sport and PA.

The university to provide the essential foundation and offices for the members then it is anything but difficult to advance positive incentives in the public eye just as the obvious soul of games (Khan, ul Islam, & Khan, n.d.). Students are influenced by several factors to participate in physical activities including; university facilities, their social environment and especially peers' attitudes and behaviors, their financial resources, time availability, stress, nature of academic pressure and competition (Deliens, Deforche, De Bourdeaudhuij, & Clarys, 2015b). The university has to play their role in the good allocation of resources for sports and physical activities that play a vital part in influencing students to participate in sports activities. In the study conducted Belgian university found that Physical activity interventions include; improving information strategies regarding on-campus sports activities, cheaper and/or more flexible sports subscriptions and formulas, including 'sports time' into the curricula, and providing university bicycles around campus. Students also believed that increasing students' physical activity might decrease their sedentary behavior at the same time (Deliens et al., 2015b). In the study done in entire Australian state by (Eime et al., 2017) and another one done in us public schools by (Colabianchi, Johnston, & O'Malley, 2012) found that Better provision of sports facilities is generally associated with increased sport participation, as well as proximity to those facilities (Meyer & Surujlal, 2014).

In (Nyanjom, 2012b) a study conducted in Kenya found that most directors (the principals and their representatives) are not prepared in games notwithstanding, their position being excessively urgent in the administration and organization of all game assets. Be that as it may, lion's share of recreations instructors have experienced through some structure or dimension of preparing in games. The principle fixing in-game inside the area is the deficiency of games offices and gear. Out of the seventeen games, things or exercises took a gander at, the examination set up that by and large, each school has just seven things accessible inside the school premises for the understudy to get to.

#### **b) Instrumental support**

There is a developing agreement that extensive changes in populace dimensions of physical activity and different practices required to improve cardiovascular wellbeing will require real adjustments in situations and strategies (Sallis et al, 2012). Encourage environments that promote and facilitate physical activity, supportive infrastructure should be set up to increase access to, and use of, suitable facilities (WHO, 2007). Availability of facilities and proximity to recreation facilities have been associated consistently with greater physical activity participation among adults (Brownson et al, 2001; Troped et al, 2001), adolescents (Cohen et al., 2006a; Babey et al, 2008), and children. In a national investigation of U.S. grown-ups (Adkins, Sherwood, Story, and Davis, 2004) found apparent access to parks and trails was emphatically connected with physical activity. (Brownson, Baker, Housemann, Brennan, and Bacak, 2001b) Respondents seeing access to these assets were almost multiple times bound to meet physical movement rules than the individuals who did not see these assets were accessible.

A national study of 17 000 adolescents found that odds of participating in frequent physical activity were greater when there were more recreation facilities nearby. Gordon-Larsen, Nelson, Page, and Popkin, (2006) A large study (Frank, Kerr, Chapman, & Sallis, 2007) of Atlanta, GA, youth found that the presence of recreation space within 1 km of home was related to walking trips among all age groups (ages 5–20 years) and was the strongest predictor of walking among youth in the 15- to 20-year-old age group. Cohen et al., (2006b) found that parks with playgrounds, basketball courts, walking paths, tracks, swimming areas, and multiple purpose rooms were associated with greater non-school physical activity among adolescent girls. Thus, the presence of parks and trails, as well as the design of these facilities, has been related to physical activity.

In Russia, (Gorobets, 2015) indicates that the establishment and implementation of the program that organized competitions in sports and physical activities raised the level and awareness of sports and physical activities participation (with propelling prizes, medals, and sports cups). Furthermore the study indicated that, the utilization of the media to bring issues to light about the critical jobs of the games and physical activity and their beneficial outcomes on wellbeing, wellness, and physical appearance to make an energetic way of life an advanced and prevalent pattern, contributed to the increase in Russian sports and physical activities participation.

**Active transport** or **active commuting** refers to the use of walking, biking, or other human-powered methods (e.g., skateboarding). It includes using public transportation or “walking school buses,” or being driven to a point close to but not at school from which students walk the remainder of the way. Active transport equates to moderate-intensity physical activity, which, as discussed in earlier chapters, provides crucial health benefits.

Active commuting has been proposed as an ideal low-cost strategy to increase physical activity within the general population and can account for one-quarter of an individual's recommended total daily steps (Whitt, DuBose, Ainsworth, & Tudor-Locke, 2004). Studies have found that active transport provides youngsters with physical activity (Tudor-Locke et al., 2002) and increased energy expenditure (Tudor-Locke, et al., 2003). Bjørkelund et al, (2013) suggest that active transport to and from university contributes on average 16 minutes of vigorous- or moderate-intensity physical activity for youth. These benefits, together with concern about increased traffic congestion and air pollution, have led to growing interest in the use of active transport by youth to get to and from university (Kahlmeier, et al., 2010). In addition, it has been suggested that active transport enhances social interaction among people and promotes independent agility (Collins and Kearns, 2001; Oliveret al., 2015).

### **2.3.3 Community's perception of physical activity among university students**

Researchers, for example, Peguero (2011) have demonstrated that inclusion in such school-based Sports prompts more noteworthy instructive accomplishment. Along these lines, as (Lunenburg, 2010 p.2) states that "extracurricular activities, by whatever name they are called, are an essential, vital, and extensive part of education". As many authors have pointed out, involvement in sports develops different life skills for jobs and for social life (García, 2012). Thus, implementing sports participation alongside the institution programs in the education system would be part of the establishment of an integrated linkage system of education-employment-welfare. The teachers identified Social skills, management skills, communication skills, leadership skills, teamwork, decision-making skills, intrapersonal and interpersonal skills as being an important part



of benefits gained through participation in sports (Soe, 2014) and further stated that learning outcomes set by the university are met directly or indirectly through the experiences and learning gained from participation in sports.

In (Anokye, Trueman, Green Pavey, & Taylor, 2012) study stated that understudies and instructors saw Physical exercises to be charming for understudies and gainful to their improvement. Further, in (Japhet, 2013) study conducted in Tanzania to explore views of stakeholders on effects of students participating in co-curricular activities including sports and physical activities found that Stakeholders were of the view that positive effects of students' participation in co-curricular activities outweighed the negative effects. (Schlessler, 2004) cautioned officials to be concerned about regardless of whether there is sufficient time to enable understudies to do both academic works as well as take part in sports activities. Most of the education practitioners consider that over-participation in and commitment to too many activities by students should be discouraged in order to help students balance their academic studies and sports. Also, there is a misconception that prevails in the minds of some students, teachers, parents as well as school authorities, that sports are trivial things to be undertaken by students, and so less consideration is given to supporting students. (Tanner & Tanner, 2007) pointed out that despite the broadly appreciated positive influence of sports and games on students, this has been entirely overlooked in recent national reports on the quality and condition of education. (Sohn, 2008) argues that the negative impacts associated with participation in sports and games activities may be related to the types of activity offered and poor organization by the institute.

### **2.3.4 Opportunities and challenges of physical activity**

The graduation rate report published by the National Collegiate Athletic Association (NCAA) shows that athletes achieved an unequalled high graduation rate of 60%, contrasted with 58% for the non-competitor populace (Joy, 2004). In addition to that, the study conducted by (Soe, 2014) found that Sports involvement and the reputation of the university students attend helped provide opportunities for students to get jobs more easily. Sports give a channel to strengthening the exercises learned in the study hall, offering undergraduates the chance to extend the use of their academic skills in a more practical and free environment. Co-curricular activities are geared towards helping students to achieve excellence in their chosen subjects (Shehu, 2001) also, socialization (Maya, Monika & Kimberly, 2008). Robinson, Peleg, Rhodes, and Frantz, (2002) add that, extracurricular designed-activities provide students with a chance to apply leadership, organizational programming, and design skills to a project, where more than a grade is at a stake. Graduates are confronted with the problem of unemployment. Shaidi, (2006) indicated that after youths have completed schooling they often do not have sufficient aptitudes that they could use to begin independent work activities. This problem is also attributed to the weakness of the academic subject. In curbing that sports can provide an opportunity for employment when students given the opportunity to participate in the same.

### **2.3.5 Synthesis and the Knowledge Gap**

The previous studies conducted in Tanzania have dwelt on sports management, physical activities participation levels and based on physical activities and sports in primary and secondary most which is the obvious level to do sports and physical activities and little is

known on what and how are strategies put to enhance sports and physical activities participation among university students. The empirical studies reviewed from Tanzania included those of (Mihayo2004), Kessy2003; Mabagala2002; and Addo1998). Other studies on Physical Activity (PA) reviewed from Africa included those of (Segar et al2012;Mbaga, et al,2018;Sallis, et al, 2016;Joseph, 2015 and Oyeyemi, 2016). Each one of these examinations, for the most part, inspected the connection between understudies'partaking in sports and PAas well as their improvementin educational settings. Conversely, little has been done in the direction of evaluatingthe degree to which understudies have access to along withparticipationinsports and physical activity, particularly as regards the supports given by universities to promote SPA participation among university students. Therefore, this study aims to fill that knowledge gap.

#### **2.4 Summary of the Chapter**

The literature in connection to the investigation is basically inspectedin this chapter. The theories supporting the study and different forms of SPA that can be undertaken in universities reviewed. The concept and status of sports and physical activities, SPA Participation, the strategies put to promote SPA, stakeholders' perceptions of student participation in SPA and the opportunities and challenges obtained from SPA.The gap in the existing body of knowledge has also identified. The next chapter deals with the methodology used in the study to fill the knowledge gap.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

The previous chapter presented the literature review through which the knowledge gap identified indicating the need for the study. This chapter presents the study methodological techniques utilized in data gathering/generation and analysis in the study. It depicts the study plan, target population, sampling techniques. Furthermore, it describes the data gathering and generation and data analysis techniques; it verifies the validity and reliability of the instruments for quantitative data and replicability and credibility/trustworthiness for qualitative data and talks about the ethical considerations, ending with a summary of the chapter.

#### **3.2 Research paradigm**

The term paradigm is used to describe “an approach to research which provides a unifying framework of understandings of knowledge, truth, values and the nature of being (Somekh& Lewin, 2005). Creswell and Clark (2007: p. 21) explain that “aParadigm[is the] view we have of our world which ultimately influences how we design and conduct research”. Others use the term worldview as meaning “a basic set of beliefs that guide action” (Guba, 1990, p. 17). The researcher has chosen to use paradigm as articulated in (Lincoln, Lynham, &Guba, 2011; Mertens, 2010) which indicates the same meaning as a worldview.

The study was underpinned by the pragmatic paradigm, which concerns applications of ‘what works’ and solutions to problems (Patton, 1990). Instead of focusing on methods, the researcher emphasizes the research problem and uses all approaches available to

understand the problem (Rossman & Wilson, 1985). As a philosophical underpinning for mixed methods studies, (Morgan, 2007; Patton, 1990; and Tashakkori & Teddlie, 2010) convey its importance for focusing attention on the research problem in social science research and use of pluralistic approaches to derive knowledge about the problem. This paradigm was used because it enabled the researcher to get an insight into the problem as the qualitative characteristics were combined with those of quantitative to explore the strategies that were put by the university to enhance student participation in physical activity.

### **3.3 Research approach**

Approaches provide specific direction for procedures in research design. Others have called them strategies of inquiry (Denzin & Lincoln, 2011). The researcher has chosen to use approaches because all two terms mean the same.

The study employed a mixed-methods approach. Mixed methods research is an approach to an inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone (Creswell, 2014). The mixed approach enabled the researcher, to understand the concern of sports and physical activity, by exploring strategies put by the university in promoting physical activity participation among students.

### 3.4 Research design

The study employed a concurrent triangulation design whereby, is a type of blended techniques plan in which the analyst joins or unions quantitative and subjective information so as to give a complete examination of the exploration issue. In this structure, the scientist normally gathered the two types of information at generally a similar time and after that coordinated the data in the elucidation of the general outcomes. Inconsistencies or incongruent discoveries are clarified or further tested in this structure (Fetters, Curry, and Creswell, 2013). Both subjective and quantitative strategies have methods that make them in a perfect world appropriate for the investigation of certain inquiries, yet insufficient for the examination of others (Sogunro, 2002). Subjective information producing strategies were suitable in connection to the idea of the examination, as it required some unquantifiable qualities, for example, perspectives, convictions, and practices which complemented the quantitative data. In adding up, the researcher utilized quantitative techniques for gathering, analyzing, as well as reporting the quantifiable findings descriptively. The concurrent triangulation technique was viewed as significant as it empowered the researcher to utilize subjective and quantitative techniques to affirm, cross-approve, or verify discoveries inside a single study (Creswell, 2009). The design has a leeway of concentrating on „how“ with „why“ questions (Kelley, Clark, Brown, & Sitzia, 2003). The plan enabled the researcher to get rich data on strategies put by the university to promote physical activity participation among university students at the University of Dar es Salaam in Tanzania.

### **3.5 Study location**

The study was done in the Dar es Salaam region. Dar es Salaam region is one of the 31 administrative regions in Tanzania created in 2016. It is located at 6°48' South, 39°17' East on a natural harbor on the Eastern coast of East Africa. It is the major city and commercial port on Tanzania's Indian Ocean coast. The region had a population of 4,364,541 as the official 2012 census. The total area of the region is 1,393 km<sup>2</sup>. The region consists of five administrative districts; Kinondoni in the North, Ilala in the Centre, Ubungu, Temeke in the South and Kigamboni the across the Kurasini creek. Dar es Salaam region has 13 universities, which are many compared to other regions in the country i.e. Kilimanjaro region has 4 universities, Morogoro has 4 universities, Arusha region has 4 universities, Zanzibar Urban has 3 universities, Iringa region has 3 universities, Dodoma has 2 universities, Mbeya has 2 universities, Tanga region has 2 universities, Mwanza region has 2 universities, Ruvuma region has 2 universities, Katavi region has 2 universities, Mtwara region has 1 university, Njombe region has 1 university and Kagera region has 1 university. The study was conducted in Dar es Salaam region because it consists of a large number of universities, which have branches in other regions and have high enrollment rates of students from different regions in the country. By conducting the study in this region the researcher was targeting the area where the problem is persistent due to advanced science and technology and there is the opportunity of government and non-Government publicities on physical activity participation.

### **3.6 Target population**

The target population refers to the group of people or objects with common features from whom or which researcher expects to obtain relevant information to answer the study

questions and attain objectives of the study. And Lindner, (2003) clarifies that a populace is the gathering important to the scientist from which conceivable data about the investigation can be concluded. The target population of the study included; 1 university directors of social services, 28,000 students and 1 physical education and sports coordinators from the University of Dar es Salaam.

### **3.7 Sample size and Sampling techniques**

#### **3.7.1 Sample size determination**

Sample size determination is the act of choosing the number of observations or replicates to include in a statistical sample. The study sample was determined using the online sample calculator (<https://www.checkmarket.com/sample-size-calculator/>, 2018) with a confidence level of 95% and a sampling error of 5% (see Appendix B). For the sample of 28,000 university students, 379 students were selected. The 379 students were randomly selected from the University of Dar es Salaam's main campus.

#### **3.7.2 Sampling techniques**

Kombo and Tromp, (2006) define sampling as the procedure a researcher makes use of to acquire human beings, places or matters from a populace to look at. Thus, in the case of this study, the researcher will make use of cluster random sampling, simple random sampling, purposive sampling, and convenience sampling. Cluster random sampling involves the use of heterogeneous characteristics respondents which applies when the area of interest happens to be big or large where a convenient way is used to divide the sample group in a smaller non-overlapping group of representatives (Delice, 2010). This procedure used to obtain the university and students in the study. In simple random



sampling, each person in the reachable population has an equal chance of being chosen (Sowell, 2001). Simple random sampling also employed to choose students. In purposive sampling, researchers deliberately select people and sites so as to analyze the important phenomenon (Creswell, 2009). The procedure used to select university directors of social services and sports and game coordinators. Convenience sampling which requires that the sample is accessible, convenient and willing to participate was employed to select students. (Gall, Gall & Borg, 2007) explain convenience sampling as the one in which the researcher involves representatives who suit the purpose of the study. The use of volunteers is an example of convenience sampling (Kombo & Tromp, 2006). Procedures for selecting each category of samples are outlined below:

**a) University director of social services**

The director of social services is an administrator and also the manager in charge of all institutional social activities including physical activities. Controls along with supervision of the ordinary curriculum and extracurricular activities to ensure that each matter is well-timed operated and is on the right path. The inclusion in the study was purposively and conveniently due to their position. Social services director of the university is assumed to provide adequate information on the usability of facilities, strategies to promote physical activity i.e. the allocation of resources for, physical activity equipment and facilities use in the university, the opportunities encountered and their opinions/perceptions in physical activity participation among university students.

**b) University Sports and games' coordinator**

Who is regarded as the supervisor and facilitator of all physical activity also included in the study. He provided data on how physical activity organized in the university, the

status and use of university physical activity facilities and equipment, the challenges encountered and competency in supervising the activity. The contact of games coach/coordinator was obtained from the university social service director; purposively sampling employed to involve him/her because of the vital role in physical activity and is of most important in the study.

### c) Students

This category of respondents provided proceedings at the distinct forms of sports activities and PA available in their particular universities, the degree to which they participate in them along with the status of the sporting environment. Furthermore, they provided data on the benefits gained during sports and PA participation without forgetting what motivates them to participate and give out their views on how they perceived participation in sports and physical activities while engaging in university studies. Through cluster random sampling 379 students participated in the study for the reason that they were representing all students of the same characteristics of whom they had equal opportunity to engage in sports and physical activities.

**Table 1.0 representing the sample size and sampling technique**

<b>Participants</b>	<b>Target population</b>	<b>Sample size</b>	<b>Sampling technique</b>
Social service directors	1	1	Purposive sampling
Sports and games coaches/coordinators	1	1	Purposive sampling
Students	28000	379	Cluster & simple random sampling

### 3.8 Data Collection Instruments

### 3.8.1 Interview

An interview refers to dialogue with intention, tailored to achieve the researcher's objectives (Denscombe, 1998). Interviewing includes exploring peoples' views, ideas, attitudes and reviews on various problems that the observer is concerned with. one of the advantages of this approach is its flexibility at some stage in the sphere study because it will offer the researcher an opportunity to restructure questions wherein necessary in order to acquire relevant statistics. Interviews are important assets of mixed-method research data. In the study, Interviewsessionswere done face-to-face. The interview sessions were in both an unstructured and semi-structured form. The following individualsparticipatedin face-to-face interviewswhich lasted between 45 and 60 minutes: social services director and sports coordinator. More so,itwas done in the participants' workplaces during working hours, basing on their suggestions and consent. Interviews helped to find out respondents' views on the status and use of university sports and physical activities facilities and equipment, strategies put by the university to promote sports participation based on resources allocation for sports and physical activities, special programs that motivates students to participate in sports and physical activities and their opinions on the PA participation among university students. The advantage of a face-to-face interview was that it helpedtheparticipant not to be influenced by the responses of fellow participants unlike focus group discussion or group interview. Moreover, the researcher gainedprecious insights based on the depth of the facts accrued and the know-how of the informantsaboutthestrategies put by the university to promote physical activity participation.

