



**UNIVERSITY OF
KWAZULU-NATAL**

**INYUVESI
YAKWAZULU-NATALI**

**FACTORS AFFECTING PARTICIPATION IN SPORT AND RECREATION OF
STUDENTS STAYING IN RESIDENCES AT THE UNIVERSITY OF KWAZULU-NATAL**

MTHOKOZISI MICHAEL MTHETHWA

211527851

**A dissertation submitted in part-fulfilment of the requirements for the degree Master of
Sports Science in the School of Health Sciences at the University of KwaZulu-Natal**

Supervisor: Mr. Patrick Zimu

2017

**FACTORS AFFECTING PARTICIPATION IN SPORT AND RECREATION OF
STUDENTS STAYING IN RESIDENCES AT THE UNIVERSITY OF KWAZULU-NATAL**

2017

MTHOKOZISI MICHAEL MTHETHWA

211527851

A dissertation submitted to the School of Health Sciences, University of KwaZulu-Natal, Westville Campus, in part-fulfilment for the requirements of the degree Master of Sport Science. As the candidate's Supervisor, I have approved that this dissertation be submitted for examination.

Mr. Patrick Zimu

Signature _____

Date _____

Place _____

Declaration

FACTORS AFFECTING PARTICIPATION IN SPORT AND RECREATION OF STUDENTS STAYING IN RESIDENCES AT THE UNIVERSITY OF KWAZULU-NATAL

2017

I, MTHOKOZISI MICHAEL MTHETHWA, do hereby declare that this dissertation, which is being submitted to the University of KwaZulu-Natal for the degree Master of Sport Science, has not previously been submitted for a degree at any other university, that it represents my own work, and that all sources which I have quoted in the text have been acknowledged by means of a complete reference list.

Signed by me on the _____ day of _____ 2017

Signature _____

Place _____

Witness

Name _____

Signature _____

Date _____

Place _____

Dedication

This work is dedicated to Libeleni, Nelisiwe, Phumephi, Thobeka and Zandile Mthethwa.

Acknowledgements

I would like to acknowledge and thank the following individuals and institutions for playing a crucial role in ensuring that I was able to complete this arduous journey in Higher Education.

Mr. Patrick Zimu, my Research Supervisor, thank you for the guidance, critique and support during my study. Your positive attitude and level of professionalism is highly appreciated.

Professor Johan Van Heerden, Academic Leader of Research in the University of KwaZulu-Natal College of Health Sciences, for your willingness to assist with various aspects of my postgraduate studies.

Dr. Walter Ngcobo, Former Deputy Dean of Students at the University of KwaZulu-Natal, I am grateful to have been mentored by someone of your calibre in my young career.

Mr. Colin Muller, your editorial expertise and input in this dissertation is highly appreciated.

Mrs. Victoria Hathorn, thank you for co-editing and proof-reading my dissertation. I am highly appreciative of all the support you and **Jeremy** have given me all these years.

Ms. Cathy Connolly, your assistance with the statistical analysis of the data is hereby acknowledged.

Miss Thandazi Shabalala, thank you for the motivation and support during the dark days of this journey. I am blessed to have you in my life.

The Students at the University of KwaZulu-Natal residences at Howard College, Westville and Edgewood Campus, thank you all for taking the time to participate and share your personal experiences on sport and recreation in my study. This dissertation would not be possible without any of you.

The **University of KwaZulu-Natal College of Health Sciences**, for providing me with me funding to commence with my postgraduate studies.

The financial assistance of the **National Research Foundation (NRF)** of South Africa that has enabled me to complete my work is hereby acknowledged.

Finally, I would like to thank the almighty and my ancestors (**oNyambose noDingiswayo**), for the many blessings I have received.

FACTORS AFFECTING PARTICIPATION IN SPORT AND RECREATION OF STUDENTS STAYING IN RESIDENCES AT THE UNIVERSITY OF KWAZULU-NATAL

Abstract

Almost all the institutions of higher learning across the globe offers sport and recreation opportunities to its students and staff. These programmes and services are offered to serve several purposes of which at the summit of them all is to improve social cohesion and physical fitness of the students and staff members. The challenge faced by most tertiary institutions is that services and infrastructure provided are either over-utilised or underutilised and there appears to be unknown factors precipitating the situation. It is therefore important that the motives and constraints to sport and recreation participation be discovered in an effort to help direct future strategic plans and correct present and past mistakes. The primary aim of the present study is to ascertain the factors that affect local and international student's participation in sport and recreation, with the intention of providing pertinent information that the University of KwaZulu-Natal Sport Administration Office can utilize in imminent strategic plans for campus based sport and recreation delivery. A descriptive research design was utilised and a questionnaire was designed to investigate the views and perceptions of students (n=199) staying at the University of KwaZulu-Natal residences. The Median (M) and Interquartile Range (IQR) was used as a summary statistic. The non-parametric two-sample Wilcoxon rank-sum (Mann-Whitney) test was used to compare sub-groups. Intrapersonal and interpersonal factors prevents participation, more specifically time and lack of partners. Justifications for participation in sport and recreation were achievement/status, energy release and fun. Findings further reveal differences based on gender and age highlight the views of students on unequal treatment of various sport and recreation codes on campus. The study findings further advance knowledge on constraints and motives affecting sport and recreation participation among university students, revealing information for policymakers to consider when designing programmes for student services on campus.