### **3.8.2 Observation Checklist**

According to (Neuman, and Robson, 2014) observation checklist refers to a list of things that an observer is going to look at when observing a phenomenon. With the help of an observation checklist, the researcher managed to observe various kinds of physical activity resources which are existing in universities and the status of facilities available. Furthermore, the researcher was able to observe how students participate in different PA in a natural locale. The method helped to expose some data that was scarce to be uncovered through other methods; therefore it complemented the interview and questionnaire data generation methods to ascertain the strategies put by universities to promote physical activity participation among students at the University of Dar es Salaam in Tanzania.

### **3.8.3 Questionnaire**

The questionnaire is a research instrument, consisting of a series of questions (or other types of prompts) for the purpose of gathering information from respondents (Creswell, 2017). The questionnaire consisted of both quantitative questions and comprehensive qualitative questions for generating the quantifiable and unquantifiable information vital for the study. Comprehensive qualitative questions allow the free will of expression by participants by means of their own lexis, and so it was not easy to construct and compute the answers, therefore were subjected to thematic analysis. While closed questions (quantitative questions) restricted respondents to explicit responses in order to get data on the scale of the issues under study in terms of magnitude, therefore were subjected to statistical analysis. Questionnaires were distributed by the researcher with the help of research assistants to students who constituted the larger number of the

sample and consented to participate in the study. Additionally, Questionnaires were a somewhat easy way of collecting a considerable amount of information, as the researcher administered them (Kothari, 2004). The questionnaires covered all the aspects that related to status, availability, and utilization of sports and PA facilities and equipment in the university, the motives to participate in sports and PA based on, the allocation of resources for and promotion of PA participation, the offers, public press for physical activity promotions made by the university, the benefits obtained from PA participation and the views on challenges and solutions for the involvement of students in physical activity.

### **3.9 Validity and reliability**

#### **3.9.1 Validity**

Validity is the quality of being logically or factually sound; soundness or supremacy (Noble & Smith, 2015). To guarantee the validity of the instruments along with the trustworthiness of the information, the study utilized the triangulation procedure of information accumulation, which includes the utilization of more than one strategy for information gathering. This empowered the specialist to countercheck the data offered and to supplement the shortcomings of certain strategies by the qualities of others to expand the legitimacy of the instruments. For interviews, the trustworthiness was ensured through member check immediately after the interviews. Also, as recommended by (Creswell, 2009), the researcher found the peer person who cross-checked the instruments. The instruments were refined and validated according to relevance, accuracy, and coverage of the study for boosting the content validity, construct

validity and face validity, after receiving the supervisors' comments and those of Masters of Education (Med) Research colleagues of the School of Education at Moi University.

### 3.9.2 Reliability

The reliability of measurement describes the consistency or dependability of the data from an instrument (Sowel, 2001). To ensure reliability, the instruments were pilot tested at one university in Tanzania which was not included in the study. Alterations were made in the instruments in order to suit the reason for the study. A pilot test was made for checking language use, phraseology, and vocabulary and sensitivity of words for the interview guide. Moreover, comparative data was gathered from different classifications of respondents. What's more, in the field the researcher expanded the dependability of information by plainly disclosing the reason of the study to clear away any uncertainties and let the participants check their responses immediately after the interview before using them for qualitative data analysis and presentation.

For the quantitative data, the researcher used Cronbach's alpha to secure the reliability of the instrument (questionnaire) whereby 10% of the study sample was used for the pilot study (Mugenda & Mugenda, 2003). The researcher administered the questionnaire to the university student respondents. The responses obtained were analyzed by running Cronbach's Alpha using SPSS software. Then the consistency of the instrument was determined by the results which ranges between;  $0.9 < \alpha$  - excellent,  $0.8 \leq \alpha < 0.9$  - good, and  $0.7 \leq \alpha < 0.8$  - acceptable. The items that indicated a lower coefficient in the column or if the item deleted were retained. And those which indicated to raise the coefficient if deleted, the instrument was adjusted by deleting that item. The adjustment of the questionnaire

leads the Cronbach's alpha to be 0.79 and 0.84 which are fine and acceptable for the study.

The overall reliability was increased through the use of a mixed data collection method that is triangulation in which questionnaires, interviews, and observation were used. Questionnaires, interviews, and observation checklist complemented each other on exploring the strategies put by the university to promote physical activity participation among students.

### **3.10 Data collection procedures**

Data collection is the procedure that helps the researcher to scientifically collect appropriate answers to research questions. Before proceeding to the field for data collection and gathering, the researcher obtained approval from the supervisors, then to the Department of Educational Management and policy studies, School of Education. From there, I sought an authorization letter from Moi University, School of Postgraduate Studies and Research. The research consent was sought after from Tanzania Commission for Science and Technology (COSTECH). Further, the researcher sought permission to do the study from the DVCs of the pilot studied university and sampled university.

The researcher then started by visiting the university involved in the study. In that visit, the researcher obtained the number of students who participated in the study and at this time, the researcher met the university sports and game coaches, and directors of social services and tried to build up a good rapport. The appropriate dates for filling the questionnaires and for conducting interviews were set. Further, the researcher got to

familiarize with the university environment where the observation of the physical activity environment was done.

The second visit was for the actual data collection, whereby the students were involved in filling the questionnaires while the university social services director and sports and games coach participated in interviews. Furthermore, the researcher was able to observe the physical activity environment and filled the observation checklist. All these data collected helped to reveal the strategies put by the university to promote physical activity participation among university students.

### **3.11 Data analysis procedures**

Data analysis is the course of action that implies editing, coding, and organization of the collected data (Kothari, 2004). Before the actual analysis, the researcher performed the pre-data analysis by checking the errors and missing data. Then, the actual data analysis followed. Since the study employed mixed methods of data collection, then the data generated from the study were analyzed both qualitatively and quantitatively, the data were concurrently analyzed and presented by giving equal weight to both qualitative and quantitative data (Creswell, 2009). Further mixing was done during the interpretation of the data.

#### **3.11.1 Qualitative Data Analysis**

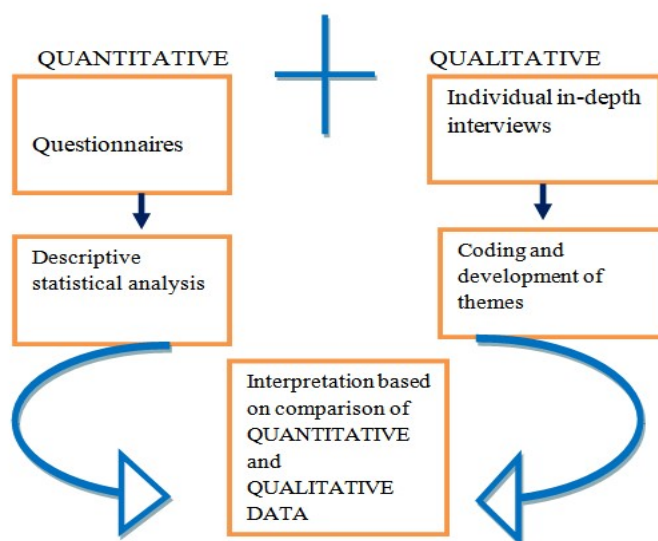
The qualitative data that were collected from face-to-face interviews and an open-ended (comprehensive qualitative questionnaire) was subjected to thematic analysis. (Creswell, 2009) affirms that thematic analysis is carried out by designing detailed descriptions of the survey and using coding to put the themes into categories. Data collected from



university social services director, games coordinator, and students were coded and ordered as per the examination goals. A few contentions, perspectives, and feelings of participants were exhibited as citations. Furthermore, the data were interpreted to clarify how universities do to promote physical activity participation in the university.

### 3.11.2 Quantitative Data Analysis

The researcher first organized data and coded them accordingly, then by the use of the Statistical Package for Social Sciences (SPSS) software program to analyze quantitative data from the structured questions in the questionnaires. The quantitative data were coded, entered into SPSS version 20 and were subjected to descriptive statistics analysis. The findings presented in the form of frequencies, percentages in tables and graphs as appropriate to show the agreement to the level of utilization of PA facilities, opportunities gained from PA, agreement on the availability of support given by the university for participation in PA and the level of PA participation in the achievement of the study purpose which aimed at exploring strategies put by the university to promote physical activity participation among students.



**Figure: 3.0 Visual model of concurrent triangulation mixed methods design procedures.** Source: Adapted from (Creswell and Clark, 2007)

### **3.12 Ethical considerations**

The researcher adhered to the tenets and guidelines managing the underlying thought for issues in the moral field that researchers should address when planning and undertaking research. First, the researcher sought after approval from supervisors, then the research clearance letters from the following offices: From the office of dean of student for department of Educational Management and Policy Studies at School of Education at Moi University, then the letter helped the researcher to seek research permit from the Tanzania Commission for Science and Technology (COSTECH), before finally contacting the respective university authorities for the purpose of collecting and gathering data.

Secondly, the researcher visited the selected institution and introduced herself and the respondents were well informed of the purpose and importance of the study. This was done at the first contact at the beginning of data generation and, where needed, by providing an explicit explanation on the procedures that the study will follow and the participants were left with the introductory letter and consent form.

Thirdly, the researcher visited the institution in the second round, where the participants were not strained to take part in the study, but rather was given the choice to enter, pull out or defer their commitment in the study.

Thirdly, the researcher reserved the participants' names anonymous; also they have assured the privacy of the information given for the duration of the storage and processing of the data. In reporting, pseudonyms used to keep respondents' names

unidentified. The researcher promised to utilize the information for academic purposes only. Furthermore, the entire intellectual works used in this study together with books, dissertations, journals, theses, newspapers and field data are accordingly accredited. (See the introductory letter and consent forms in (Appendix C)

### **3.13 Summary**

This chapter provides the methodological procedures for the study. The concurrent triangulation design in a mixed-methods approach which uses qualitative and quantitative research methods was in use, along with identifying the study site. Furthermore, the chapter described the target population and procedures used in representative choice. Moreover, data generation methods, validity, and reliability of the instruments and data analysis actions are presented.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS, INTERPRETATION, AND DISCUSSIONS

#### 4.1 Introduction

This chapter focuses on the presentation, analysis, interpretation, and discussion of data generated through a mixed-method approach, to evaluate the strategies put to promote physical activity participation among the University of Dar es Salaam students in Tanzania. Both quantitative and qualitative methods were employed in this study for the purpose of triangulation. The 379 closed-ended questionnaires were filled by the university students constituted the quantitative survey sample. The qualitative data generation entailed individual semi-structured interviews with the 2 key informants and 45 comprehensive qualitative questionnaires with students who were selected among the 379 students who filled the closed-ended questionnaires. The findings emanating from the data were discussed, with more emphasis being placed on the discussion of both quantitative and qualitative data which were given equal weight in the data generation methods. The quantitative and the qualitative data are integrated into interpretation and discussion of the findings.

## 4.2 Characteristics of the participants

A sample of 379 university students and 2 administrators participated in the study that sought to evaluate the strategies put to promote Physical Activity participation among the University students. Table 4.0.1 below shows the biographic information for participants of the qualitative data and respondents of the quantitative data.

**Table 4.1 Biographical information of participants**

<b>Biographic data for quantitative respondents</b>			
	<b>Male n (%)</b>	<b>Female n (%)</b>	<b>Total n (%)</b>
<b>Sample size</b>	198(64.5)	109(35.5)	307 (100)
<b>Residence</b>			
<b>Campus</b>	58 (46)	67 (54)	125(40.7)
<b>off-campus</b>	140 (77)	42 (23)	182(59.3)
<b>Education level</b>			
<b>Undergraduate</b>	187 (64)	103 (36)	290(94.5)
<b>postgraduate</b>	11 (65)	6 (35)	17 (5.5)
<b>Biographic data for qualitative participants</b>			
<b>Residence</b>			
<b>Campus</b>	12 (57)	9 (43)	21 (47)
<b>off-campus</b>	16 (67)	8 (33)	24 (53)
<b>Occupation</b>			
<b>Student</b>	28 (62)	17 (38)	45 (100)
<b>Administrator</b>	2 (100)	0 (0)	2 (100)

n is the number of participants and (%) is the percentage of the participants

The total number of participants for the study was 379, who consented to participate in the study was 309 which is an 81% response rate. A total of 307 responded to the questionnaire, among them 45 participated in a comprehensive qualitative questionnaire and 2 participated in in-depth face to face interviews. These included 109 (35.5%) females and 198 (64.5%) males. The sample comprised of university personnel in the sports and games administrators and university students, 290(94.5%) students were undergraduate students and 17 (5.5%) were postgraduate students. In which 125(40.7%)

students resided on campus and 182(59.3%) students resided off-campus. Furthermore, qualitative participants included two university administrators and 45 university students. The data generated from the questionnaire are presented in tables of percentages and graphs while the data generated from interviews are presented in categories and themes. The quantitative and the qualitative data, as well as literature control, are integrated into the analysis and interpretation of the findings. The quantitative data are presented first the qualitative data follows.

### **4.3 The utilization of University Physical Activity facilities and equipment**

The findings from the questionnaire and interview served to explore various supportive offers given by the University for Physical Activity Participation among the students. This section analyzes, present, interpret and discuss questions regarding the first objective on the utilization of the university facilities and equipment for physical activity. The quantitative data were analyzed descriptively, as explained in chapter three and presented in the form of tables and bar graphs, and qualitative data were thematically analyzed hence complemented each other in the description as well as an interpretation, also drawing on relevant literature. Thereof, these findings provide answers to the first research question of the study.

#### **4.3.1 Students' participation in Physical Activity (PA) at the University**

The respondents indicated whether they participated or not participated in any PA at the university as part of section B in the questionnaire, their responses are shown in table 4.2 below;

**Table 4.2 Participation in Physical Activity at the University**

<b>Participation in Physical Activity</b>			
	<b>Total n (%)</b>	<b>Male n (%)</b>	<b>Female n (%)</b>
<b>Participated</b>	200(65.1)	145 (73)	55 (50.5)
<b>Non-participants</b>	107(34.9)	53 (27)	54 (49.5)
<b>Total</b>	307(100.0)	198(100)	109(100)

**n** is the number of participants and (%) is the percentage of the participants

Table 4.2 above shows, the quantitative data in response to the question in the questionnaire on whether students were participating in any physical activity (PA) at the university, it shows that 65.1% of participants indicated that they participated in any physical activity at the university. While 34.9% of participants reported not participate in any physical activity at the university. This question asked for the participation of any physical activity without any restrictions on levels of physical activity participated in which could be the result of a high percentage of participation among the student.

Qualitative data in response to this question the participant described the participation of students in PA to be low compared to the number of students available and this implies the less usability of the facilities available whereby the participation rate accounts for the utilization of facilities. The above is evident from the following quotation:

It's this who believes games are part of their education come to the field but the bigger percentage who believe games are not part of their education, see it as time wastage. It's this that you find a student can endure from the first year till when he finishes and never steps in the field ... (Interview, Key Informant, line 20-02, p.4-5, 2018-06-15)

“... so, those who are doing exercise are the same ones from first till the end ...”  
(Interview, Key Informant, line 4-5, p.5, 2018-06-15).

“... there are those who join after being educated on the importance of sports and exercises and those who find difficulty and are referred to partake exercises ...”  
(Interview, Key Informant, line 5-7, p.5, 2018-06-15).

From the above narration, the informant described that the utilization that would be counted by the participation rate is still low at the university. The finding seems to contradict that of quantitative. This may be due to the fact that the questionnaire item asked whether the respondents participated in any physical activity regardless of the intensity of that activity and place of practice.

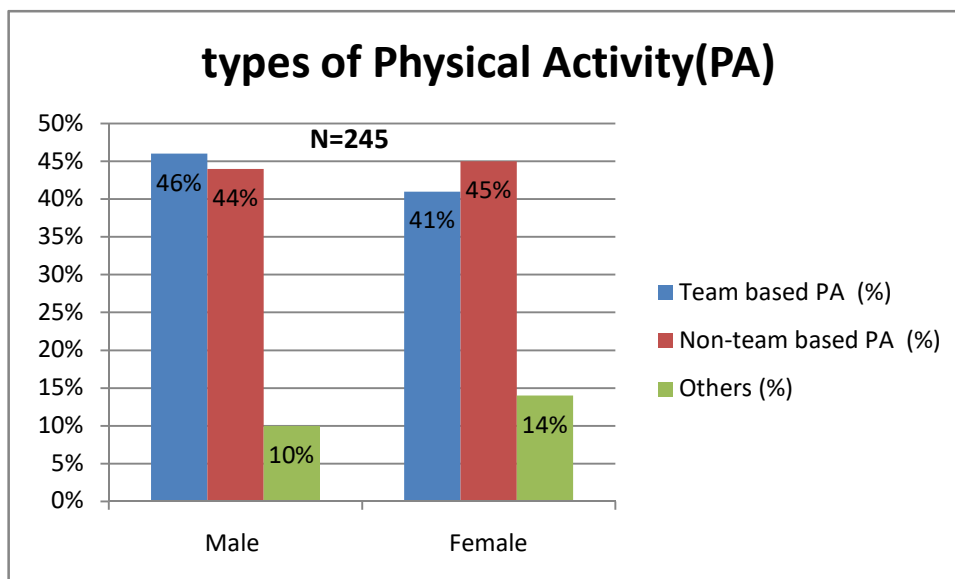
Interpreting the data in response to a question regarding students' participation in physical activity implies that, some of the students still unaware of practicing or participating in physical activity for their own benefit which leads to 34.9% of students who responded “no” to the question. Also, qualitative data reveals the same when the participants were asked to talk about the challenges for participation in PA at the university as “some students have little awareness and education on PA...” (Interview, participant3, line 10, p.3, 2018-06-17). This agrees with (Rod, et al, 2018) findings who pointed out that, young adults' participation in PA still low and facilities available in various institutions are not in use. The reason for this was identified to be the structure of the university system that has a tight timetable which hinders one to partake in PA. Although, in this study most of the students indicated to participate in physical activity in which this could be due to self-awareness resulted from their level of education and from the initiatives done by the university as the key informant reveals during the interview



“...we send letters to every department so that students can come to games like sport bonanzas....“(Interview, line 17, p.5, 2018-06-15). Furthermore, Elsa-Grace (2009) wrote that the education level among individuals has a significant correlation to the total physical activity participation of that individual. Education level seems to play an important role because most of the participants involved in the study had a compulsory PE course at their university for every student which is not a case in the current study. However, (Delfien et al 2015) portray the decrease and low Physical activity participation among college/ university students which is the result of the low participation rate. This might be due to the fact that the Delfien study was done based on specific physical activity while this study question was asking any physical activity participation among the students. Furthermore, In this study, most participants indicated to participate in PA although the further probing in qualitative data reveals low participation among the students. This is different from that of the previous studies despite the awareness effort made at the university which could have played the role as the compulsory PE course does in the previous studies. This would have been motivated individuals to participate in PA activities available for their health. Therefore, the university would better look for a better way to stimulate students’ motives for PA activity participation.

#### **4.3.2 types of physical activity practiced by individuals at the university**

The respondents identified different types of physical activity which they practice at the university as illustrated in figure 4.0 below;



**Figure 4.0 Physical activity types practiced by students**

Figure 4.0 shows the quantitative data, in response to question in the questionnaire which asked about the types of physical activity the students practiced, it reveals that majority participated in team-based physical activity by 46% of male students; 41% of female students. Further, the figure indicates 44% of male students participate in individual (non-team) based PA and 10% of males practice other types of PA rather than the identified types. However, the majority of female students indicated to participate in individual (non-team) based PA by 45% and 14% practice other types of PA which is different from that of male students.

Since this item in the questionnaire is linked to the kind of physical activity that student was practicing, and due to the fact that a large number of participants participated in team activities and sometimes termed as competitive activities rather than leisure activities, this might be due to exposure to kinds of activities that they are capable to participate in and the gains obtained from them might have been the cause of choice of that activity.

The qualitative data revealed that there is the manifestation of opportunity to participate in competitive games (i.e. team-based physical activity) that are facilitated by the university and outside the university so as to encourage PA participation at the university. This is confirmed by the quote below by the participant description;

...we have TUSA games for example that took place at the University of Dodoma (UDOM) last year and also there are the E.A games that will take place at UDOM in December. So, once we tell the students, they decide to do exercise so that they can be chosen for the games and through this, he/she does exercise unknowingly hence is another way....(Interview, Key Informant, line 9-14, p.2, 2018-06-15).

Also, because these are a team activity, one might be engaging in the same because can socialize as a result of participation as a team (Maya, Monika, and Kimberly, 2008). Although the other number of students indicated to participate in other activity than what was identified, this could be due to the fact that, the identified activity was obtained from literature, indicating the most likely health/moderate to intensive measure level of activity which didn't include other which might be practiced in the specified area of study, which resulted to 24% who responded to others. Furthermore, from the data there is an indicator of the percentage of student who did not- team-based PA at a fair percentage of 44% of male students and 45% of female students respectively this implies that maybe the university has a safe and spacious area that allow physical activity that's why these individual are capable of involving in individual PA as the participant described during the interview that, "our university has favorable geographical features such as hills and valleys that allow PA of every kind ..." (Interview, Key Informant, line 7-8, p.7, 2018-06-15) also added that "We also have fields that are at standard levels...."(Interview,

Key Informant, line 9, p.7, 2018-06-15). Similarly, the choice of individual physical activity could be due to the initiatives done by the university to do exercise as the participant added during the interview “...the university managed to form jogging clubs...” (Interview, Key Informant, line 15-16, p.1, 2018-06-15) that influence individuals to participate in PA like jogging activity. This finding concurs with the study done (institute of medicine of the national academies, 2005) pointed out that, physical activity participated in by an individual is the result of the built environment available and easy accessibility of the same.

#### 4.3.3 Place of Physical Activity (PA) practice

Location of practice was identified by the respondents as shown in table 4.3 where the respondents were given the choice of the locations including; university grounds, who used their home grounds, and for those who used others apart from the mentioned two.

**Table 4.3 Location of practice**

Place of practice	Residence				TOTAL n(%)
	Off-Campus		Campus		
	Male n(%)	Female n(%)	Male n(%)	Female n(%)	
<b>University grounds</b>	78(62)	20(63)	43(78)	28(74)	169(67)
<b>Home grounds</b>	36(29)	9(28)	7(13)	9(23)	61(24)
<b>Other</b>	12(9)	3(9)	5(9)	1(3)	21(8)
<b>TOTAL</b>	126(100)	32(100)	55(100)	38(100)	251(100)

n is the number of participants and (%) is the percentage of the participants

Table 4.3 above, shows the quantitative data, in response to question in the questionnaire about the location of practice, it shows that 67% of the participants used university grounds for physical activity participation; 24% used home grounds, and 8% used other spaces rather than home and university ground for participation in physical activity.

The finding indicates that most of the participants used university grounds for their participation in physical activity (PA) regardless of their area of residence and their gender. Since the university has a tight schedule of studies and most of the students' time spent at the campus so, it is difficult sometimes for them to go back to their homes and participate in PA after school. This agrees with what (Yong, Hock & Chee, 2018) found that most individuals are likely to participate in PA where they spend most of their time and comfortable to do the same. Similarly, (Meyer & Surujlal, 2014) argue that the proximity to the PA facilities has a great influence on participation and use of the facilities. However, the propinquity and participation relation depends on the individual's motives to do PA. Also, this study finding is contrary to what (England national report, 2014) found out in which the universities grounds are most likely to be less used by students, due to the cost involved in the use for example, in England Universities you have to book a facility in advance and pay for use which makes a distinction with the current study case. In the same way, qualitative data indicate the less utilization of the facilities available at the university although the university has free space for PA as narrated by the participant as, "To get the complete statistics of those who are involved it is tricky, though it is not big, compared to those who don't partake in the exercise as a whole." (Interview, Key Informant, line 8-10, p.5, 2018-06-15). This resulted from time constraint among the students as the participant in the interview narrates as follows, "...taking into considerations the university time table especially academics studies learning to begin at 6:00 am and sometimes the classes go till 9:00 am hence, one is more occupied with academics works and has little time for exercise..." (Interview, Key Informant, line 7-12, p.11, 2018-06-15).

#### 4.3.4 Quality of Physical Activity (PA) facilities used at the university

The quality and condition of facilities and equipment used were rated by the respondents as indicated in table 4.4 below;

**Table 4.4 Views of the respondents on the quality of facilities and equipment used at the university**

		<b>Excellent</b>	<b>Good</b>	<b>Average</b>	<b>Poor</b>	<b>very poor</b>	<b>TOTAL</b>
		<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>
<b>Quality of facilities</b>	<b>Total</b>	31 (12)	80 (31)	121(46)	19 (7)	11(4)	262(100)
	<b>Male</b>	17 (7)	53 (20)	84 (32)	15 (5)	10 (4)	179 (68)
	<b>Female</b>	14 (5)	27 (11)	37 (14)	4 (2)	1 (1)	83 (32)
<b>Condition of equipment for facilities</b>	<b>Total</b>	23 (9)	72 (28)	130 (50)	31 (12)	5 (2)	261(100)
	<b>Male</b>	9 (4)	52 (20)	89 (34)	23 (10)	5 (1)	178 (68)
	<b>Female</b>	14 (5)	20 (8)	41 (16)	8 (3)	5 (1)	83 (32)

**n** is the number of participants and (%) is the percentage of the participants

Table 4.4 shows the responses of the participants when were asked to rate the quality and conditions of PA facilities and equipment used, it is indicated that 12% and 9%of participants rated the quality of the university facilities and equipment to be excellent; 31% and 28%reported good quality; 46% and 50%reported the quality to be average; 7% and 12% reported the poor quality; and 4% and 2% reported very poor quality of university facilities and equipment respectively.

The qualitative data reveals the quality of the facilities available whereby the participants narrated the presence of outdated facilities and few are in the process of being modified as quoted below;

... but for now they [facilities] are outdated, the field was created when the university started in 1962, as for the swimming pool, machines have been placed this year after it had been used up and spoils they have been like that without being used ... (Interview, Key Informant, line 9-12, p.4, 2018-06-15)

Some fields have improved such as the tennis court, it had been renovated and the soccer field number 2 which is being used and other fields which are under routine activity and when the students go for holidays the rest will continue to be renovated ... (Interview, Key Informant, line 1-4, p.8, 2018-06-15)

The above quotations confirm that the standards of facilities used at the university are outdated though the university is trying to do a renovation of the same so that students can be attracted to participate in PA.

Drawing from the quantitative data and interpreting this data descriptively, the fact that participants reported the average quality of facilities (quantitative data) at the university could be indicative that the varsity tries the level best to improve the quality of facilities as the qualitative data reveals by the key informant that "...the university is also giving out funds to modify the fields and the swimming pool..." (Interview, Key Informant, line 17, p.7, 2018-06-15). despite the fact that there is a little budget for physical activity (PA) facilities in most of the universities (Key Informant, 2018-06-15). The findings concur with (Ayfer et al, 2017) who pointed out that facilities availability is among determinants of one's participation in PA though universities have no enough recreational facilities which are at a good state to attract students' participation. This is evident in the study whereby the participants indicated the effort of the university to renovate the facilities which are not in good condition so that they can attract more participation rates. More

so, Meyer and Surujlal (2014) found out that most of the facilities for PA are poorly maintained in the community which leads to less attraction to PA participation among members which is the same case in the current study.

#### 4.3.5 Regularity of facilities utilization by students at the University

The respondents in the study rated their utilization of PA facilities whereby, the rate included; rarely users, often users, very often users and always users as shown in table 4.5 below;

**Table 4.5 Regularity of PA facilities utilization**

<b>Students' frequency of PA facilities utilization</b>			
	<b>Total</b>	<b>Male</b>	<b>Female</b>
	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>
<b>Rarely</b>	85(33)	62(24)	23(9)
<b>Often</b>	79(31)	59(23)	20(8)
<b>very often</b>	39(15)	26(10)	13(5)
<b>Always</b>	55(21)	36(14)	19(7)
<b>Total</b>	258(100)	183(71)	75(29)

**n** is the number of participants and (%) is the percentage of the participants

Table 4.5 in response to the question in the questionnaire, the participants were asked to rate their rate of recurrence of usage of the university facilities available, the response indicates that 33% of participants reported to rarely use university facilities; 31% used the facilities often; 15% very often used the facilities while 21% reported to always use the facilities.

Interpreting the data descriptively, since the majority of students, indicated to rarely use the university facilities, it could be the implication for little participation in PA and meeting the conditions for healthy PA. Also, qualitative data reveal the less participation

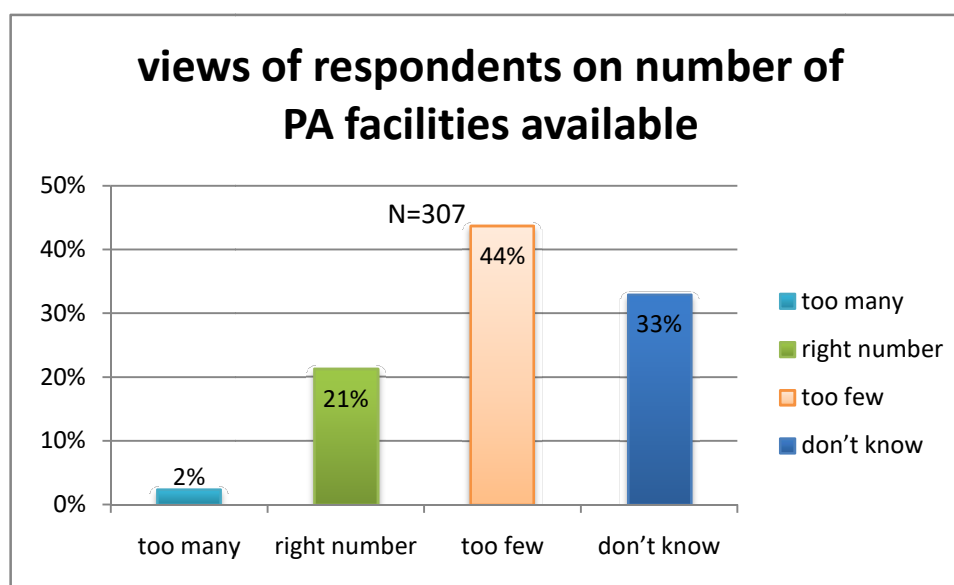


rate as narrated by the participant as follows; “To get the complete statistics of those who are involved it is tricky, though it is not big, compared to those who don’t partake in the exercise as a whole.” (Interview, Key Informant, line 8-10, p.5, 2018-06-15). The rarely use of the facilities constituted 32.9% of participants which could imply that most participants are light users of the facilities i.e. only 1-2 days per week. Carrano et al (2008) argue that the intensity of youth participation and use of PA facilities is important because those spend more time have benefits more than those who participate at lower levels or not at all. Furthermore, the qualitative data indicates the less use of facilities and participation in PA by participants at the university despite the facilities available are provided for free. More so, the interview participant confirms the free provision of facilities as; “Our University has favorable geographical features such as hills and valleys that allow PA of every kind which is free of charge...” (Interview, Key Informant, line 7-8, p.7, 2018-06-15). Therefore, the less participation could be due to the nature of the priorities of students that limit them to participate in PA example from the interview the participant describing his priority as follows “... for me, I don’t get time for exercise since I didn’t come for Physical Education (PE) course and I have no time to participate in games due to the tight academic time table...” (Interview, Key Informant2, line 15-16, p.7, 2018-06-15). The findings are in line with what (England National report, 2014) found out the value placed by individuals to a certain activity determines their scale of preference. This was evident when the participants who placed their priority to payable games were identified to participate more in those games and put down those free play/free entertainment games. The same is observed in the current study where the

priority of students seems to be on academic subjects hence, remove motives to PA participation.

#### 4.3.6 Respondents' views regarding the number of PA facilities available at the university

Respondents provided their views regarding the number of facilities available at the university as shown in figure 4.2 below;



**Figure 4.2 views of respondents on numbers of PA facilities available**

Figure 4.2 in response to the question in the questionnaire, which asked the participants to rate the number of facilities available, the quantitative data revealed the following: 44% of participants indicated their university having too few PA facilities; while 21% indicated the right number; 2% indicated too many and 33% didn't know in this regard. Also, qualitative data reveals the few facilities as narrated by the participant in the study interview as “The number of users is big due to the fact that the facilities are few....”(Interview, participant 14, line 15, p.4, 2018-06-17).

The implication of these findings following a descriptive interpretation of the data could be that the facilities available at the university are not sufficient for all students which leads to less or low participation rates as indicated (*c.f.* table for the frequency of use of facilities). The findings are contrary to those from (England report, 2014) which found that the university students were satisfied by the number of facilities available at their university and this could be due to the fact that the previous study was done in the location where varsities prioritize PA which is different from the present study where the PA is not the first priority, as the interview narrative substantiate this as;

... the big percentage of Tanzania Universities set their targets in Education, consultancy and other things such as research hence, sports come as by the way to them and they dedicate more time and funds to the three things mentioned earlier and the rest on this other side... (Interview, Key Informant, line 12-14, p.9, 2018-06-15).

However, this is contradicting with what the participant of the study narrated that the university has enough space that could enable physical activity participation. The contradiction could be the result of few and appropriate PA options and programs of which most individuals have the option to participate in which lead to facilities available to be insufficient at the location of study as revealed by (Hilary, Dori, Rosenber, Tara & David, 2014) that, the appropriate PA programs in relation to individuals' preferences have influence to physical activity participation. However, this preference was based on the PA which depends on the built environment for one to participate in PA which is not the case to other forms of PA. Therefore, the orientation that one has on PA understanding and their preference matters.

#### 4.3.7 Accessibility of PA facilities and equipment available

Accessibility of the PA facilities and equipment were presented by the respondents as shown in table 4.6 below;

**Table 4.6 Accessibility of PA facilities and equipment available at the university**

<b>accessibility of PA facilities and equipment available</b>			
	<b>Total</b>	<b>Male</b>	<b>Female</b>
	<b>n(%)</b>	<b>n(%)</b>	<b>n(%)</b>
<b>Freely accessed</b>	108(35)	76(25)	32(10)
<b>Non-free accessed</b>	72(24)	52(17)	20(7)
<b>not sure</b>	127(41)	70(23)	57(19)
<b>Total</b>	307(100)	198(65)	109(35)

**n** is the number of participants and (%) is the percentage of the participants

Table 4.6 in response to the questionnaire's question about the free accessibility of the facilities and equipment available, it shows that 35% of participants accessed the facilities and equipment available for free; 24% indicated that the equipment and facilities they used at the university not for free; and 41% were not sure of the accessibility whether it is free or payable.

If one interprets the quantitative data descriptively, it is clear that many of the participants are not sure of free accessibility of equipment and facilities at the university, this might be an implication for programming of the PA, and they are not aware/well informed of the programs available at the University. This still seems to be a constraint to the utilization of facilities available as (Meyer & Surujlal, 2014) pointed out that, participants are likely to use the facilities available if they are freely provided which

enables the participation rate in PA to be promoted. However, this was evident among the participants within specific PA activities which may insult a slight difference with the current study where individuals seem to not well informed of the available PA programs that lead to uncertainty of their accessibility to PA facilities available at the University.

#### 4.4 Supports offered by the University for Physical Activity Participation among the students

The findings from both the questionnaire and interviews served to explore various supportive offers given by the University for Physical Activity Participation among the students. This section serves to analyze, present, interpret and discuss the supports offered by the university to enable the student to participate in PA as shown in the figure below;

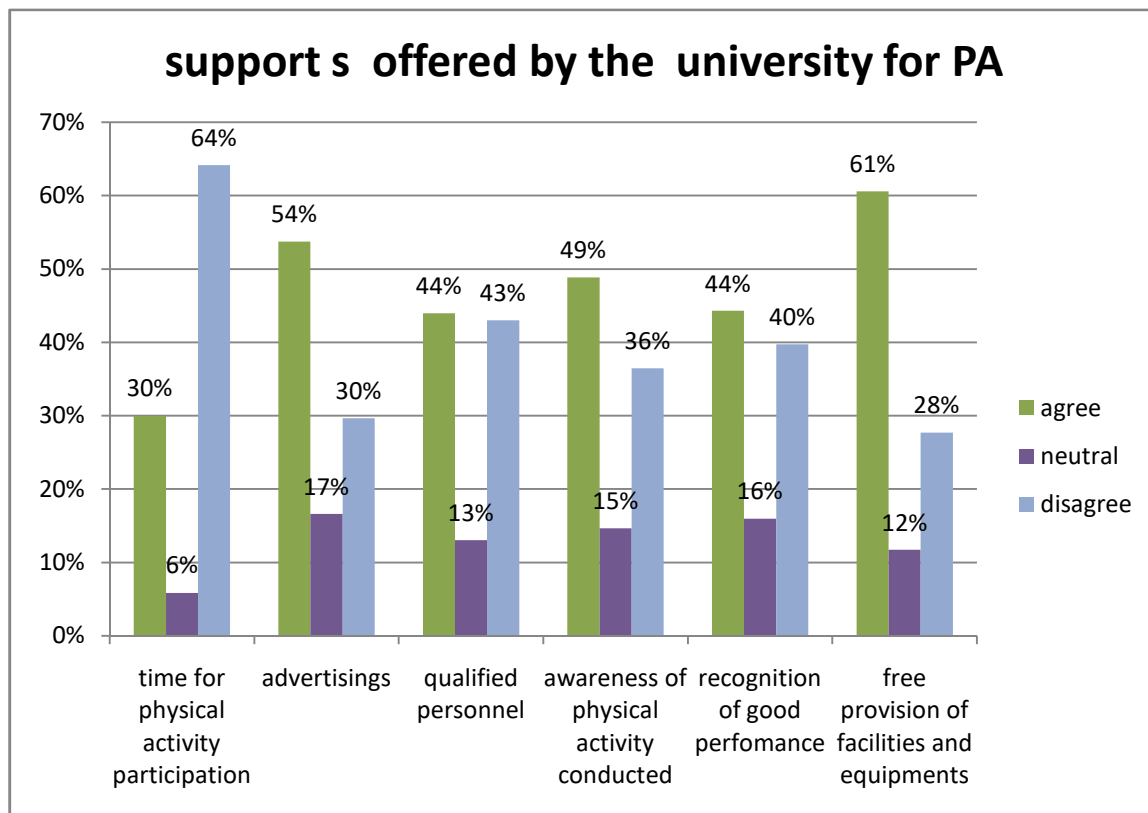


Figure 4.4 Graph showing the support offered by the university

#### **4.4.1 Provision of time for physical activity participation by the university**

In response to question in the questionnaire, which asked about the availability of adequate time provided by the university for PA participation, from the above figure 4.4 it is evident that, the university doesn't offer enough time for physical activity, as indicated 64% disagreed with the presence of enough time for physical activity participation; 30% agreed; and 6% were neutral in response to question 1 in section C of the questionnaire.