Keywords: Sport, Recreation, Physical activity, Constraint, Motive, Perceptions, Participation.

Table of content

Supervisors' approval to submit dissertation for examination.....	i
Declaration.....	ii
Dedication.....	iii
Acknowledgements.....	iv
Abstract.....	v
List of tables.....	ix
List of figures.....	x
List of abbreviations.....	ix
CHAPTER 1: INTRODUCTION TO THE STUDY	
1.1 Introduction.....	1
1.2 Background to the study.....	1
1.3 Problem statement.....	3
1.4 Research questions.....	5
1.5 Aim of the study.....	5
1.6 Objectives of the study.....	5
1.7 Type of study and methods.....	6
1.8 Definition of terms.....	6
1.9 Outline of the dissertation chapters.....	7
CHAPTER 2: LITERATURE REVIEW	
2.1 Introduction.....	8

2.2 Brief history of university sport.....	8
2.2.1 University sport and recreation in South Africa.....	9
2.3 Sport and recreation at the University of KwaZulu-Natal.....	11
2.4 The values of participating in sport and recreation.....	12
2.5 The motives for sport and recreation participation.....	14
2.6 The constraints to sport and recreation participation.....	15
2.6.1 Intrapersonal constraints.....	16
2.6.2 Interpersonal constraints.....	16
2.6.3 Structural constraints.....	17
2.7 Summary.....	18
 CHAPTER 3: METHODOLOGY	
3.1 Introduction.....	19
3.2 Study design.....	19
3.3 Setting of the study.....	19
3.4 Participants in the study.....	21
3.5 Sampling and sample size.....	21
3.6 Inclusion criteria.....	21
3.7 Exclusion criteria.....	22
3.8 Data collection tool.....	22
3.9 Pilot study.....	23
3.10 Data collection process.....	23

3.11 Data management.....	24
3.12 Data analysis.....	24
3.13 Ethical procedures.....	24
3.14 Summary.....	25
 CHAPTER 4 : RESULTS OF THE STUDY	
4.1 Introduction.....	26
4.2 Demoographics.....	26
4.3 Participation in sport and recreation activities on campus.....	30
4.4 Constraints to sport and recreation participation.....	31
4.5 Motives for participation sport and recreation activities.....	33
4.6 Perception on sport and recreation services.....	35
4.7 Constraints to sport and recreation participation based on gender.....	36
4.8 Constraints to sport and recreation participation based on age.....	37
4.9 Gender comparison of the motives for sport and recreation participation.....	38
4.10 Motives for sport and recreation participation based on age.....	39
4.11 Student perceptrions on sport and recreation services based on gender.....	40
4.12 Student perceptrions on sport and recreation services based on age.....	41
4.13 Comparative analysis of structural constraints.....	42
4.14 Student perceptions on sport and recreation services.....	43
4.14.1 Perceptions about sport and recreation facilities.....	43
4.14.2 Perceptions about the signifcance of sport and recreation participation.....	44

4.14.3 Perceptions on communication of sport and recreation information.....45

CHAPTER 5: DISCUSSION

5.1 Introduction.....46

5.2 Demographics of the participants.....46

5.3 The constraints to sport and recreation participation.....47

5.4 The motives for sport and recreation participation.....48

5.5 Perceptions on the delivery of campus based sport and recreation.....49

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction.....50

6.2 Conclusion to the study.....50

6.3 Limitations of the study.....50

6.4 Recommendations for university sport managers.....51

6.5 Recommendations for future research.....52

6.6 Summary.....53

REFERENCES.....54

APPENDICES.....70

Appendix 1: Editors confirmation letter

Appendix 2: Gate-keeper’s request letter

Appendix 3: Gate-keeper’s approval letter

Appendix 4: Ethical clearance

Appendix 5: Participant information letter

Appendix 6: Consent form

Appendix 7: Questionnaire

List of tables

Table 1: Sport activities constituted by USSA.....	10
Table 2: Member universities of USSA.....	11
Table 3: UKZN sport facilities and activities.....	25
Table 4: Profile of participants based on race.....	27
Table 5: The constraints to sport and recreation participation.....	32
Table 6: The motives for sport and recreation participation	34
Table 7: Perceptions on sport and recreation services.....	35
Table 8: Constraints to sport and recreation participation based on gender.....	36
Table 9: Constraints to sport and recreation participation based on age.....	37
Table 10: Motives for sport and recreation participation based on gender.....	38
Table 11: Motives for sport and recreation participation based on age.....	39
Table 12: Perceptions on sport and recreation services based on gender.....	40
Table 13: Perceptions on sport and recreation services based on age.....	41
Table 14: Comparison of structural constraints.....	42