Qualitative data reveal the shortage of time, whereby most participants narrated to have constrained by academic timetable and lack of time for PA as quoted; "...taking into considerations the university time table especially academics studies learning begin at 6:00 am and sometimes the classes go till 9:00 am hence, one is more occupied with academics works and has little time for exercise..." (Interview, Key Informant, line 7-12, p.11, 2018-06-15).

These findings could be the repercussion of priorities in the time schedule of students' academic time table. this is in line with (Tom, Benedicte, Ilse & Peter, 2015) who argue that time for physical activity among university students is the main constraint to PA participation in which the university had to plan for the provision of reasonable time to promote PA participation. Therefore, from the findings, it is evident that time is not sufficiently given to students that can enable them to participate fully in PA while at the University. However, this may imply that as a result of pressure to academic/assignments seems to take the important role of PA hence, removed from individual programs priorities by the students themselves not necessarily the university (Peykari et al, 2015).

#### **4.4.2 Provision of different advertisements for PA programs organized for students on the campus**

In response to the question about provision of different advertisements for Physical Activity (PA) programs in the questionnaire, figure 4.4 shows that 54% of participants indicated their university provided different advertisements for PA programs; 17% were undecided on whether the university provided advertisements or not; and 30% of participants reported to not see the advertisements provided concerning PA at the University.

Qualitative data findings reveal the presence of informational support where the participants narrated "...we send letters to every department so that students can come to games like sport bonanzas..." (Interview, Key Informant, line 17, p.5, 2018-06-15). Also added that "...we also do advertisements using notice boards, social media, and other forms..." (Interview, Key Informant, line 23-1, p.5, 2018-06-15).

If one interprets this data descriptively, the majority (quantitative data) of participants indicated the presence of advertisements provided by the university to promote PA participation, as the presence of advertisements has a role in enhancing the participation rates in PA among individuals. This may imply that the University has attained a level of curbing barriers to PA participation by providing information that can enable the student to participate in the same. This finding agrees with what (Jingwen, Devon, Sijia, & Damon, 2015) found in their study whereby, the promotional message that may include advertisements in noticeboards and social networks proved to impact on the increase in PA participation rate. Also, the finding agrees with the suggestions of implementation

strategies for promoting PA participation by (Tom et al, 2015 & Hilary et al, 2014) in which digital advertisements mentioned to be effective.

#### **4.4.3 Qualified personnel for managing Physical Activity (PA) programs**

Figure 4.4, in response to the questionnaire, the participants were asked to rate whether the University had employed qualified personnel for managing physical activity (PA) program, it is evident the participants indicated to agree with qualification of personnel present at the University when asked whether they had enough qualified personnel to manage the PA programs at their University. 44% indicated to agree with the statement asked, this could imply that the university has considered yet employing personnel who can influence PA participation by their good management as portrayed by (England report, 2014) that the PA participation among individuals goes in hand with the satisfaction gained by the participants/individuals to have enough qualified personnel to manage PA at the institution. It is notable that the position of the personnel plays a vital role in raising the levels of PA participation, however, the participant in the interview identified inadequacy of qualified personnel at the university when they were asked to explain the challenge for physical activity participation as “The absence of professional trainers hinders my involvement in PA ...” (Interview, participant 2, line 15, p.6, 2018-06-17) of which the key informant addressed the solution to it during the interview as long as there is inadequate personnel then “...we requested for more PE teachers especially the female so as to motivate female students to also participate...” (Interview, Key Informant, line 22-23, p.6, 2018-06-15). However, the personnel demanded in this study by participants indicated to be for competitive PA. Therefore, it would be better if those who are available to embrace more programs that are non-competitive PA to encourage



students to participate in PA. This might lessen the gap seen by participants on the inadequacy of personnel to manage PA. Although this cannot be generalized rather further research on it is recommended.

#### **4.4.4 Recognition of good performance in PA and provision of rewards by the University**

When the participants asked to rate whether the University recognized their good performance in Physical Activity (PA), from the graph 4.4 above, indicates that 44% agreed, 16% were neutral, and 40% disagreed with the recognition of good performance and rewards provided by the university. However, the majority of participants indicate to be recognized when are performing well in PA and agree that the university rewards them in enhancing participation in physical activity.

Qualitative data reveals the recognition of good performance and provision of rewards to students by the university as quoted below;

..different rewards are given to winners of the intra-competition and for those who win the inter-competition, when they come back they are rewarded for example last time our students came back with a trophy and the university rewarded them a cow as a present... (Interview, Key Informant, line 12-14, p.8, 2018-06-15).

This could imply that the university has recognized the role of rewards in enabling one's participation, especially in PA. The result concurs with the suggestion from the study made by (Bess&LeighAnn, 2018) that, provision of rewards motivates one to participate in PA. This came about as the suggestion because the participant in the experiment group of the study who were rewarded had improved regularities of PA participation in comparison to those who did not. This is the same case in this study however, it wasn't

experimental rather the participant narrated the success of the use of rewards shown to have an impact on the rates of participation in PA. Therefore should be embraced.

#### **4.4.5 Free provisional of PA facilities and equipment**

In response to the questionnaire's question, which asked the participants to rate whether the University provided them with facilities and equipment freely, from the figure 4.4 the following were the responses; 61% agreed; 12% were neutral; 28% disagreed respectively with the free provision of facilities and equipment by the University.

Qualitative data in response to understanding the kind of facilities and equipment available for free at the university, the key informant responded with the availability of enough free facilities at the university that could enhance the participation rates in PA by students. The following quote put right this statement;

In fact, Physical activity doesn't much rarely on the quality rather the space available that can enable one to do exercises, for example, one can run, play taekwondo, and other sports or exercises. Therefore, the University of Dar esSalaam is the University with better supportive Environment for the variety of physical activity because of its geographical features (hills and valleys) comparing to other Universities in the country, also we have standard grounds for competitive games activities which are free or each university community member [student]...(Interview, Key Informant, line 5-9, p.7, 2018-06-15)

The above quote clarifies the presence of enough space and facilities for physical activity at the university which could enable full participation of students in physical activity. This is in line with the support theory describing that the participation by individuals will be accelerated by the physical and visible support available (space for participation)

(Israel, 1990 & Lee 2018). Furthermore, interpreting quantitative data descriptively, the majority of participants agreed that they were given facilities and equipment available at the university for free. This may imply that the University could have recognized the importance of providing freely the facilities which are important in promoting the participation of students in PA. This agrees with (Meyer & Surujlal, 2014) findings, where students suggested that they would participate more in PA at the University if facilities were freely provided. The reason for this suggestion came out as a result of the cost involved in the utilization of the facilities at the University hindered the students from participating in PA. Cost for facilities is not the case in this study where the students are freely provided with space and facilities with the end goal to promote them to participate in PA. Hence, it is anticipated to have impacted on their participation rate in PA.

#### **4.4.6 Other significant quantitative findings regarding Supports offered by the University for Physical Activity Participation**

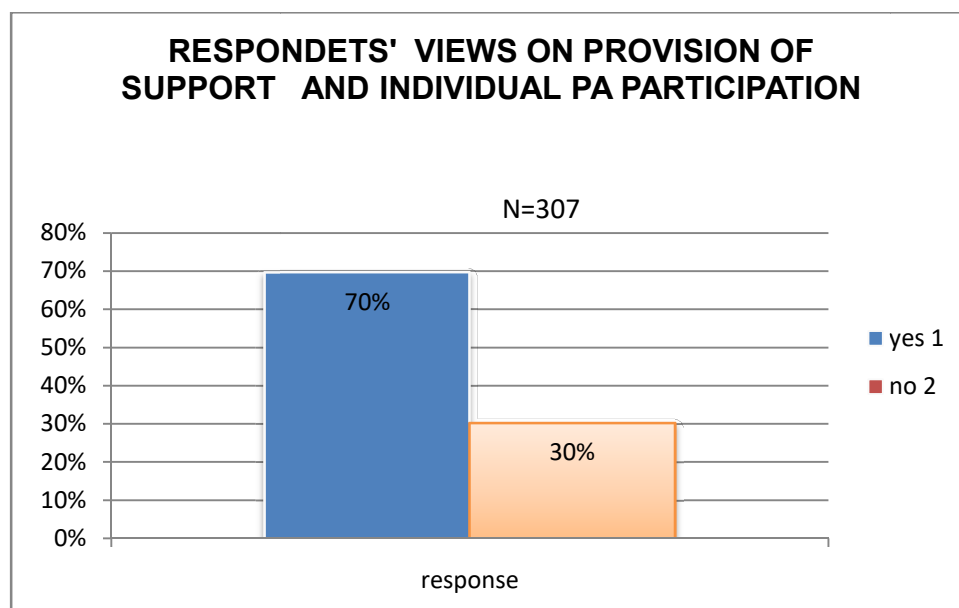
##### **4.4.6.1 Students' awareness of different PA conducted in the university**

In response to the question on awareness of different Physical Activity (PA) conducted in the university, figure 4.4 shows that 30% of participants indicated they are aware of physical activity programs conducted at the university; 49% of participants agreed; 15% were undecided on whether they are aware of physical activity programs conducted at the University or not; and 36% of participants reported to not be aware of physical activity programs available at the University.

If one interprets the quantitative data descriptively, the majority of participants indicated to be aware of PA programs conducted at the university. This may imply that the university has programmed different PA and has made the best to inform the student's community of what is available for PA that's why 49% agreed with the statement in the section. This concurs with (RE, et al, 2017) study results pointed out that awareness of the PA programs available enhances one's participation in the same. However, this finding disagrees with the fact that university may be providing physical activity programs but the students are not aware of them which can lead to poor participation in physical activity. In this study, most of the students are aware of those PA programs available.

#### 4.4.6.2 views of respondents on support provision and individual participation in PA

Respondents' views regarding the provision of support and individual participation are shown in figure 4.5 below;



**Figure 4.5 Graph to show the views of respondents on offers provision and individual participation**

Figure 4.5 shows the views of respondents. When asked whether the offers were well provided that would enable them to participate in PA, in response to a question in the questionnaire, the majority established that the offers could help them participate in PA, where 70% of the participants agreed. This may imply that most of the participants are extrinsically motivated through the study done by (Kubayi, & Surujlal, 2014). Suggest that offers/support has a great role in influencing PA participation which may include information, advice or encouragements especially for those individuals who are not self-motivated to take part in exercises. Those who didn't agree with the influence of offers to their participation in PA may imply that they are intrinsically motivated to participate in PA though they are few of the participants. However, it cannot be generalized rather it is recommended for further research to investigate the extent to which intrinsic or extrinsic motives can impact one's PA in relation to Support offered.

#### **4.4.7 Other significant qualitative findings regarding Supports offered by the University for Physical Activity Participation**

##### **a) Formulation and implementation of the sport policy**

Participants in the study described the presence of policy formulated to promote PA at the university whereby included the participation of students in the contribution of some money for the sports activities which enable full participation in PA as a result of the contribution one made for the sporting event. The above is reflected in the following quotations;

“tumetengeneza sports policy kwaajiliyawanafunzi na wafanyakazi pamoja na jumuiya nzimayachuokikuu. “ (Interview, Key Informant, line 3-4, p.6, 2018-06-15).

“We have made sports policy because of students and workers together with the university”. (Interview, Key Informant, line 3-4, p.6, 2018-06-15).

“....moja ya mapendekezo ili mtu ajue michezo ni muhimu kuanzia pale anapoingia atapaswa kuchangia sehemu Fulani kwaajiliyamichezoilihyoelaiingiekwenyeshughulizamichezonayeyeajisikiekuwaa mechangiashughulizamichezonaajihusishekatikahizoshughuli. “ (Interview, Key Informant, line 5-8, p.6, 2018-06-15).

“One of the suggestions so that one knows games are important is that from the start she is supposed to support a certain field in games so that the money can be used in games and the person feels she has participated and involves herself in those activities.” (Interview, Key Informant, line 5-8, p.6, 2018-06-15).

“kwahiyoni sera ambayoitasaidiakupandishamoriyaUfanyajimazoeziwajumuiyayachuokikukwauj umla.” (Interview, Key Informant, line 13-14, p.6, 2018-06-15).

“It is such a policy that will help increase the exercising in the university as a whole.” (Interview, Key Informant, line 13-14, p.6, 2018-06-15).

The above quotations indicate that the university has seen the importance of individual participation in PA at the university which stimulated the formulation and implementation of the policy. This result is supporting that of (Schoolyard, 2018) where individuals stipulated that, are likely to participate in events where they have put in some

effort and expenses. As it is clear from this study where the policy includes some contributions students are supposed to make for PA hence, it might play part in promoting their participation rates.

### **b) Financial Support**

Participation in physical activity goes in hands with financial capabilities which can be used in different aspects of PA. In the study, the participant narration indicates that the University seems to provide some capital for PA though it is in small amount comparing to other priorities of the institution as quoted below;

....tunatumia gharama nyingi na tunatafuta sponsor..... wakatimwingine tulipata coca-cola kudhamini sports day.. (Interview, Key Informant, line 16-17, p.5, 2018-06-15).

We use a lot of costs and search for sponsors..... Once we had Coca-Cola to carter for sports day.....(Interview, Key Informant, line 16-17, p.5, 2018-06-15).

....Piachuokinajitoleapesayakekwaajiliyakutengenezaviwanjanamarekebishoya swimming pool.... (Interview, Key Informant, line 17, p.7, 2018-06-15).

...the university is also giving out funds to modify the fields and the swimming pool... Interview, Key Informant, line 17, p.7, 2018-06-15).

From the above quotations, it is evident that the university has played the part in financial support to enable PA though it is not among the priorities of the university plans as the narrator indicated in the following quote

....Asilimiakubwayavyuo vya kitanzania malengo yao makubwa ni elimu, consultancy na vitu vingine kama hivi research kwahiyomichezoniby the waykwo

hata katika kutenga bajeti wanatenga asilimia kubwa katika hivo vituv itatu the rest ndio wanaingiza huku... (Interview, Key Informant, line 12-14, p.9, 2018-06-15).

... the big percentage of Tanzania Universities set their targets in Education, consultancy and other things such as research hence, sports come as by the way to them and they dedicate more time and funds to the three things mentioned and the rest on this other side... (Interview, Key Informant, line 12-14, p.9, 2018-06-15).

So the findings confirm that the university has recognized the importance of financial support to promote PA participation. This concurs with what (Rod et al, 2018; & Bess& LeighAnn, 2018) revealed that, financial matters for PA participation especially for environments of students. Also, these authors argue that financial assistance has an impact on Pa where can involve the use of sponsors, funds for renovations, also, in supporting students to participate in inter universities competitions. Therefore, this is an important aspect noting that most of the African universities' budget for PA is little (Mwisukha et al, 2011).

### **c) Opportunity to participate in competitive games**

The participant described the manifestation of the opportunity to participate in competitive games that are facilitated by the university and outside the university that encourage PA participation at the university. The above is confirmed by the quotes below;

....wenginewanafanya physical activities kupitia competitive games... (Interview, Key Informant, line 2-3, p.2, 2018-06-15).



...others do physical activities through competitive games... (Interview, Key Informant, line 2-3, p.2, 2018-06-15).

.....tuna michezoya TUSA mfano mwaka jana ilifanyika UDOM mwaka jana na pia tuna michezoyetuya East Africa ambayo itafanyika UDOM disemba kwahiyo wanafunzi tukishawatangazia kuna hiyo michezo anaamua kuja bora afanye mazoezi ili achaguliwe lakini kujilazimisha huko kufanyamichezo ili achaguliwe humsaidia kufanya mazoezi bila yeye kujua kumbe lengo lake achaguliwe kwenye timu kwahiyoninjiani yingine inayomfanyamtuafanyemazoezi bila yeyekulazimishwa.....” (Interview, Key Informant, line 9-14, p.2, 2018-06-15).

...we have TUSA games for example that took place at the University of Dodoma (UDOM) last year and also there are the E.A games that will take place at UDOM in December. So, once we tell the students, they decide to do exercise so that they can be chosen for the games and through this, he/she does exercise unknowingly hence is another way.... (Interview, Key Informant, line 9-14, p.2, 2018-06-15).

Since sports and games are part of PA, it is evident that this strategy attracts most of the student to participate in Physical Activity, therefore concurs with (WHO, 2017) report that, sports for all enable physical activity participation. though this contradicts with (Walery, Andrey & Anatoliy, 2018) who mean sports are for talented people that may lead to the attraction of few individuals who are talented. However, this was opposed by (Daniel & Sarah, 2004 & Glyn & Darren, 2018) that Sports and games are not only for talented because wherever there are sports there are spectators who do not require any talent but their attendance helps them to do PA. This contradiction may not be that much barrier to PA participation because it is not the only means used by the university rather

there are other means to promote PA as described previously and in the following themes and categories.

#### **d) Transport-related support**

Transport being one among things that can enhance PA participation among individuals. The attainment of the required PA participation for health depends also on how one uses transport. In the following quotation the participant indicated how the university promotes PA participation in transport-related at the university as follows;

.....wanafunzi ambao wanakaa njeyaChuo, kila mtu anaamini pia pesa inayotolewa kwa ajili yao huenda haitoshelezi, kwahiyo kuna baadhiyawanafunzi wanaona wana fanya vitu kwa shida au kwa umasikin iunakuta hawana hela wanatokamabibowanatembea kwa miguu mpaka chuo main campus... pia linalo walazimisha wao kufanya mazoezi bila wao kujijua wanafanyamazoezi.... (Interview, Key Informant, line 15-22, p.2, 2018-06-15).

....students that stay off-campus each of us believe that the funds they are given are not enough so, some of them see they are doing things under difficulty or poverty, you find they have no money and they come walking to the university from Mabibo. This forces them to exercise unknowingly... (Interview, Key Informant, line 15-22, p.2, 2018-06-15).

...wanafunziwanaoishiMagufulihosteliwaohawana means yoyoteyausafiri kwahiyo lazima watembee kwa miguu na hapa ni almost three quarters kilometers kwahiyokilaasubuhilazimawatembeekilaasubuhinajioniwarudikwamiguunakamaa nakujaasubuhihanavipindinginelazimaatembeekurudihostelihalafujoiniatembeea rudi.... (Interview, Key Informant, line 23-5, p.2-3, 2018-06-15).

...other students residing at Magufuli Hostels don't have any means of transport hence, they have to walk almost 0.75km so every morning they have to walk to come and come back in the evening if they have no noon classes have to go back to the hostels and wait to walk back in the evening.... (Interview, Key Informant, line 23-5, p.2-3, 2018-06-15).