List of figures

Figure 1: Motives and constraints to physical activities.....	13
Figure 2: Gender.....	26
Figure 3: Age.....	27
Figure 4: Nationalities.....	28
Figure 5: University sport and recreation committee.....	28
Figure 6: College of study.....	29
Figure 7: Level of study.....	30
Figure 8: Sport and recreation participation.....	30
Figure 9: Preferred setting for sport and recreation participation.....	31

List of abbreviations

DHETSA - National Department of Higher Education Training in South Africa

DOHSA - National Department of Health South Africa

DSRSA - National Department of Sport and Recreation South Africa

FET - Further Education and Training Colleges of South Africa

HEAIDS - Higher Education HIV and AIDS programme

IQR - Interquartile Range

Max. - Maximum

Min. - Minimum

NCD - Non-Communicable Diseases

NIA - National Intramural Association

NIRSA - National Intramural Recreational Sports Association

NMMU - Nelson Mandela Metropolitan University

NRF - National Research Foundation of South Africa

SASSU - South African Student Sport Union

SSISA - Sport Science Institute of South Africa

TVET - Technical Vocational Education and Training colleges of South Africa

UDW - University of Durban-Westville

UKZN - University of KwaZulu-Natal

USA - United States of America

USSA - University Sports South Africa

UWC - University of the Western Cape

WHO - World Health Organization

**FACTORS AFFECTING PARTICIPATION IN SPORT AND RECREATION OF
STUDENTS STAYING IN RESIDENCES AT THE UNIVERSITY OF KWAZULU-NATAL**

MTHOKOZISI MICHAEL MTHETHWA

2017

CHAPTER 1: INTRODUCTION TO THE STUDY

1.1 Introduction

Over the last two decades the prevalence of obesity has increased substantially in all parts of the world (Toriola & Monyeki, 2013; WHO, 2010; WHO, 2014). The World Health Organization (2014) estimates that approximately two billion citizens are overweight and more than half a billion of the population is obese. Eleven percent (11%) of men and 15% of women above the age of eighteen are overweight as a result of physical inactivity and poor diet (WHO, 2010; WHO, 2014).

Historically, excessive weight and obesity were health related conditions found predominantly among citizens of high income countries (WHO, 2010; WHO, 2014). Today these lifestyle related diseases have become burdensome, causing mortality in middle and lower income countries (WHO, 2014). The number of overweight and obese South Africans has increased significantly in the new millennium as a result of nutritional deficiencies and high sedentary lifestyles (Toriola & Monyeki, 2013; Moss, 2014; Department of Health South Africa (DOHSA), 2015; WHO, 2016; Mungal-Singh, 2016; WHO, 2016).

According to the Heart and Stroke Foundation, South Africans eat too much, drink too much alcohol and don't move enough during their leisure time (Mungal-Singh, 2016). This is exacerbated by a lack of inclusive environments, a shortage of personnel to promote physical activity, increased reliance on technological devices, transport and time management constraints (SSISA, 2010; WHO, 2010; WHO, 2014; DOHSA, 2015). Engaging in physical activities on the other hand is prescribed by International bodies and Governments because numerous researchers have reported that engaging in sport or physical activities improves one's social, physiological and psychological function (WHO, 2014; DOHSA, 2015).

1.2 Background to the study

The global status reports by the World Health Organization reveal that Non-Communicable Diseases (NCDs) are a leading cause of deaths globally (WHO, 2010; WHO, 2014). Non-communicable diseases include; certain cancers, diabetes mellitus, cardiovascular diseases, hypertension and coronary heart disease (WHO, 2010; Knight, 2012; WHO, 2014). Non-Communicable Diseases are attributed to individual behaviour and lifestyle habits (WHO, 2010; WHO, 2014; WHO, 2016). These behaviours and habits are to a large extent influenced

by economic transition, rapid urbanization and modern lifestyle factors which include smoking, alcohol consumption, diet and physical inactivity (WHO, 2010; WHO, 2014).

Approximately 3.2 million deaths occur annually due to non-communicable diseases as a result of causes related to physical inactivity, sedentary lifestyle and nutritional deficiencies (WHO, 2010). The Department of Health South Africa (2015) reported that there is a growing number of young people who are overweight and suffering from NCD's related to physical inactivity.