From the above, it indicated that the university provides a chance for one to do PA through transport situations of the students as they commute from their areas of residence to attend classes. This concurs with the study done by (Jenny et al, 2017) who suggests that the more walk enables one to attain PA required for health. Also as it is said in (Brian & Carolina, 2017) that, not only sports and games that would enable one to participate in PA but also the walk plays a great role. In this study, it is established that the students' opportunity to walk from their areas of residence to classes enables them to keep their body and mind fit. Although their fitness will depend on the speed that individuals adapt during the walk to meet the results of their heart rates which count to healthy PA.

#### **e) Emotional support**

Emotional support refers to the assurance, encouragement, and understanding we give or receive to a person (Nuget, 2013). So, emotional support is given by people who understand, encourage and reassure you. The participant in the study described the presence of different emotional supports to the student at the university that helps them to be encouraged to participate in PA as the quotes below indicate:

Modeling

“...wafanyakazi wame unda jogging club, wame nunua T-shirt zao, kwahiyo kila siku asubuhi siku tatu kwa wiki, jumatatu, jumatano na ijumaa na sikuyanne ambayo ni jumamosi...”.(Interview, Key Informant, line, 16-18, p.1, 2018-06-15).

“..workers here have formed their jogging club, they have bought t-shirts so that in a week, atleast thrice i.e. Monday, Wednesday, Friday and they added optional fourth day i.e. Saturday they go for run... (Interview, Key Informant, line, 16-18, p.1, 2018-06-15).

....wafanyakazi wetu mfano wanashiriki mashindanoyawafanyakazi inatwa SHIMUTA.... (Interview, Key Informant, line, 3-4, p.2, 2018-06-15).

...our workers, for example, participate in a competition known as SHIMUTA... (Interview, Key Informant, line, 3-4, p.2, 2018-06-15).

...timu za chuo kikuu za wafanyakazi wanaruhusiwa kushiriki mashindanoyaSHIMUTA, na kweli tulipata vikombe zaidiyavitano,hiihalihuwapamotishawanafunzikushirikipia... (Interview, Key Informant, line, 9-10, p.8, 2018-06-15).

...University teams of the workers are allowed to participate in the SHIMUTA competitions and indeed we won more than five trophies. This motivates the students also to participate in games... (Interview, Key Informant, line, 9-10, p.8, 2018-06-15).

## Reinforcements

Chuo hutengamudawasikumojhadimbilikatikakilamweziilikufanyaphysical activities...watuwenginehawapatinafasilakinikunasikukamahiyowanawezakujakuf anyamazoeziyakigroupkatikaviwanja..... (Interview, Key Informant, line 1-3, p.4, 2018-06-15).

“The university puts aside a day or two in a month for physical activity for some people who don’t get a chance in other days can utilize chance like this to go do exercise in the fields.... (Interview, Key Informant, line 1-3, p.4, 2018-06-15).

.....tumeingiza sports day ilikuwapa motisha wanafunzi kufanya mazoezi.... (Interview, Key Informant, line 16, p.5, 2018-06-15).

“...we have placed sports day so as to motivate students to do exercise... (Interview, Key Informant, line 16, p.5, 2018-06-15).

Drawing from the quantitative data (*c.f.* quantitative data Graph 4.4.6) confirms the presence of emotional supports in terms of rewards and recognition of good performance. This agrees with (Rebekah, Dawn& Lee, 2014) study who argue that the great role is played by moral support for one to participate in PA especially if one is not intrinsically motivated and of which most individuals are motivated extrinsically to participate in PA for their health. Also, in this study, it was established that most individual would be more motivated if were given support (Figure 4.5) indicating most of the students are extrinsically motivated. Therefore, emotional support is so important as part of the support for physical activity as the participants narrated in the above quotes.

#### 4.5 Student's perceptions of PA

When the participants were asked of what were their perceptions to physical activity participation while at the university, the following are the response they given as quoted directly from their narratives;

Physical activity zinakomaza mwili kwa hiyo kuingia kwenye mazoezi kila mudasi issue maana inakomaza na, kuharibushepunakushindwakufanikiwavizurikwenyemasomo.... (Interview, Key Informant, line 1-3, p.11, 2018-06-15).

Physical activity spoils the body so involved in them often it is not a big deal to me because it spoils the body shape and I cannot do well in my academics.... (Interview, participant 13, line 1-3, p.11, 2018-06-17).

Mimi mudawakufanyamazoezisinakwasababusisomeimichezo, namudawakufanyamichezosiupatikabisasababuratibazamasomozinabana... (Interview, Participant2, line 15-16, p.7, 2018-06-17).

As for me, I don't get time for exercise since I didn't come for games and have no time to participate in games due to the tight academic time table... (Interview, Key Informant2, line 15-16, p.7, 2018-06-15).

Ningekuwanwanafunziwa physical education hapoingekuwarahisikufanyamazoezimaanakilamudawaohusomeaviwanjanilakinik uachamasomoyangukwendauwanjanisirahisimaanantapotezamudawangu .... (Interview, Participant 31, line 15-16, p.7, 2018-06-17).

If I were a physical Education student, it would have been easier to exercise since every now and then they learn from the fields but to leave my studies to go to the

field is not easy and I think I will be wasting my time... (Interview, Key Informant2, line 15-16, p.7, 2018-06-15).

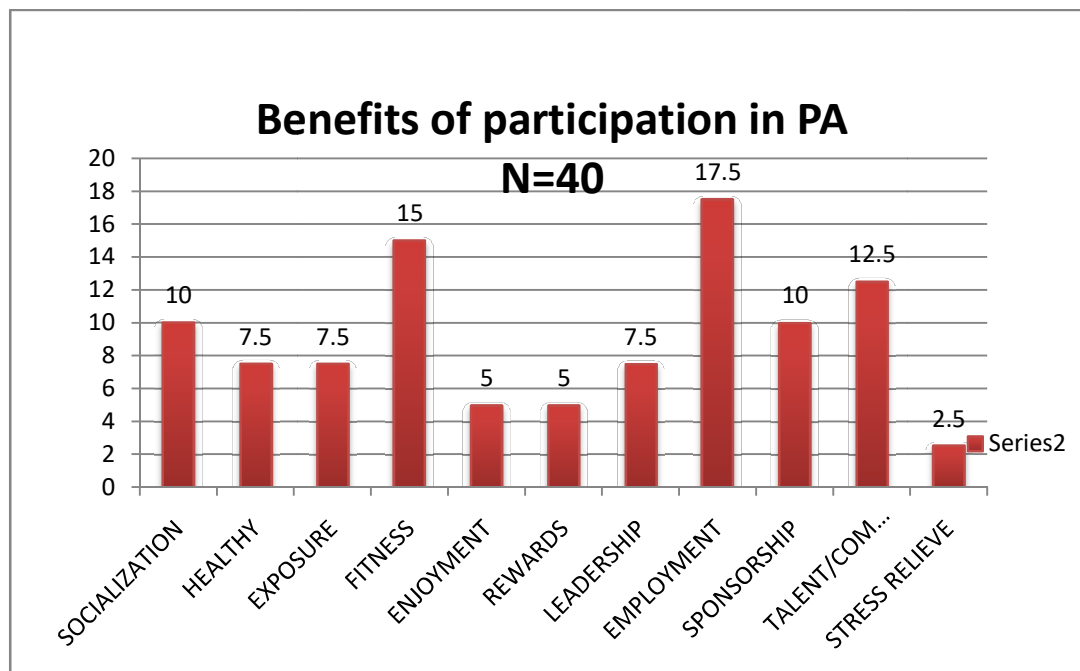
From the above it is evident indicated that individual perception to do something leads to the levels of which one can participate in the same. This concurs with what (Roy & Brad, 2015) points out that, our personality and attitudes drive our action. Therefore the student's attitudes towards PA are the ones determining the levels of participation in PA as from above quotations the student's reaction to PA determines how will be motivated to participate in the same.

#### **4.6 The Benefits, challenges, and solutions to physical activity participation**

In response to question four of the study about benefits, challenges and solution to Physical Activity participation among students, this section presents the results interprets and discusses the findings both qualitatively and quantitatively starting with benefits followed by challenges and later solutions as follows;

##### **4.6.1 Benefits of participating in physical activity (PA) participation**

The benefits of participating in Physical Activity (PA) acknowledged by the participants of the study are shown in figure 4.6 below;



**Figure 4.6 Benefits of participation in PA**

When the participants asked of the Benefits of participation in PA, in response to question one of section D of the questionnaire, the majority indicated employment and fitness to be major of the opportunities by 17.5% and 15% respectively while others being socialization 10 %; healthy 7.5%; exposure 7.5%; enjoyment 5%; rewards 5%; leadership 7.5%; sponsorship 10% talent development 12.5%, and stress relieve 2.5%. From the above data, it is evident that health opportunity has identified by the majority (15 +7.5=22.5%) of the participants understand the role played by physical activity as for health gain.

Qualitative data revealed the participant understand the benefits of participating in physical activity during the interview. Those benefits narrated include health “Sports help individual health fitness, minimize illness issues....” (Interview, Key Informant, line 7-8, p.12, 2018-06-15) another participant added that“....happiness and removal of stress is

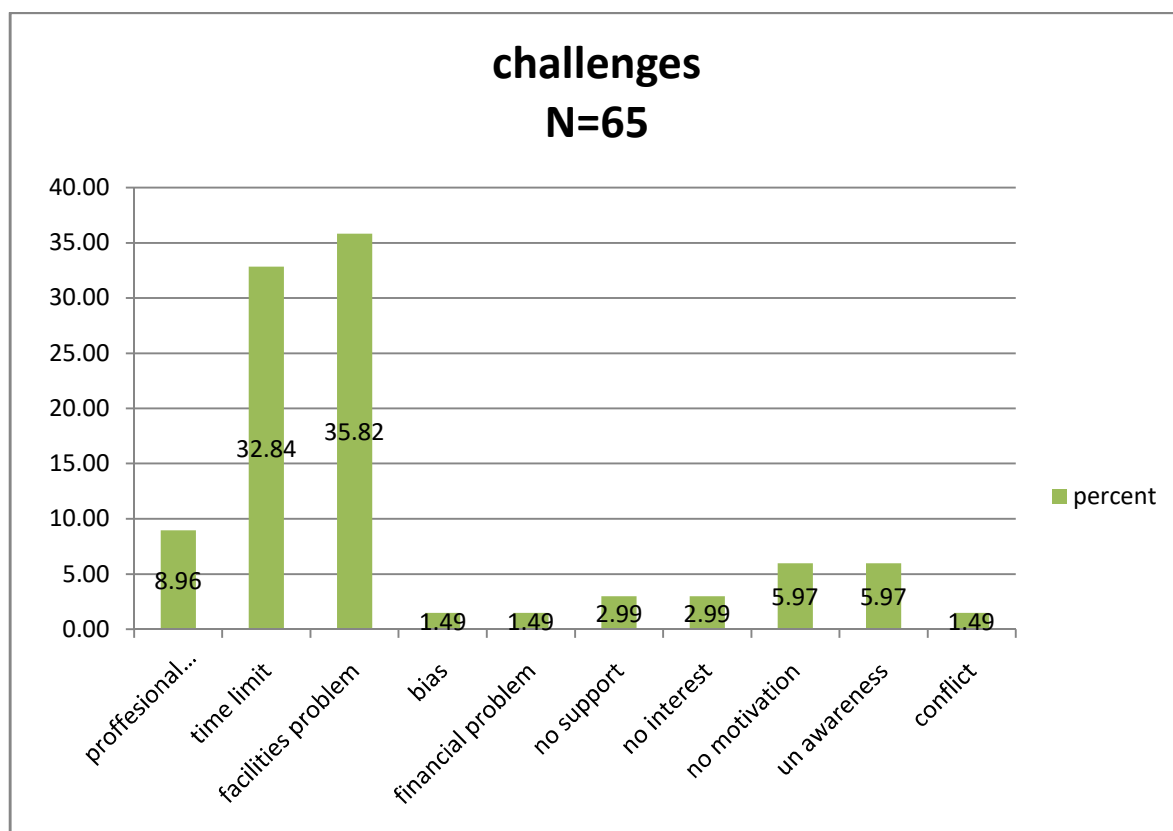


the function of physical activity participation...”(Interview, participant 25, line 11, p.5,2018-06-17).

This concurs with (WHO, 2018) which reported that there is a great influence played by physical activity to one’s health. Also, most of the participants reported that the employment opportunity can be obtained from physical activity for example “Coaching and teaching also are among the opportunities in physical activity participation...” (Interview, participant 4, line 16, p.5,2018-06-17). This is supported by (da Silva et al, 2018) who wrote that a physical activity especially sports and games can lead someone to grow economically in terms of being employed or self-employed. Moreover, the other opportunities identified are as important as (WHO, 2018 &Rod et al, 2018) reported, physical activity plays a great positive role in individual lives by promoting their health and reduce lifestyle diseases (Non-Communicable Diseases (NCDs)).

### 4.6.2 Challenges

In response to the objective four of the study, the participants identified different challenges they encounter for their participation in physical activity at the University as illustrated in figure 4.7 below;



**Figure 4.7 Challenges to participation in PA**

When the participants asked to comment on the challenges of participating in a physical activity, in response to question two of section D of the questionnaire, the following were their responses; majority identified facilities problem and time limit 35.82% and 32.84% respectively as the main constraint for their participation in physical activity at the University. Other challenges were lack of adequate trainers 8.96%; bias 1.49%; financial

problem 1.49%; lack of support 2.99%; lack of interest 2.99%; lack of motivation 5.97%; unawareness of the PA programs available 5.97%; and conflict 1.49%.

Facilities problem indicated to be the main challenge to participation as the big percentage of 35.82% of participants as reported.

Qualitative data in response to the question, the participant described the inadequacy of facilities as “I can say that there are many participants compared to the facilities available at our university...” (Interview, participant 3, line 5, p.4, 2018-06-17). Despite the fact that the participants reported having few facilities still they reported of having pressured by academics and lead to less time to PA as quoted below;

....taking into considerations the university time table especially academics studies learning to begin at 6:00 am and sometimes the classes go till 9:00 am hence, one is more occupied with academics works and has little time for exercise....” (Interview, Key Informant, line 7-12, p.11, 2018-06-15).

This is in line with (Ayfer et al, 2017) who reported the limited number of facilities available in most of the universities. This challenge caused by an increase in the number of participants in competitive games and sports that required built space. However in this study discussed about all types of PA regardless being competitive or not which indicated the same challenge of facilities, although this challenge cannot be generalized to all kinds of PA since in earlier findings it is established that, the university had free space that could accommodate non- team and competitive PA like jogging activities. Moreover, the time limit is evident from the participant as the majority of 32.84% of participants reported to be constrained by time. This concurs with (Peykari et al 2015 & Tom et al, 2015). Time for physical activity among university students is the main constraint to PA

participation, as a result of academic timetable. therefore; the university had to plan for the provision of reasonable time to promote PA participation.

#### **4.6.3 Other significant qualitative findings in response to question four of the study**

There are other significant themes emerged from the interview regarding objective four of the study whereby benefits, challenges, and solution to physical activity participation among students. These findings are presented, interpreted and discussed under the three sections below namely challenges, benefits and solutions.

##### **i) Challenges for PA participation among university students**

Under this section one theme namely unawareness/lack of knowledge emerged from the qualitative data as presented, interpreted and discussed below;

##### **a) Unawareness**

Awareness of the available programs, available equipment, and facilities, as well as awareness of the importance of PA participation, is the core issue for one to engage in physical activity. In the study participants narrated this challenge as quoted below;

“Some students don’t recognize the importance of physical activity.....”

(Interview, Key Informant2, line 15-16, p.7, 2018-06-15).

“Little awareness and education in PA...” (Interview, participant3, line 10, p.3, 2018-06-17).

“Unfamiliarity on how to utilize the equipment available.....” (Interview, participant 4, line 14, p.2, 2018-06-17).

“Wanafunziwengihawajui fursazilizopokatikamichezo, na wale wachachewanaozijuandiounawaonawanakazaniakuingiakwenye mambo yamichezo.....” (Interview, Key Informant, line 5-6, p.12, 2018-06-15).

“Many students do not know opportunities for engaging in sports, and those few who know are the one who does their best to participate in sports.. ..” (Interview, Key Informant, line 5-6, p.12, 2018-06-15).

From the above, it is clear that unawareness of PA constraints some of the collegians and this may imply that the university has not managed to emphasis PA Education to students. This is in hand with (Jingwen et al, 2015) study who argues that the more one does understand or is familiar with certain programs and their importance will be likely to influence one’s participation in the same. This study reveals that some students had little understanding of the PA programs available, also they established that they are not aware of how to use some facilities which are challenging to their participation. However, the knowledge towards the usage of facilities can have an effect on competitive PA. Although, this challenge could be as a result of whether they are freely given or not that can be challenging one to take part as it is revealed in (quantitative data) where the participants reported being uncertain if their accessibility if the facilities available. This is maybe the result of miscommunication of the PA programs at the University also the level of awareness of the same. However, this study recommends further investigations to conclude this fact.

## ii) **Benefits of Physical Activity (PA) participation**

When the participants asked of the benefits of participation in PA they acknowledged socialization, exposure, and enjoyment, rewards, leadership, and sponsorship to be among the benefits of PA participation. The following areas narrated by the participants:

### a) **Socialization**

Socialization refers to the process of internalizing the norms and ideologies of the society and it encompasses both learning and teaching and thus the means by which social and cultural continuity are attained. The participant identified in their narratives that they get to socialize through PA participation as the following quotes confirm;

“Get friends, it brings about cooperation...” (Interview, participant 8, line 10, p.4, 2018-06-17).

“Yes, there are like strengthening social relations...” (Interview, participant 5, line 15, p.5, 2018-06-17).

“Like sports improve good friendship and relationship among the participants...” (Interview, participant 1, line 16, p.4, 2018-06-17).

“...participation leads to Creation of friendship.” (Interview, participant 6, line 5, p.3, 2018-06-17).

The above quotes confirm that the participants understand the role of physical activity as helps in socialization as identified by (Alex&Mark, 2017) pointed out that socialization is important to process in the forming of personality.

## **b) Exposure**

Exposure refers to the state of experiencing something because of being in a particular situation or place. In the study, participants narrated to get exposure when they participate in PA. The following quotes are direct narratives of individuals on what they get:

“Participation out of university in competition...” (Interview, participant 26, line 16, p.3,2018-06-17).

“...yes, there are opportunities like Inter universities opportunities like in sports competitions...” (Interview, participant 19, line 10, p.4,2018-06-17).

“Visiting foreign countries and see how other civilizations are doing in different physical activities...” (Interview, participant 15, line 20, p.5,2018-06-17).

“One can get the opportunity to participate in TUSA games, intercollegiate participation... One can get exposure.” (Interview, participant 11, line 16, p.4,2018-06-17).

“...kuna opportunity kwamfano shirikisho la michezoyavyuo vikuu duniani FISU kunabaadhiyawachezaji huwa wanapata opportunity miakaya 80 kunawanafunzi walienda kwa ajiliyamashindano ya universities.... .” (Interview, Key Informant, line 21-1, p.11-12, 2018-06-15).