An examination of the literature further reveals that students are not engaging in enough physical activity, placing the health of future leaders at risk of mortality caused by non-communicable diseases (Daskapan, Tuzun & Eker, 2006; Lovell, Ansari & Parker, 2010; WHO, 2010; Edgington, Chin & Bronikowski, 2011; Awotidebe et al., 2014; Mohlala & Ramilavhana, 2014; Noorbhai, Hoosen, Lategan & Noakes, 2014; WHO, 2014; DOHSA, 2015; Halforty & Radder, 2015; Peltzer & Pengpid, 2016).

Participation in physical activities is recommended because it yields a variety of physiological, psychological and social benefits (WHO, 2010; WHO, 2014; DOHSA, 2015). Engaging in physical activities has been reported to reduce the risks of lifestyle related diseases such as cardiovascular diseases, obesity, hypertension, cancer and diabetes mellitus (WHO, 2010; McGuirk & Prentice, 2012). In addition to health benefits, one experiences a greater quality of life socially and psychologically (Ebben & Brudzynski, 2008; WHO, 2010; Henchy, 2011; WHO, 2014; DOHSA, 2015).

Understanding the value of physical activities, institutions of higher learning have invested heavily in sport and recreation resources (Webber & Mearman, 2005; Soleymani, Farshard & Fharzard, 2012; Desrochers, 2013; UWC, 2014). Students who engage in physical activities for recreational purposes experience a better quality of life. Competitively, students who excel in sports receive recognition on various public platforms, which is attributed to the institution one is representing (Desrochers, 2013). Furthermore, the recognition of students who excel in sport and academics has a positive impact on the recruitment of school learners, institutional image, and increases the likelihood of private donors investing in the institution (Desrochers, 2013).

With the value and benefits of sport being noted above, several questions arise. Firstly, why is there an increase in obesity rates in adolescents? What is causing students not to engage in

physical activities on campus? What are the current motives for participation in physical activities, as recorded in existing research? Are the factors affecting participation in sport at UKZN publicly known based on the expressed views of students?

Researchers have investigated and established several key reasons for participation in sport and recreation. Justifications for participation in sport and recreational activities include; enjoyment, skills development, friendships, competition, fitness, health, achievement, status, fun, energy and stress release (Hoe, 2007; Australian Bureau of Statistic, 2007; Ebben & Brudzynski, 2008; Afsanepurak, Hossini, Seyfari, & Fathi, 2012; Peters, Scholtz & Weilbach, 2014).

Investigators further reveal that while providing sport and recreation is rewarding to the student and the institution, not all students are able to enjoy these rewards, because there are barriers preventing students' participation (Mchunu & Le Roux, 2008; Mugwedi & Mulibana, 2014; Peters et al., 2014). These barriers include; time management, demanding academic workloads, a lack of partners to participate with in sport activities, financial challenges, the state and accessibility of facilities (Hoe, 2007; Shifman et al., 2011; Nolan & Surujal, 2011; Hashim, 2012). Researchers broadly classify these barriers as intrapersonal, interpersonal and structural constraints to participation in sport and recreation (Crawford & Godbey, 1987; Crawford, Jackson & Godbey, 1991).

1.3 Problem statement

The University of KwaZulu-Natal abides by numerous policies mandating it to deliver different services to students, e.g. health, social and sport and recreation services. The University of KwaZulu-Natal offers sport and recreation programmes that caters for everyone who is interested in either recreational sports or competitive sports (UKZN, 2012). The University of KwaZulu-Natal understands the benefits of engaging in sports and recreational activities, hence opportunities are provided for students to participate. The existence and success of university sport and recreation services depends on several factors, (i) level of students' participation, (ii) availability of programmes that caters for all, (iii) the standard and quality of built sports infrastructure and (iv) the standard of administration.

An examination of the literature reveals that there is a decline in levels of participation in sports and recreational activities despite the reported benefits obtainable from participation (Kimm et al., 2002; WHO, 2010; McVeigh & Meiring, 2014; WHO, 2014; DOHSA, 2015;

Halferty & Radder, 2015). Several researchers across the country have conducted studies to address the issue of low levels of participation in sport and recreation at higher learning institutions (Asihel, Jones & Malcom, 2005; Peters et al., 2014; Kubayi & Surujal, 2014; Mugwedi & Mulibana, 2014). However, none of the previous researchers include the views of international students or report on the students' views at the University of KwaZulu-Natal. With the Strategic Plan (UKZN, 2012) on the verge of being outdated, an exploratory study was conducted to understand the factors that affect student participation in sport and recreation. Understanding the current factors which affect student participation in sport and recreation is important for university policy makers when designing strategies to improve the delivery of student services.

1.4 Research questions

The present study will be undertaken to answer the following research questions:

- 1.4.1 What are the constraints preventing university students from participating in campus-based sport and recreation activities?
- 1.4.2 What are the motives to engage in campus-based sport and recreation activities?
- 1.4.3 What are university students' perceptions of the current delivery of campus-based sport and recreation services?

1.5 Aim of the study

The aim of the study is to ascertain the factors that affect local and international student's participation in sport and recreation, with the intention of providing pertinent information that the University of KwaZulu-Natal Sport Administration Office can utilize in imminent strategic plans for campus based sport and recreation delivery.

1.6 Objectives

The objectives of this study are to:

- 1.6.1 Establish the reasons why students do not participate in campus-based sport and recreation activities.
- 1.6.2 Explore ways to increase the participation frequencies of student who do not engage in campus-based sport and recreation activities.
- 1.6.3 Establish the motives causing students to participate in campus-based sport and recreation activities.
- 1.6.4 Establish how sport and recreation services could be improved for students who participate in sport and recreation activities.
- 1.6.5 Make recommendations to improve the uptake of sport and recreation activities by students in residences.

1.7 Type of study and methods

The present study is quantitative and qualitative in nature. The questionnaire was considered appropriate as it allowed the researcher an opportunity to establish the factors affecting the participation in sport and recreation of students living in residences at the University of KwaZulu-Natal, whilst enabling respondents' ample opportunity to express their views on sport and recreation at their campus. Students were considered an appropriate sample as they were the main recipients of the services delivered on campus. Completed questionnaires were collected from the respective residences at the University of KwaZulu-Natal and the data was analysed, leading to the findings of the investigation.

1.8 Definition of terms used in the text

This section serves to give a brief definition of terms used in this thesis in order for the reader to have clarity when they are used in the text.

Constraint/s: a factor or factors which prevent or prohibit an individual from participating and enjoying a leisure activity (Jackson, 2000).

Higher Education: all learning programmes leading to a qualification that meets the requirements of the higher education qualifications framework (DHETSA, 1997).

Leisure: the time which an individual has freedom from work or other duties and which may be utilized for the purposes of relaxation, diversion, social achievement, or personal development (Gist & Fava, 1964).

Motive/s: a combination of desires and needs that cause a person to act, or is the reason for a behaviour (Smith, 2008).

Physical activity: all body movement that is produced by the contraction of skeletal muscles and that substantially increases energy expenditure (Thomas, Nelson & Silverman, 2011). Throughout this document physical activity and sport are used interchangeably to avoid repetitiveness.

Physical fitness: a set of attributes that people have or achieve that relates to the ability to perform physical activity (Caspersen, Powell & Christenson, 1985).

Recreation: a guided process of voluntary participation in any activity which contributes to the improvement of general health, well-being and the skills of both the individual and society (DSRSA, 1994).

Service delivery: the distribution of basic resources that citizens depend on, including infrastructure and land (Chen, Dean, Frant & Kumar, 2014). For the purpose of this investigation service delivery refers to sport and recreation resources (facilities, coaches, information) students require to function at their peak and improve their standard of health.

Sport: institutionalized competitive activities that involve vigorous physical exertion or the use of relatively complex skills by individuals whose participation is motivated by a combination of intrinsic and extrinsic factors (Coakley, 2001).

Student: a person who is registered and studying fulltime or through distance learning at a university or college of higher education.

1.9 Outline of the chapters in the dissertation

This dissertation consists of six chapters which are presented in the following format:

1.9.1 Chapter one provided the introduction and statement of the problem.

1.9.2 Chapter two reviews the literature.

1.9.3 Chapter three describes the methodology.

1.9.4 Chapter four presents the results.

1.9.5 Chapter five provides a discussion of the findings.

1.9.6 Chapter six details the study's conclusions and provides recommendations.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The University of KwaZulu-Natal, through its Student Services Division, provides opportunities for students to develop themselves and improve their current state of health by participating in extra-curricular activities. There is general consensus among researchers in the field that sport and recreation offer participants improved quality of life (Afsanepurak, Hossini, Seyfari, & Fatthi, 2012; WHO, 2014; DOHSA, 2015). Researchers further reveal that there are constraints preventing students from participation, which need further investigation (Godbey, Crawford & Xen, 2010; Halforty & Radder, 2015). This chapter therefore reviews the literature on the factors affecting student participation in sport and recreation activities globally. The literature review is presented in the following format:

- Brief history of university sport and recreation
- University sport and recreation in South Africa
- Sport and recreation at the University of KwaZulu-Natal
- Participation in sport and recreation physical activities
- Motivating factors for sport and recreation participation
- Constraints to sport and recreation participation

2.2 Brief history of University sport and recreation

Sport and recreation activities have been an essential part of Higher Education institutions, dating back to the early 1800s in the United States of America (Mittlestaedt, Robertson, Russell, Byl, Temple & Olgivie, 2006). Initially, the US education system as a whole rejected it, and academics saw little value in sport and physical activities as a critical component of student development (Mittlestaedt et al, 2006). With the evolution of curricula, physical activity and sports programmes would come to play a significant role within student services departments.