“...there are opportunities for example in the world university games(FISU) there are some of the players who get opportunities,for example, in 80’s thee are students who went abroad because of the games.....” (Interview, Key Informant, line 21-1, p.11-12, 2018-06-15).

From the above quotes, it confirms arguments in the study done by (Maslach, 2018) that, different experiences such as lifestyle and characteristics can be gained from exploring different parts of the world and interactions with other people. Since PA activities involve people's interactions especially competitive and team activity, hence exposure and other people's experience sharing is possible through it.

### **c) Enjoyment**

Enjoyment is a feeling of pleasure or happiness and satisfaction caused by doing something you like. Participants explained what they get from participation in PA as happiness or pleasure as the following quotations confirm; “When I participate I get enjoyment...” (Interview, participant 12, line 9, p.3,2018-06-17).

Physical activity is part of entertainment where one can get happiness and forget stress, especially in games and sport. The above confirms what (WHO, 2018) pointed out for sports for all. Where the report identifies that games and sports should be engaged by each and everybody to maximize their happiness. The above also is in line with (Robert & Daniel, 2018) who explain that physical activity leads to happiness and individual who do physical activity regularly live a happy life.

### **d) Rewards**

Reward defined as a thing given in recognition of service, effort or achievement to someone. In the study, the participants indicated to be influenced by the recognition of their effort as the following quotes indicate; “I like that all who participated are rewarded...” (Interview, participant 11, line 23, p.4,2018-06-17). Also, “....when you do well in sports you get rewards...” (Interview, participant 10, line 17, p.2,2018-06-17).



Rewards are among the motives that can enable one to do better in a certain thing. The above quotations imply that participants are motivated by the rewards gained from PA participation at the University. This concurs with (Mohit& Ashutosh, 2017) who pointed out that, motivation plays an important and great role to influence individuals for physical activity participation especially in the constricted schedule of academic work as a university student. This study indicates the importance of rewards as participants established that, they do PA with the expectation of rewards which are given by the university to them.

#### **e) Leadership**

Leadership is the quality of influencing the attainment of the goal set. Participants in the study described the leadership opportunity that can be acquired through participation in PA. This is confirmed by the following quotes;“...also leadership can be attained and recruited in physical activity participation...” (Interview, participant 24, line 20, p.5,2018-06-17) as well “I got leadership i.e. I was captain of the soccer team...” (Interview, participant 8, line 13, p.4,2018-06-17).

Leadership is an important aspect in individual life either to be a leader or to be lead as (Ashley, Todd&Krista, 2018) pointed out that, a physical activity especially sport and games has a great influence on someone to gain leadership traits as sports can teach leadership. Therefore, it is not only that individual can show their leadership skills through PA but also, can learn how to lead especially in Sports where the leadership traits are practically trained in a team activity like being a captain in the team enable one to show and train others humanity and fairness in the game.

## **f) Sponsorship**

This means to support a person, organization or activity by giving money, encouragement or other help. Participants narrated that; their participation in PA can help them get sponsored as the quotes below indicate;

“I got Sponsorship when I participated in swimming activity and got more trophies...” (Interview, participant 2, line 18, p.5,2018-06-1}).

“...karibia kila mwaka kuna wanafunzi wawili wanaopata opportunity yakushirikimashindanoyadunia na pia wanaingia kwenye drooyakupatascholarshipzamasomounaona...” (Interview, Key Informant, line 3-4, p.12, 2018-06-15).

“...almost yearly at least two students get the opportunity to participate in FISU and also have a chance to get academic scholarship.....” (Interview, Key Informant, line 3-4, p.12, 2018-06-15).

The above quotes agree with (Millan, Djurdjica, Nikola&Miroslav, 2018) physical activity (PA) are most events that attract donors and one who participates in that can get sponsorship easily. Also (Michael et al, 2018) argue that most individuals are likely to be attracted by sponsorship found in sports and games as the participants narrated in the above quotes.

### **4.6.4 Solution to the challenges**

The participants in the study after narrated the challenges for participation in PA; they suggested solutions for the challenges and how PA can be promoted better as follows;

**a) Employment of more experts /personnel especially female**

Participant in the study suggested having more personnel for PA at the university which would smoothen the management of programs. The quotation below confirms the above;

..tumeomba kuongezewa walimuwamichezohasawa kike ilikuwapa motivation wanafunziwakike huenda hawashiriki kwa sababu wengiwalimu waliopo niwakiume maybe huezi kujua japo siamini sana kama hivo lakini tumeomba hiko kikifanikiwa nafikiri labda participation itaongezekazaidi... (Interview, Key Informant, line 22-2, p.6-7, 2018-06-15).

...We requested more sports and games tutors especially female tutors in order to motivate female students maybe they can participate, simply because most of the available personnel are male, you never know though I don't much believe so but we have requested that and if will be considered maybe participation rate will mount...(Interview, Key Informant, line 22-2, p.6-7, 2018-06-15).

Female personnel was suggested to be provided as the results show female student are vulnerable to physical inactive than male students (c.f. observation and questionnaire findings). The above concurs with (Ayfer et al, 2017) findings, where pointed out that qualified personnelis among the determinants of the level of PA participation in which practitioners or implementers of PA interventions should consider. More so, their management skills have a big advantage to influence one to participate in PA.

**b) Introduction of PE units in other courses**

The participants in the study narrated the importance of introducing PA units in other courses as it will promote participation in high levels. This is evident in the following quotations;

For me, would be better if the university to introduce a PA course unit to each faculty so that students can be able to understand what physical activity is and be able to participate in them (Interview, participant 7, line 6, p.4,2018-06-17).

If possible the government and experts should start teaching us about physical activity and physical education from lower levels and provide exams in order to draw attention to the importance of PA without using any force over it at this level of the university. (Interview, participant 4, line 13-16, p.3,2018-06-17).

Like for communication skills and life skills also physical activity should be introduced in the syllabus from primary to secondary schools. Interview, participant 16, line 10-11, p.5, 2018-06-17).

You see the curriculum indicate PE to be taught in schools but it has no examination so I would like to say that this is the one that cultivates PA so it is important to be examinable so that one is motivated and aware to do PA from lower levels of schooling because now can see the importance of it. And also I suggest that in order to solve the problem of inactivity if not possible to have PE as a subject which enables PA then they should consider having topics about PA in other subjects from lower levels of education then challenges for physical activity participation will be solved Interview, participant 8, line 13-16, p.9, 2018-06-17).

The above quotations indicate the need for other means of promoting physical activity through teaching it as part of normal courses and subjects. This finding concurs with what (MooSong&Bradley, 2018)found out, whereby as the introduction of PA to the university curriculum enabled an increase in rates of physical activity participation also

(England, 2014) argue that examination of PE subject at school arouses the awareness and motivation of physical activity participation among students. Therefore, this suggestion would work since the PA units are not necessarily to each student rather only PE students in this study case. It is anticipated that the inclusion of PA units can work however, evaluation of this is recommended.

#### **4.7 observation of Physical Activity environment**

Two main issues were revealed during observation made in the time the study was conducted at the university involved. These were; the supportive environment for physical activity and the status of facilities used (indoor and outdoor).

##### **4.7.1 Availability of supportive environment for physical activity**

The first observation was that there was an abundance of the physical environment that can support physical activity participation among students. These include the free space the university has and its geographical nature which includes hills and valleys that force an individual to do physical activity without anyone else influence. Also, different flyers on notice boards that advertise different physical activity programs that were conducted at the university were observed.

##### **4.7.2 The status of facilities used**

During the observation, different facilities used for physical activity at the university both indoor and outdoor facilities were seen. Outdoor facilities observed were in average condition mostly and some were in excellent condition like the basketball courts, lawn tennis court, and the netball court. The indoor facilities also were in good conditions i.e.

gymnasium, and table tennis equipment; except for the swimming pool which was closed and under maintenances.

As mentioned earlier the free space for participation was in abundance for other physical activity. And the mentioned facilities indoor and outdoor are supportive in sport and games kind of physical activity though not limited to only those (*c.f.* qualitative data).

#### **4.8 DISCUSSION OF THE FINDINGS**

This section presents a general discussion of the findings. The discussion is built on the result analyzed, presented, and interpreted in the previous section. More so, it focuses on what the researcher found in answering the questions of the study with the end goal of achieving the objectives of this study as stated in chapter one.

##### **4.8.1 The utilization of the University's Physical Activity facilities and equipment**

Physical activity facilities have a great influence on PA participation among individuals. Ayfer et al, (2017) point out that, facilities availability is among the determinants of one's participation in physical activity. Although among the requirements for PA participation being facilities and equipment, the university had provided space for PA participation and renovating the facilities as mentioned by the participants. However, the participants described to not fully utilize the facilities available at the University. This concurs with (Rod et al, 2018) who point out that, young adults participation in PA still low and the utilization of facilities available in the various institution are not in use. The reason for less utilization of the PA facilities is the structure and system of life which reduces the priorities of youth to engage in Physical Activity rather than sedentary life due to technology advancement in this era. The fact that the facilities are not in use,

however, the participants pointed out the reason is the state of the facilities available which is not conducive lead to averaging the rating of the quality of facilities. Similarly, the study done by (MacKenzie et al, 2015) established that the low quality of PA facilities available hindered the utilization of the same hence low participation rates. However, Wahome and Wanderi, (2011) wrote that the facilities quality has no significant influence on physical activity participation. The participants' elaboration concurs with Wahome's study whereby some participants established that the participation in PA doesn't rely much on the quality of the facilities rather the space available of which the university does provide. Additionally, Prins et al, (2012) indicated that the availability of facilities like parks and sports grounds were not associated with physical activity participation reasonably the time allocated for leisure activity had a great impact on PA participation among individuals in the population. Back to the study, the data indicate that there are time constraints for PA participation among individuals as described by participants which hindered the utilization of the facilities. Moreover, Pengpid (. 2013) points out that the utilization of the facilities available can be hindered by a variety of factors among them being interpersonal constraints including reinforcement from the significant others (i.e. spouse parent, teachers/trainers). Furthermore, the participants added that they are unaware of physical activity programs and how to use the facilities which may have lead to low utilization of facilities available. However, PA participation is compulsory in primary and secondary schools than in Universities in most of the African context (Mwisukha et al, 2011). in view of the fact that the university is an important setting for developing habits of individuals, it still has a chance to make use of facilities available for promoting physical activity

participation by providing vibrant awareness education on physical activity for the individual. Therefore, the university has to look for systematic well-scheduled competitions and structured intra and inter-universities physical activity programs which can provide reasonable time for the utilization of the facilities available to promote PA participation among the University Students and the community.

#### **4.8.2 Supports offered by the University for Physical Activity Participation among the students**

Support offered by different persons to enable one to participate in PA is an important aspect of the population. The supports influence health behaviors i.e. Active lifestyle which maintains one's physical and mental health (Israel & Schurman, 1990). Support offered to individuals stimulates his self-efficacy as pointed out by Bandura, 1986) that, self-efficacy stimulated by the role model's actions and behaviors (i.e. administrators and managers). Moreover, the PA participation rate among person increases as a result of supports offered to them (i.e. instrumental, informational, and emotional support). In the study the participants established various supports offered by the university including informational support whereby the participants described being provided with the emotional support including provision of rewards as a recognition of good performance in PA programs, instrumental supports offered included provision of space and available equipments and facilities freely, other included employment of qualified personnel in managing PA programs. Also, informational support was offered whereby the participants reported being provided with information on PA events and programs available through their departments and notice boards as well as social networks like Whatsapp, Facebook, and Instagram. The findings are congruent with (Israel,



1990) theory that states that, different supports enable individual participation in PA if they are well provided. Moreover, Kubayi and Surujil, (2014) wrote that offers for PA have a great influence on PA participation among the population. Additionally, the participants in the study established that they are likely to participate more in PA if the supports are well offered by the University (c.f figure 4.5). However, Roy (2015) reports that, for all supports offered for PA participation to function, then the individual has to be intrinsically motivated first. Furthermore, Knox et al, (2015) points out that, Education on the importance of PA has an important role to an individual to be intrinsically motivated to do exercise whereby, added that the employer who educates his employee on PA participation is likely to use less effort to embrace individuals through expensive support offers for one to participate in exercises. Notably for most of the universities are experiencing little budget for PA and sports (Schlessner, 2014). Therefore, they need to use alternative means of providing PA education in line with the established support. Also, participants in the study established that they are provided with jogging clubs which reinforces their participation in PA. This result is in line with (Telford et al, 2015) who points out that, the formation of various PA clubs a great impact on participation among people.

More so, students are influenced by several factors to participate in PA including facilities, their social environment, time availability and nature of academic pressure (Deliens, 2015). Although, all the mentioned aspects almost are offered by the university with the exception of time for PA participation which was identified as constraining to PA participation as the participants narrated that *time is not visibly offered*. Deliens et al (2015) wrote that in order to promote PA among university students there is a need to

incorporate *PA time* in the curricula. Additionally, Sallis et al (2012) point out that, modification of environment and policies are highly needed in order to meet the requirements of promoting PA in this era of advanced technologies and life priorities of youth. Similarly, the study's data supports that whereby the participants described the implementation of the sports policy at the University which aims to promote PA participation of which in past years was not in action. Additionally, the finding concurs with that of (Gorobets, 2015) who established that the implementations of policy programs for PA raised the level and awareness of PA participation. Therefore, the policy enacted and implemented at the University for PA promotion needs to consider incorporation of time which seems to be the constraint to PA and lag behind the other supports offered hence to seem malfunction for PA participation.

#### **4.8.3 Student's perceptions of PA**

A clear understanding of PA among youth is of great importance (Biddle et al, 2004). However, an individual's attitude towards something drives his action towards it (Roy & Brad, 2015). Consequently, the way one interprets and perceives Physical Activity participation plays an important role in participation in the same. In the study, the participants established their perceptions towards PA participation whereby some identified that participation in PA is the responsibility of each individual in maintaining their health. This concurs with the recommendation of (WHO, 2018) which reports that each individual recommended maintaining their health through PA participation and other related active actions. Additionally, Tylor (2012) wrote that, most of the students and teachers in his study perceived PA to be enjoyable and of great benefits to their bodies and mental health development. Similarly, Peguero (2011) pointed out that, the

positive perceptions of PA as the personal responsibility lead to an increase in participation rates in the same due to the fact that, most of the students viewed PA as an important aspect of their Educational achievements which results to better health. However, this positive attitude towards PA participation should be emphasized in the foundation stages of individual development so that to keep the pace of liking and self-motivation towards PA participation. Although in the study some participants narrated PA participation to be part of students who are specializing in Physical Education and Sport science and not other students. This implies the scantiness of understanding towards PA participation because these participants seem to isolate themselves from the responsibility of maintaining their health. This is congruent with that established in (Schlesser, 2012) study who pointed out that, participation in PA tends to decrease due to discouragement received to athletes students who fail in their academic study caused by the poor balance between PA and academic staffs. Also, Sohn (2018) argues that negative impacts associated with PA participation especially sport and game activities may be related to types of activity offered and poor organization by the respective institution. Although participants established negative perceptions towards PA participation as it is not their responsibility since theirs is to do their specialization courses, still, most of the participants perceived PA participation positively as they understand clearly benefits obtained from it. Similarly, Soe (2014) wrote that the learning outcomes set by the university are met directly or indirectly through the experiences of learning gained from participation in PA. The rationale for it being the social, economic, as well as healthy (body and mental) benefits obtained from participants in PA. Therefore, there is a need to

encourage students to participate in PA and spread to them positive vibes of PA for their benefit in order to promote their participation rates in the same.

#### **4.8.4 The Benefits, challenges, and solutions to physical activity participation**

Physical Activity (PA) has several benefits as the participants identified. Mainly benefits identified include; healthy, employment, socialization, exposure, enjoyment, and others being sponsorships, leadership, and rewards. The established benefits concur with various studies that indicated and shown the importance of PA to the population for example, (Soe, 2014) wrote that, PA participation help students get job opportunities easily. Torrence et al, (2002) identify that, PA participation provides students with the chance to apply leadership skills also, established that it helps the students to solve the problems of unemployment. Also, Garcia, (2012) points out that, there are different opportunities for participating in PA especially games and sporting activities including healthy (mind and physical) living. Furthermore, the study is congruent with the (WHO, 2018) report that indicates various importance of participating in PA for human being development were healthy, employment, socialization, and enjoyment are vibrant.

However, there are diverse challenges identified by the participants including, time constraints, inadequate facilities, inadequate PA personnel also unawareness of PA programs. All mentioned above are harmonizing with different studies that found the same as (Ayfer et al, 2017; Peykari et al, 2015 & Tom et al, 2015). Although all the mentioned are constraints to PA participation among students, still other participants reported their individual priorities hinder them to participate in PA. This implies that education on the importance of PA for individual benefits needed. However, time

feasibility should be made available for one to participate fully in PA at the University (URT, 2004).

More so, the participants suggested different solutions to the challenge they face for PA participation including, the establishment of PA units in the university normal classes which will permeate clear awareness of the part played by PA for individual benefits hence an increase in PA participation rates among the students. This is in line with (WHO, 2018) report that confirms that awareness-Education on the important position of PA participation has a great chance to increase participation rates. Also, MooSong et al, 2018 and England report, (2015) found out that the introduction of PA units and examination of the same in the subjects arouses awareness and motivation of PA participation among the students. Therefore, if this suggestion has to be worked on, it can increase PA participation rates among the students. However, the initial foundation in the early years of individual development should be thought about before they are young adults and adults. Moreover, the participants established that there is a need to add more facilities and professional PA personnel for Managing PA at the University. This is in line with (Ayfer et al, 2017 & Millan et al, 2018) studies who argue that facilities and adequate qualified personnel are among the determinants of the levels of PA participation among individuals also implementers of PA participation interventions that should consider. However, self-determination among individuals is the main accelerator to the success of the solutions suggested because self-drive to PA participation makes easy for one to practice the same. Therefore, the University and other practitioners should seek to cultivate the culture of PA practice among the population that will be self-driven.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS**

#### **5.1 Introduction**

The previous chapters (one through four) discussed the introduction, literature review, design and methodology used in this study, also presents, interprets and discussed the findings. This chapter contains the restatement of the objectives, the summary of findings, conclusion, and recommendations.

#### **5.2 Summary of findings**

##### **5.2.1 Utilization of the university facilities and equipment**

The findings show that the majority of the students i.e. 65% participated in any physical activity and this signifies that they have developed the habit of participating in PA and have knowledge of the importance of PA. In the study, male participated more in team activity and female conformed to participate more in an individual activity. This seems to be the most activity the university has exposed the students to and has more facilities and space for it.

The findings also show that despite the location of residence and the majority being off-campus residents by 59.3%, the majority indicated to use the university grounds for physical activity by 67.3% of the participants. The quality and conditions of the facilities indicated to be average by 46% and 50% respectively.

Furthermore the actual utilization of the facilities and equipment indicated to be low, despite the most student to show that they use university grounds for physical activity participation, whereby majority indicated to rarely utilize the university facilities by

33% of participants indicated rarely use of the same on a 4-point scale of measurement (rarely to always). The same is confirmed by qualitative data from the narratives of participants.

### **5.2.2 The offers provided by the university to support student PA participation**

The study reveals that the university provided a variety of offers to support PA participation among the students at the university. Though time offers indicated to be not well offered by the university whereby the majority of the participants disagreed with the presence of such offers by 64% which would be important for enabling students participation if were to be adequately provided. The narratives of participants also confirm the inadequate time for PA. Other offers indicated to be well provided by the university i.e. informational offers that included advertisements in different forms, awareness of physical activity programs conducted at the university, recognition of good performance in PA, and free provisional of facilities and equipment for PA.

Furthermore, the study reveals that, the presence of offers that the university provides enables individual participation in PA as indicated by 70% of the participants that the offers enable them to participate in PA at the university.

### **5.2.3 Students' perception of PA participation**

The study indicates that the student had different perception of Physical Activity participation at the university whereby most of them indicated to perceive it as a function and responsibility of the Physical Education students as they narrated to have not enough time for it because it is an extra responsibility to them and rather they do concentrate with class courses that are examinable so that they can excel into them while PA is part of

them when they have free time after classes which is very infrequent hence, lead to giving less priority to the PA. Although others indicated to perceive the physical activity as part of their life and Education because they contribute to their health fitness and therefore this reason motivates them to participate in the same.

#### **5.2.4 challenges, and solutions to participating in PA**

The study notes that students understood the variety of benefits obtained from participation in PA. The majority indicated to have a chance of employment, health benefits and socialization ranked to be the main. Other opportunities identified to be; exposure, enjoyments, rewards, leadership, sponsorships opportunities, and talent development.

Still, the study reveals that the students are mainly constrained by time which is associated with the pressure on academic subjects which results in a lack of time for PA. Other challenges revealed to be, inadequate facilities, inadequate professional trainers, lack of interest, lack of motivation, lack of support, financial problem, bias, conflict, and unawareness of the physical activity programs.

Lastly the participants in the study suggested solutions for the mentioned challenges as follows; they suggested the employment of more qualified personnel especially female because even though the available is not enough but still are the only male which might be causing few female students to participate in the PA so the addition of more personnel would stimulate and motivate female as well as all students to participate in PA at the university. Moreover, the participants suggested the introduction of PA as part of the university curriculum apart from Physical Education, Whereby all the students can



involve in PA as part of their study courses. So the introduction of PA in the curriculum as part of a topic or unit will stimulate awareness and interest for PA at the university. Also they suggested having topics in the normal syllabus in the lower levels of Education (primary and secondary school) so that to create awareness of the importance of PA earlier and have foundation of the same once one comes to higher levels of Education will be self-motivated aware of the PA programs hence participation rate will be high. Additionally, the participant suggested that facilities and equipment should be made available to cater to the number of students who are there at the university. Lastly, they suggested that the university should consider having more time and events that will stimulate participation rates in PA so that every individual has free time for participation.

### **5.3 Conclusion**

Most of the participant students were off-campus residents. They were also rarely users of the physical activity facilities at the university. Therefore the university facilities available were not fully utilized.

The university offered different supports for PA participation among students, however, enough time was not visibly provided.

Most of the students perceived physical activity participation as for sports and games; few understood physical activity participation to be any bodily movement that leads to energy expenditure and that can help in maintaining good health as well as that participation in PA is individual responsibility.

The benefits revealed most from PA participation are employment, healthy and socialization however the most mentioned challenges for participation in PA are time limit, inadequate qualified personnel and facilities inadequacy.

Generally, The University had put a variety of strategies for PA participation for health inclusive the implementations of the sports policy which were not in consideration. However, the utilization of the PA space available still low which may imply the malfunction of the strategies put. Therefore, there is a need to incorporate the suggestion made by the participants regarding how PA can be promoted.

#### **5.4 Recommendations of the findings**

In light of the findings and conclusion drawn, the following recommendations are suggested:

PA participation by University students is a crucial issue that should be emphasized by the University. Providing opportunities for participation gives the University students the morale to do more physical activity for their health i.e. mental and body.

The university should ensure that time is well provided for participation in PA by adjusting the class timetable to fit and give sometimes for individual participation fully in PA out of class activity. Since students are aware of the importance of PA and their participation is low, the university management should emphasize participation by visibly giving time for participation in PA at the university. One way of increasing the time for the PA participation rate is to provide a curriculum that will include PA programs course units to make sure that students are aware of PA.

The University should ensure to provide enough facilities for PA participation in relation to the students available.

The Ministry of Health and health organizations should consider partnering with the University in promoting PA participation among individuals. This could prevent the increase of Non-Communicable Diseases (NCDs).

The university leadership, students and sports and games personal should create ways that all maximize the use of the space available, and this can be reached if the curriculum will be revised to provide units of PA programs in the class courses.

The Ministry of Education, Tanzania Commission for Universities (TCU), and the Education Sector Development Programme should revise the curriculum by considering providing units of PA in the courses. This could increase awareness of PA and raise the participation rates among university students.

Personnel employed by the University should emphasize participation in PA by developing various programs that can enable each student to participate in PA apart from sport and games activity.

Since the participants indicate the inadequacy of professional personnel for PA, it would be better if the university management would consider employing more personnel at least each school to have one, instead of having only two personnel for the whole big university.

Administration and staff should promote PA participation in assistance with Physical Education staff and students.

The policymakers should formulate policies that will stimulate PA participation in an Education setting. This could help curb the risk of inactivity in the country and among individuals in all occupations. Hence, it promotes mental and physical health among individuals.

### **5.5 Recommendation for further studies/research**

The researcher recommends the following for further research;

This study focused on University students from one African University, namely UDSM. In order to get a wider understanding of the strategies put to promote PA participation among university students, I recommend that this research should be replicated in other universities.

Even though the study was carried out in one African University (UDSM) it was a descriptive study. It would be significant if the same study is done to establish a significant relationship between the strategies put and the participation rate.

The study was specifically aimed at evaluation of the strategies put by the University in promotion of PA participation among students. It will deepen our understanding of the strategies put if the effects of the strategies put by the university to the student participation are also explored.

The approach taken in this study is concurrent triangulation mixed methods (questionnaires, semi-structured interviews, and observation). The same study could also be done using a different methodology as it could extend the depth of findings.

Since the study took a short time, then the future study should take longer to grasp the strategies the university put to promote physical activity

The future study should include more universities to understand the broader issue of promoting physical activity participation among students.

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**APPENDICES**

**APPENDIX (A): A Map of the Dar es Salaam Region.**



*Source:* <http://coastalforests.tfcg.org/tz-dar-ns.html>, 2018

## APPENDIX(B): Sample size calculator

### Sample size calculator

Calculate the number of respondents needed in a survey using our free sample size calculator. Our calculator shows you the amount of respondents you need to get a specific margin of error for a specific population. Discover how many people you need to survey to obtain a specific margin of error. Calculate the margin of error based on your sample size.

**CheckMarket**

Features

Services ▾

Pricing

Resources ▾

About us ▾

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Q

#### Calculate representative sample size

Sample size		
Population size:	<input type="text" value="28000"/>	How many people are in the group your sample represents? (The sample size does not change much for populations larger than 20,000.)
Margin of error:	<input type="text" value="5%"/>	This is the plus-or-minus figure usually reported in newspaper or television opinion poll results. For example, if you use a margin of error of 4% and 47% percent of your sample picks an answer, you can be "sure" that if you had asked the question to the entire population, between 43% (47-4) and 51% (47+4) would have picked that answer.
Confidence level:	<input type="text" value="95%"/>	This tells you how sure you can be of the margin of error. It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the margin of error.
<b>Required sample size:</b>	<b>379</b>	Number of respondents needed
Estimated response rate:	<input type="text" value="80%"/>	What percent of those asked to participate in the survey will do so. Response rates vary greatly depending on many factors including the distribution method (e-mail, paper, phone...), type of communication (B2C, B2B...), quality of the invitation, use of incentives, etc.
<b>Number to invite:</b>	<b>474</b>	This is the number of individuals out of the population you need to ask to participate, in order to achieve the required sample size based on the expected response rate.

Source: Checkmarket, 2018

**APPENDIX(C): Consent forms****AGREEMENT FORM FOR THE INSTITUTION**

To be completed by the DVC of the selected University

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jaribuida@gmail.com

Dear sir/madam

Re: PERMISSION FOR YOUR INSTITUTION TO PARTICIPATE IN A RESEARCH ON PROMOTION OF PHYSICAL ACTIVITY PARTICIPATION AMONG STUDENTS AT THE UNIVERSITY OF DAR ES SALAAM IN TANZANIA

I am currently a postgraduate student enrolled for a Master's degree in Educational Research Methodologies and Management in the department of Educational Management and Policy Studies at Moi University. I am in the process of writing my Master's Thesis and the purpose of the research is to explore the strategies put by university in promoting physical activity participation among university students at the University of Dar es salaam in Tanzania. Your institution UDSM has been sampled to participate in the research study by the above Title. I am kindly seeking permission and your consent to conduct the study among university students, director of social services and games and sports coach and use of sports and games environment for observation in your university on the above topic. Your institution participation in the study is voluntarily.

The researcher will administer the questionnaire to the student, interview to the director of social services and games and sports coach; furthermore the researcher will observe the sports and games environments that will be part of the selected sample size. Tape recording will be used during the interviews to enhance concentration of the researcher, to be transcribed later. The study will not cause any harm to the participants and it is meant for only academic purposes.

Data collection process ethics shall be strictly adhered to and the collected data will be kept under lock and key and reported only as a collective combined total. No unauthorized persons will know the individual responses to interviews and questionnaires. The findings of the study will be published in international conferences and journals for the purpose of dissemination and adding new knowledge to the word of academia.

I promise that, the data to be collected will remain anonymous in all written reports via pseudonyms and anonymity. Data evidence will be destroyed soon after it has served the intended academic purpose.

My research proposal has been approved by Moi University and the Tanzania Commission for Science and Technology. The study will commence in May 2018 with the duration of one month. You are requested to feel free to ask question for anything unclear to you about this form, in case of any question regarding your rights as an institution kindly contact the researcher using the contacts provided above.

Your sign in this consent form is an indication that you have carefully read through the information provided on this form and that you have fully understood the researcher's study expectations.

### **Consent**

I have read and understand the provided information and have had the opportunity to ask questions. I understand that the participation of my institution is voluntary and that is free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree the institution to take part in this study.

**DVC'S signature**  ..... **Date:** JUNE, 2018

**Researcher's signature**  ..... **Date:**JUNE, 2018



## **INDIVIDUAL PARTICIPANT CONSENT FORM**

### **Introductory letter**

IDA JARIBU ANDREW  
DEPARTMENT EDUCATIONAL MANAGEMENT AND POLICY STUDIES  
P. O BOX 3900-30100 MOI UNIVERSITY ELDORET-KENYA  
+254740574887/+255759520544 E-mail addresses: [jaribuida@gmail.com](mailto:jaribuida@gmail.com)  
Dear participants,

Re: PERMISSION TO PARTICIPATE IN RESEARCH ON PROMOTION OF SPORTS  
AND PHYSICAL ACTIVITIES PARTICIPATION AMONG UNIVERSITY  
STUDENTS IN TANZANIA

I am currently a postgraduate student enrolled for a Master's degree in Educational Research Methodologies and Management in the department of Educational Management and Policy Studies at Moi University. I am in the process of writing my Master's Thesis and the purpose of the research is to explore the strategies put by universities in promoting sports and physical activities participation among university students in Tanzania

I am kindly requesting you to participate in the study by completing the enclosed questionnaire designed to collect information about yourself and strategies put by universities to promote sports and physical activities which will make the questionnaire to be divided into five sections.

If you have any questions about this project, feel free to contact the researcher using the contact given above

Thank you for your assistance in this important endeavour.

Sincerely yours,

Ida Jaribu Andrew

## CONSENT

### Participant's statement

I have read this consent form. I have had the chance to discuss this research study with my colleagues. I have had my questions answered in a language that I understand. The risks and benefits have been explained to me. I understand that my participation in this study is voluntary and that I may choose to withdraw any time. I freely agree to participate in this research study. I understand that all efforts will be made to keep information regarding my personal identity Confidential.


I agree to participate and provide cooperation in this study

Participant's signature: 

Date: June, 2018

### Researcher's statement

I, the undersigned, have fully explained the relevant details of this research study to the Participant named above and believe that the participant has understood and has freely given his/her consent.

Signature: 

Date: June, 2018

## APPENDIX (D): The Research permit

**TANZANIA COMMISSION FOR SCIENCE AND TECHNOLOGY  
(COSTECH)**



Telephones: (255 - 022) 2775155 - 6, 2700745/6

Director General: (255 - 022) 2700750&2775315  
Fax: (255 - 022) 2775313  
Email: rclearance@costech.or.tz

Ali Hassan Mwinyi Road  
P.O. Box 4302  
Dar es Salaam  
Tanzania

### RESEARCH PERMIT

No. 2018-242-NA-2018-132 3<sup>rd</sup> May 2018




1. Name : Ida Jaribu Andrew
2. Nationality : Tanzanian
3. Title : The Role of Universities in Promoting Sports and Physical Activities among Students in Tanzania
4. Research shall be confined to the following region(s): Dar es Salaam
5. Permit validity from: 3<sup>rd</sup> May 2018 to 2<sup>nd</sup> May 2019
6. Local Contact/collaborator: Dr. Joyce S. Ndabi, University of Dar es Salaam, Dar es Salaam
7. Researcher is required to submit progress report on quarterly basis and submit all Publications made after research.

  
 M. Mushi  
 for: DIRECTOR GENERAL

## APPENDIX (E): Interview codes

1 *Key informant (Friday, June 15, 2018, 11:13:51 AM)*

2 **Interviewer:** tafadhali unaweza ukaniambia Ufanyaji wa physical activity upo vipi/ trend of  
3 physical activity participation upo namna gani hapa chuoni?

4 **Informant:** labda hapa kuna kama aina mbili za student participation in physical activities nazo  
5 trends zao kwa ujumla. Kuna ambao wako natural motivated, yaani kutoka nyumbani walikuwa  
6 wakifanya mazoezi na walivofika hapa walig...s.. wakaendelea kufanya mazoezi, Kwa hiyo hao  
7 utawakuta wapo katika makundi ya individual kama jogging ile asubuhi sana na aerobics  
8 zinazofanyika ambazo sio official kule viwanjani, huwa wanaorganize wanajoin pamoja  
9 wanaingia. Kundi la pili ni lile ambalo ni (tunajaribu kuwahamasisha, kwahiyo unapowaeleza  
10 (umuhimu wamazoezi au physical activity) kiujumla pamoja na kujilinda na afya zao ndio  
11 unakuta, ili nifanye ili nisiugue ... watu wa jinsi hiyo wapo ambao mara nyingi tunawaita watu  
12 waoga wanaogopa afya zao zisiharibike, kwa hiyo utakuta watu wanaofanya ili wapunguze  
13 vitambi, wanataka wapunguze vifua wengine wanataka waongeze vifua sababu ya kuogopa  
14 pengine kuonekana na tumbo kubwa ni vibaya kwa hiyo kuna watu wa jinsi hiyo ambao factor

Comment [Ydah1]: sensitization

Comment [Ydah2]: explaining importance of physical activity

15 hiyo huwavuta ili wakafanye mazoezi. Lakini kwa pamoja kama sisi ngazi ya chuo, chuo  
16 cheneyewe kimeweza kuunda jogging clubs ambayo mfano, kwa wafanyakazi inaitwa jogging  
17 club, wamenunua tshirt zao, kwa hiyo kila siku asubuhi siku tatu kwa wiki, jumatatu, jumatano na  
18 ijumaa na siku ya nne ambayo ni jumamosi ambayo watu kila mmoja anafanya anavyotaka  
19 wanaingia kwenye aerobics (inayofanyika uwanjani sehemu za wazi kwenye viwanja vya chuo,  
20 Na kwa wanafunzi nao tuliwahamasisha wakawa wametengeneza makundi ya jogging asubuhi,  
21 kwa hiyo nao wanafanya japokuwa si sana saizi wamepungua, huwa wanaenda kwa msimu,  
22 mfano ukikaribia mtihani kuanza test zikianza zikibana hupunguza ile rate ya kwenda, kwa hiyo  
23 utakuta unakutana nao asubuhi ile wale wanaofanya mazoezi na waishatoka kule wanaenda

Comment [Ydah3]: formulation of jogging clubs

Comment [Ydah4]: free provision of free space

1

1 viwanjani kwenye uwanja wetu wa tennis, ukipita kama jumamosi unakuta wapo wengi  
2 wanafanya physical activities. Na wengine wanafanya physical activities kupitia competitive  
3 games kwa maana kwamba, kwa wafanya kazi mfano wana mashindano ya wafanyakazi inatwa  
4 SHIMUTA, kwa hiyo mtu mwingine anaona nikienda kufanya mazoezi na coach kaniona  
5 nimeenda kufanya mazoezi nami nimeenda kuchaguliwa niende kwenye mashindano ya  
6 SHIMUTA lakini kwa kwenda kwake kule sisi kama makocha tunawaona wanaenda chamsingi  
7 hatuungalii SHIMUTA, kwenda kwake kuna faida gani yeye naye anakuwa haelewi yeye  
8 anafikiria anaenda ili achaguliwe lakini kimsingi anaenda anafanya mazoezi hata anaaza



9 asichaguliwe. **vivyo hivyo kuna kundi lingine tuna michezo ya TUSA mfano mwaka jana**  
 10 **ilifanyika UDOM mwaka jana na pia tuna michezo yetu ya East Africa ambayo itafanyika**  
 11 **UDOM disemba kwa hiyo wanafunzi tukishawatangazia kuna hiyo michezo anaamua kuja bora**  
 12 **afanye mazoezi ili achaguliwe lakini kujilazimisha huko kufanya michezo ili achaguliwe**  
 13 **humsaidia kufanya mazoezi bila yeye kujua kumbe lengo lake achaguliwe kwenye timu kwa**  
 14 **hiyo ni njia nyingine inayomfanya mtu afanye mazoezi bila yeye kulazimishwa.**

**Comment [Ydah5]:** announce of competitive games

**Comment [Ydah6]:** announcements of the present programs

15 **Kuna kundi lingine la wanafunzi ambao wanakaa nje ya chuo, kila mtu anaamini pia pesa**  
 16 **inayotolewa kwa ajili yao huenda haitoshelezi, kwa hiyo kuna baadhi ya wanafunzi wanaona**  
 17 **wanafanya vitu kwa shida au kwa umasikini unakuta hawana hela wanatoka mabibo wanatembea**  
 18 **kwa miguu mpaka chuo main campus lakini wao wanakuwa wanajiona kama masikini kumbe**  
 19 **hawajui wanafanya mazoezi ambayo ni muhimu kwa maisha yao kuliko wangukuwa na hela**