The year 1852 saw the earliest record of a competitive university sport, which was a boat race between Harvard University and Yale University (Mittlestaedt et al., 2006). Subsequently, the first college basketball game took place in 1859 (Mittlestaedt et al., 2006), followed by the first athletics meeting which took place in the early 1870s (Rice, 1929). The early 1900s saw the formalization of campus-based sport by the University of Michigan and

Ohio State University through formal appointments of sport directors (Mittlestaedt et al., 2006). According to Mittlestaedt et al. (2006) football, basketball, athletics and tennis were the main codes of sports delivered on campuses during this period.

Universities in North America began to follow in the footsteps of the University of Michigan and Ohio State University by appointing professionals to lead sport and recreation departments before the First World War commenced (Mittlestaedt et al., 2006). Post-World War II, universities in the United States experienced increases in student enrolment and retentions (Mittlestaedt et al., 2006). The impact of sport and recreation in campus programmes changed attitudes among the academic community, which had initially rejected sport and recreation as a critical component of student health and development (Mittlestaedt et al., 2006).

By the early 1950s, campus-based sport and recreation was valued to such an extent that academics formed the National Intramural Association (NIA), now known as National Intramural Recreational Sports Association (NIRSA) (Mittlestaedt et al., 2006). NIRSA was formed to serve as an advisory body to academic institutions delivering campus-based sports programmes and activities in North America (Mittlestaedt et al., 2006). Over the past 5 decades NIRSA has become a key organization in campus-based sport and recreation movement, playing a pivotal role in the advocacy of student health and development of campus-based sport and recreation programmes.

The National Intramural Recreational Sports Association (1996) identified that one of the key roles of university sport and recreation must be to provide participation in a variety of activities which satisfy the diverse needs of students (Mittlestaedt et al., 2006). The University of KwaZulu-Natal's strategic plan echoes similar views to NIRSA (1996) and states that it will provide social spaces that encourage social interaction among diverse groupings, and amenities, including recreational and sport facilities that facilitate the social and personal well-being of students (UKZN, 2012:17).

2.2.1 University sport and recreation in South Africa

When one looks locally, South African universities do not have an advisory body such as NIRSA to assist in the development of campus-based sport programmes and activities. Universities rely on available resources to deliver sport for non-elite purposes (Peters et al.,

2014). For competitive purposes at the elite level university sport is the responsibility of University Sport South Africa (USSA).

Originally established as the South African Student Sports Union (SASSU), USSA is the official sports body responsible for regulating, organizing and coordinating student sport activities at regional, provincial and national levels in the higher education landscape of South Africa (USSA, 2016a). With historical divisions in South Africa’s higher education institutions, USSA was founded on the principles of creating student unity, accountability, non-racialism, non-sexism and democracy through sport participation (USSA, 2016a).

One of USSA’s core functions is to maximize student participation in sport and produce educated athletes (USSA, 2016b). Students from the institutions of higher learning in South Africa compete in a range of indoor and outdoor sport activities for recognition and honour as listed in Table 1.

Table 1: Sport activities constituted by USSA

Aerobics	Gymnastics	Dance sport
Aquatics	Hockey	Darts
Athletics	Judo	Fencing
Badminton	Karate	Football
Basketball	Netball	Golf
Bodybuilding	Rowing	Cricket
Boxing	Rugby	Cycling
Canoeing	Softball	Chess
Surfing	Table-tennis	Volleyball
Yachting	Squash	Pool (snooker)

USSA currently has a membership of over 45 institutions of higher learning in South Africa (USSA, 2016c). Institutions of higher learning which are members of USSA all offer and deliver sport and recreation activities to students.

Table 2: Member universities of USSA

Cape Peninsula University of Technology	Central University of Technology
Durban University of Technology	Mangosuthu University of Technology
Nelson Mandela Metropolitan University	North West University
Rhodes University	Tshwane University of Technology
University of Cape Town	University of Fort Hare
University of the Free State	University of Johannesburg
University of KwaZulu-Natal	University of Limpopo
University of Mpumalanga	University of Pretoria
University of Stellenbosch	University of Venda
University of the Western Cape	University of the Witwatersrand
University of Zululand	Vaal University of Technology
Walter Sisulu University	

One of the institutions listed in Table 2 as a member of USSA is the University of KwaZulu-Natal (UKZN). UKZN is an institution of higher learning born out of a merger between two historically diverse universities. UKZN markets itself as a hub for all rounded human development, using sport as one of the key tools in its marketing strategy to attract students and academics to this institution (UKZN, 2012).

2.3 Sport and Recreation at the University of KwaZulu-Natal

Sport is an important part of University life, and UKZN caters for everyone – from recreational to highly competitive persons (UKZN, 2012). In line with this marketing statement, the University of KwaZulu-Natal offers a variety of sport and recreation activities one can engage in whilst a student at this institution on the various campuses. Edgewood,

Pietermaritzburg, Howard College and Westville campuses all have a range of indoor and outdoor facilities for students to engage in physical activities during their leisure time (UKZN, 2012).

Students on the Pietermaritzburg campus have the choice of participating in athletics, tennis, aerobics, rowing, volleyball, basketball, ballroom dancing, canoeing, cricket, hockey, karate, mountaineering, netball, rugby, soccer and squash (UKZN, 2012). Howard College has an indoor sports complex and offers boxing, chess, gymnastics, surfing, rugby, underwater sport and yachting (UKZN, 2012).

Westville campus has an indoor sports complex and an Olympic-size outdoor swimming pool (UKZN, 2012). In addition to these facilities, students on Westville campus can engage in athletics, aerobics, badminton, basketball, boxing, ballroom dancing, chess, cricket, gymnastics, golf, karate, netball, soccer, softball, squash, swimming, table tennis, volleyball, weightlifting and body building during their leisure time (UKZN, 2012). Some of the key sporting activities offered at the Edgewood campus include chess, volleyball, netball, aerobics, swimming, athletics, rugby, cricket and snooker (UKZN, 2012).

As an institution that is affiliated to the USSA body, students from the University of KwaZulu-Natal compete against the other institutions of higher learning at regional and national platforms. During the 2014 and 2015 academic years, the University of KwaZulu-Natal achieved its greatest successes on the competitive front since its inception in 2004. The University's weightlifting, volleyball, dancing, rugby, rowing and cricket teams all won their respective leagues and competitions, boosting the institution's image and reputation as a hub for well-rounded human development (UKZN, 2014; UKZN, 2015; Sport24, 2015).

While recognising the achievements of the University sports teams at UKZN, what motivates students to participate in sport at other institutions of higher learning?

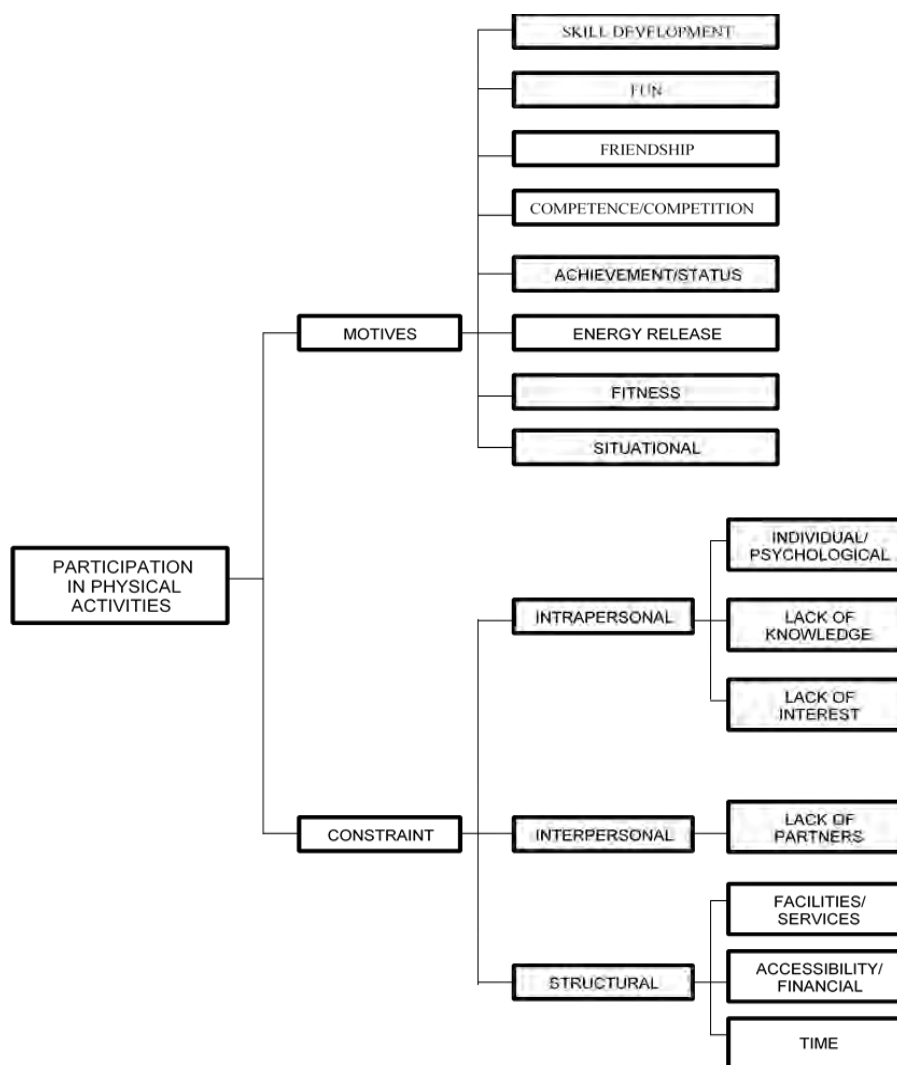
2.4 The values of participating in sport and recreation activities