**Comment [Ydah7]:** place of residence and little financial status

20 **hawajui wanafanya mazoezi ambayo ni muhimu kwa maisha yao kuliko wangukuwa na hela**  
 21 **sababu wangukuwa na hela wangukodi taxi wangepanda mashato na wangefika campus lakini**  
 22 **bado afya zao zisingekuwa ni nzuri hilo ni swala lingine pia linalo walazimisha wao kufanya**  
 23 **mazoezi bila wao kujijua wanafanya mazoezi wanajihisi tu wanatembea kwa vile hawana kipato**  
 24 **cha kuwawezesha wao kupanda usafiri. Na pi kuna kundi lingine la wanafunzi wanaoishi**

2

1 **magufuli hosteli wao hawana means yoyote ya usafiri kwa hiyo lazima watembee kwa miguu na**  
 2 **hapa ni almost three quarters kilometers kwa hiyo kila asubuhi lazima watembee kila asubuhi na**  
 3 **jioni warudi kwa miguu na kama anakuja asubuhi hana vipindi vingine lazima atembee kurudi**  
 4 **hosteli halafu jioni atembee arudi chuo na kama vipindi vimesambaa utakuta anaenda bwenini**  
 5 **mara nyingi na kurudi. Nanna nyingine ni ile hali ya ubinadamu si unajua hiyo hali haina saa**  
 6 **maalumu ya kujisaidia au kutoa uchafu mwilini na si unajua chuo chetu kina milima na**  
 7 **mabonde, ukitaka kwenda utawala inabidi upandishe academic bridge upandishe kule .ee...**  
 8 **kuna vyoo viko kule ndivyo unaviamini ni lazima upandishe huko kwenda kujisaidia ikiwa**  
 9 **ndivyo unavyo viamini, na wakati mwingie mtu kama haamini vyoo vya public lazima apande**  
 10 **milima arudi bwenini mfano magufuli hosteli unafanya shughuli zako unarudi kufanya hivyo ni**

**Comment [Ydah8]:** no provision of transport means from magufuli hostel

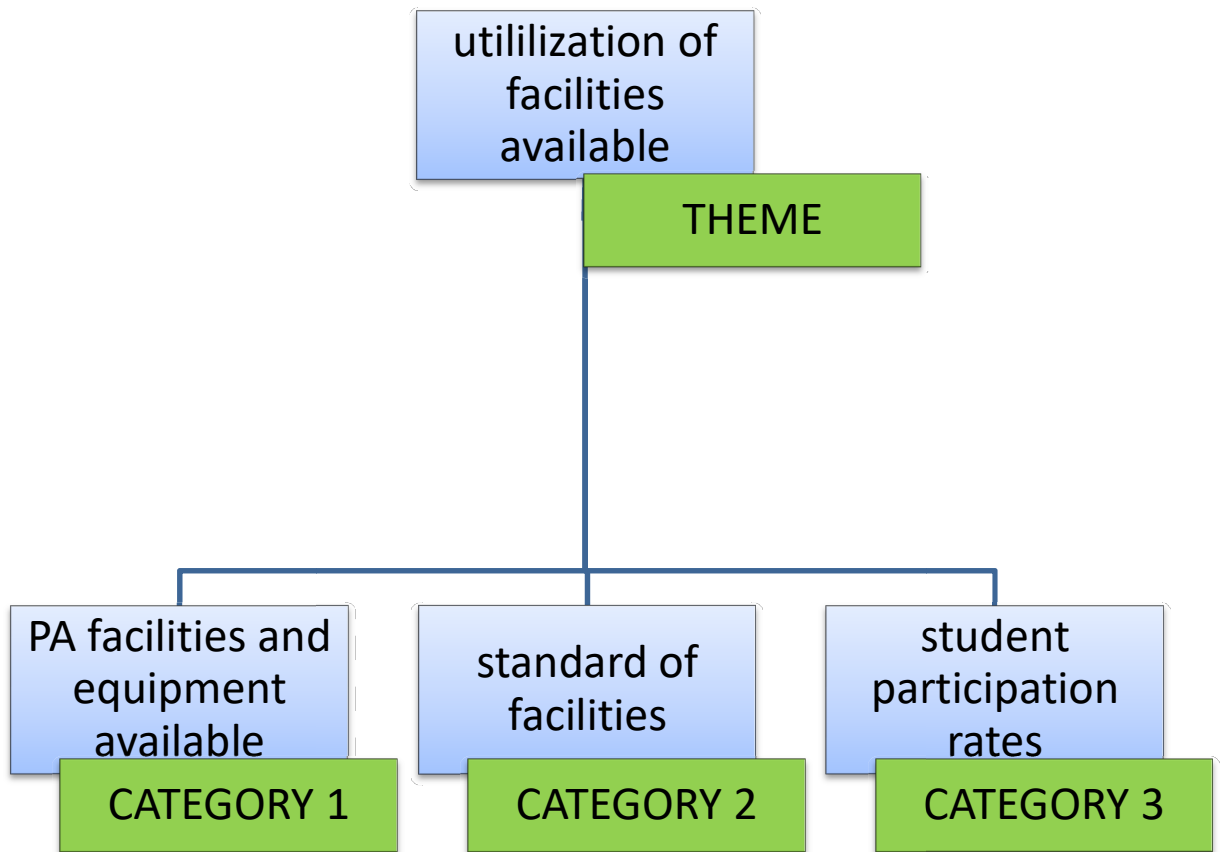
**Comment [Ydah9]:** ups and downs of the university environment

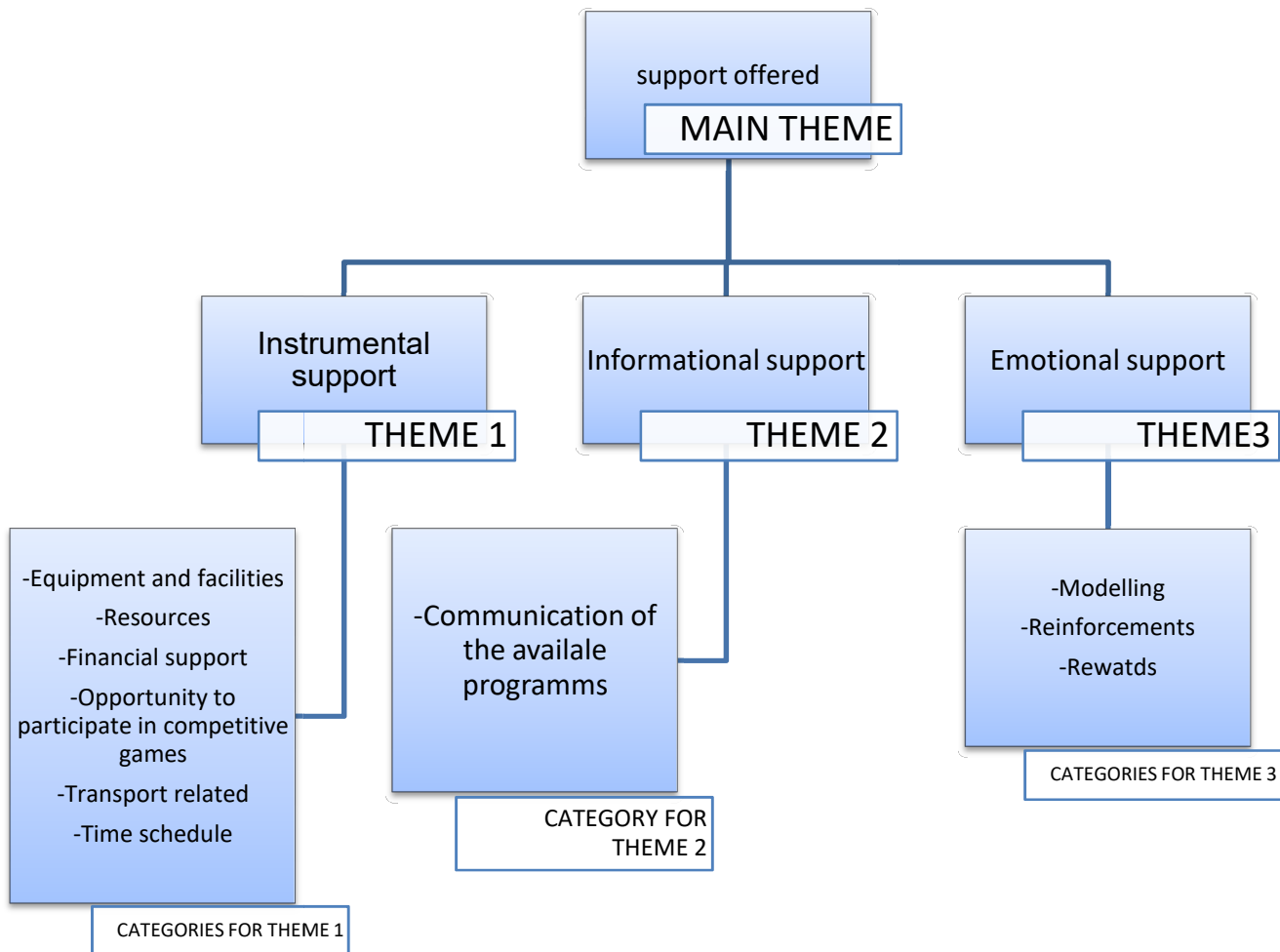
**Comment [Ydah10]:** washrooms location

- 11 mazoezi tayari bila kujua. Ukiachilia mbali wanafunzi wanakaa kwenye maholi ambayo ni  
 12 maghorofa kama hall two, hall5 ambazo ziina ghorofa hivo kupanda ghorofa mara kwa mara  
 13 inawasaidia wao kufanya mazoezi bila kujijua.
- 14 Wakati mwingine ni kupitia system ya mtandao watu wanakuwa wanatumiana mziki  
 15 nini..wanakuwa na simu mtu anakuta na earphone zake kwenye sikio akicheza ambapo huko  
 16 kucheza anafanya mazoezi bila kujijua hata akiwa njiani.
- 17 Na mara nyingi wakati wa mitihani, unakuta mwanafunz anatoka mabibo hostel anakuja kufuata  
 18 wenzie kusoma nao na kipindi hiki wanakuwa wameishiwa hela wanatembea kwa miguu hadi  
 19 campus na kurudi inayomsaidia yeye kufanya mazoezi bila kujijua, kwa hiyo kuna jinsi  
 20 mbalimbali zinazo,fanya mtu afanye mazoezi bila kujijua akiwa chuo.
- 21 Ukiachilia mbali hayo niliyoyaeleza lakini kuna tamko pia la kiserikali lililotolewa na makamu  
 22 wa raisi mama samia, yeye alitoa pendekezo kabisa kwenye sehemu za kazi na mashirika ya

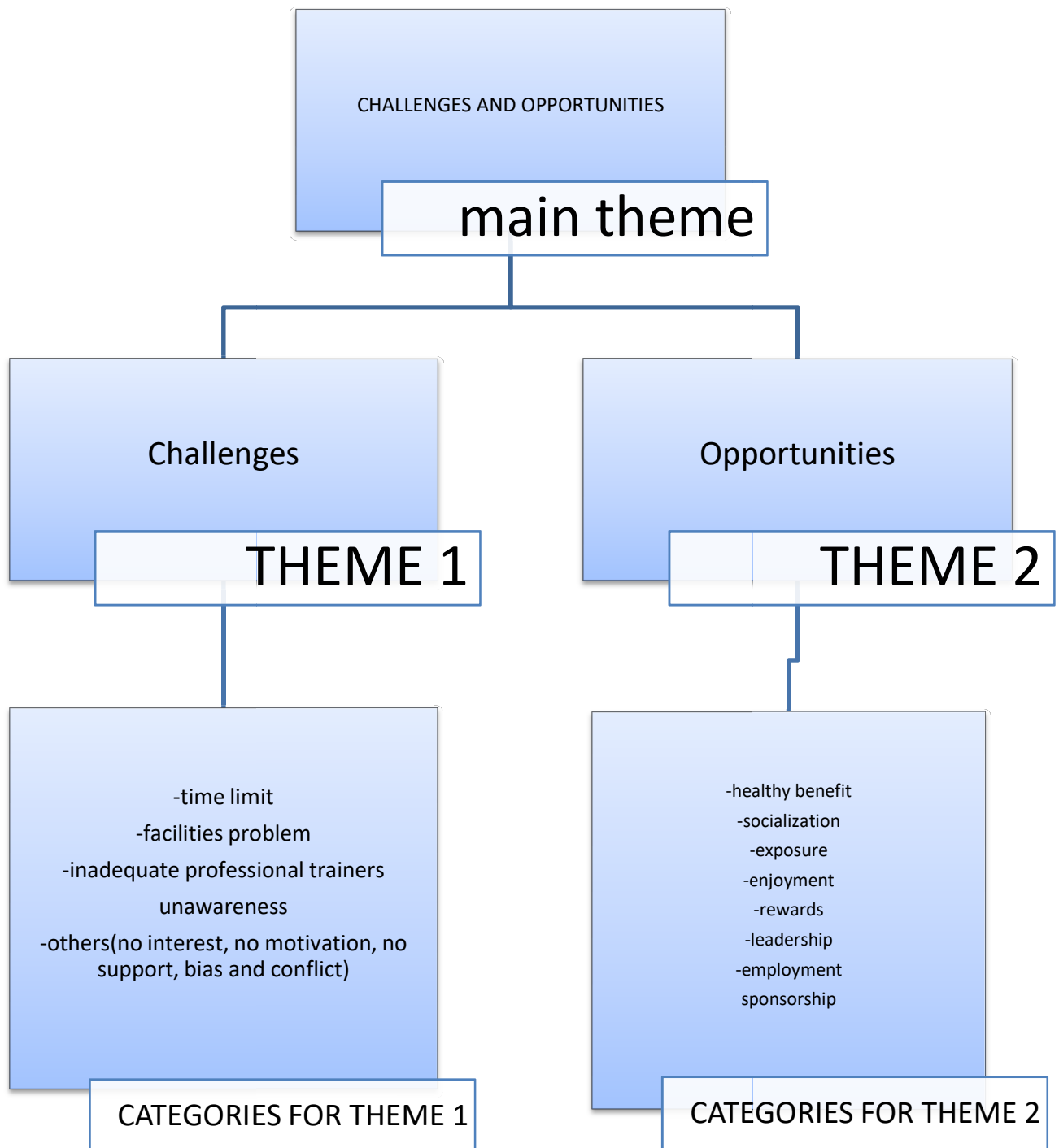
**Comment [Ydah11]:** students residence are high buildings with staires for exercise

**APPENDIX (F): Themes and categories**









**APPENDIX (G): Questionnaire for students**

**The questionnaire to be filled by the student**

**SECTION A: Background information**

**Tick (√) the appropriate response**

1. I am a/an <input type="checkbox"/> Undergraduate Student <input type="checkbox"/> Post graduate student
2. Where do you reside <input type="checkbox"/> campus <input type="checkbox"/> off campus
3. Gender <input type="checkbox"/> Male <input type="checkbox"/> Female
4. Which school/ college/institute do you belong <input type="checkbox"/> COAF <input type="checkbox"/> COET <input type="checkbox"/> COICT <input type="checkbox"/> COHU <input type="checkbox"/> CONAS <input type="checkbox"/> COSS <input type="checkbox"/> SJMC <input type="checkbox"/> UDBS <input type="checkbox"/> UDSOL <input type="checkbox"/> UDSE <input type="checkbox"/> IRA <input type="checkbox"/> IDS <input type="checkbox"/> IKS. Any other (specify) .....

**SECTION B: The utilization of physical activity facilities**

**Tick (√) the appropriate**

1. Do you use university sport and physical activity facilities and equipment in the university?  Yes  No
2. Which physical activity (ies) do you participate in? (You can pick more than one choice)

Activity	Tick(√)	Activity	tick(√)	Activity	tick(√)
Aerobics		Brisk walking		Rope skipping	
Jogging		Dancing		digging	
Football		Biking		Gymnastics	
Volleyball		Hockey		Rugby	
Netball		swimming		Tennis	
Badminton		Diving		Judo	
Basketball		Boxing		Athletics	
Handball		Table tennis		Weight lifting	
Cricket		taekwondo		Wrestling	

Other (please specify) .....

Statements	excellen t	good	averag e	Poor	Very poor
3. How would you rate the quality of facilities you use					
4. How do you rate the condition of equipment for the facilities you use					

5. How often do you make use of the facilities?  
rarely often veryoften Always
  
6. When looking at the physical activity facilities available at the university, how do you rate the number available?  
Too many The right number Too few Don't know
  
7. What additional indoor or outdoor physical activity facilities would you like the university to provide?  
 .....  
 .....  
 .....
  
8. What improvements would you like to see in the physical activity facilities that you use? (Please also name the facility)  
 .....  
 .....  
 .....  
 .....
  
9. What are the main problems you face when using the physical activity facilities provided by the university?  
 .....  
 .....  
 .....
  
10. Do you freely access the facilities and equipment available?  
Yes No Not sure
  
11. If you answered 'No' in the above question, how much are you charged for facility and equipment use currently? .....
  
12. Any other comments? .....

**SECTION C: Supports offered by university for physical activity**

1. To What extent do you agree with the following statements regarding the supports given by your university to enhance physical activity participation?

1=strongly agree 2=Agree 3=Neutral 4=Disagree 5=Strongly Disagree.

Tick (√) the appropriate

Statements	1	2	3	4	5
The university provide enough time for physical activity participation					
The university provide different advertisement posters for physical activity programs organized for students in the campus					
Sports and physical activity programs are managed by qualified and personnel					
I am aware of different physical activity conducted in the university					
The University recognize good performance in physical activity and provide rewards					
The university provide free physical activity equipment and facilities e.g. balls, net, jersey, space for participation i.e. grounds					

Does the existence of the above, enhancing your participation in sports and physical activities at the university? YES NO

**SECTION D: Challenges and opportunities for physical activity while schooling**

1. Are there any opportunities for physical activity?

YesNoDon't know

Comment on/ list opportunities gained from physical activity participation

.....  
 .....  
 .....

2. Are there any challenges for physical activity participation?

YesNoDon't know

Comment on/ list the challenges in participation of physical activity while schooling.....

.....  
 .....  
 .....

Thank you

**Appendix (H): the Interview guide for Director of Social Service and Sports and  
GamesCoach**

<b>SEQUENCE</b>	<b>OPENING QUESTIONS AND ADDITIONAL OPTIONAL PROMPTS</b>
<b>Utilization of the available physical activity facilities and equipments</b>	<ul style="list-style-type: none"> <li>○ Can you tell me the trend of physical participation at the University</li> <li>○ How can you say about the usability of those facilities and equipment?</li> </ul>
<b>Supports given by university</b>	<ul style="list-style-type: none"> <li>○ In terms of support, what does the university do to enhance PA participation among students?</li> <li>○ What do you think the university should do to support university students in PA participation?</li> </ul>
<b>Perception towards university students participation in PA</b>	<ul style="list-style-type: none"> <li>○ How do you perceive university students' participation in PA?</li> </ul>
<b>Opportunities and challenges</b>	<ul style="list-style-type: none"> <li>○ Are there any opportunities that can be gained from PA participation by university students? What are those?</li> <li>○ Are there any challenges in PA participation at the university? What are they?</li> <li>○ What do you think are the causes of the challenges?</li> <li>○ What do you think could be the solutions or how, would help with the problems?</li> </ul>

*Thank you for your time*