It is an undisputed fact that by participating in sport and recreation based physical activity, one experiences a better quality of life (WHO, 2014; DOHSA, 2015). Promoting healthy habits during the earlier years of life is a key factor in the health and economic development of an emerging country (Xaba & Watson, 2014). Universities, being institutions of Higher

Learning, are ideally placed and important environments in which lifelong habits can be developed (Smith, 2008).

Recognizing the value of sport and recreation participation in the promotion of health, researchers have conducted numerous studies trying to establish the reasons for participation and non-participation in campus sport activities. These investigations were conducted with the intention of improving the state of student health, and of understanding sport delivery on campus. Globally, there is a general consensus among researchers that the factors affecting student participation in sport and recreation activities vary as depicted by Hoe (2007:6) in Figure 1. One finds that there are different motives, and various constraints serving as barriers to participation, depending on the part of the globe in which the investigations were conducted.

Figure 1: Motives and Constraints to participation in physical activities (Hoe, 2007:6)



2.5 Motives for sport and recreation participation, specifically students

Participating in sport and recreation activities produces significant benefits to students, even after one has graduated from university (Henchy, 2011). Engaging in sport and recreation activities enables a participant to improve their physiological, social and psychological functioning which is crucial in the development of our future leaders (WHO, 2014; DOHSA, 2015). A review of the literature suggests that the findings of previous authors appear to differ in relation to the motivations for participation in sport and recreation on campus (Sawir et al., 2007; Hoe, 2007; Peters et al., 2014).

According to Hoe (2007), the motives for participation in sport and recreation vary and are individual-specific. Sawir, Marginson, Duenert, Nyland and Ramia (2007) contend that engagement in sport or recreation activities serves to eliminate discrimination. Asihel and Colleagues (2005) opine that sporting activities create environments that are socially cohesive and tolerant of a diverse population. In the long term, student engagement in sport and recreation activities reduces alienation, increasing one's chance of involvement in the life of the community (O'Sullivan, 2006).

In his study, Hoe (2007) found that skills development and friendship were the main reasons for engagement. Participants experienced a sense of enjoyment as the key motive to engagement in physical activities (Hoe, 2007). Ebben and Brudzynski (2008) found that the leading reason for participation in sport and recreation in the American student community is health. Lovell, Ansari and Parker (2010), in the United Kingdom, place greater emphasis on participating in sport and recreation for physical fitness. Investigations by Ebben and Brudzynski (2008), Lovell, Ansari and Parker (2010) place emphasis on the challenge of sedentary lifestyles.

Peters et al. (2014) reported that the motives for participation in sport and recreation among university students are recognition/achievement, energy/stress relief, social interaction, challenge/enjoyment, health and physical wellness (Peters et al., 2014). The findings of Peters et al. (2014) expose the value of sport and recreation in the development of students, playing a role in decreasing the number of students who drop out of university in South Africa due to stress and depression.

The work of Peters et al. (2014) is further supported by Kubayi and Surujal (2014) who report that South African students experienced lower levels of anxiety, depression and stress

following engagement in sport and recreation activities. In Henchy's (2011) work, students reported that sport and recreation engagement improved their quality of life. Students reported that their ability to manage stress had significantly or moderately improved as a result of participating in campus-based recreation activities (Henchy, 2011).

Noting the works of Henchy (2011), Peters et al. (2014), Kubayi and Surujal (2014), one can state that participation in physical activities is an achievement on its own, considering the current landscape of higher education, where high dropout rates and unhealthy lifestyles have been prevalent (Letseka & Maile, 2008; HEAIDS, 2010; Venugopala & Taylor, 2013).

Jensen's work in 2011 reaffirms the earlier findings of Allender, Cowburn and Foster (2006), in which the population stated that they experienced a sense of achievement by participating in physical activities as their psychological functioning improved. Henchy (2011), Hassmen, Koivula and Uutela (2000) found that individuals who engage in regular physical activities experienced significantly less depression, anger, distrust and stress than those who do not participate.

Noting the motivations being reported in the literature, why then are some students continuing to lead inactive lifestyles? What prevents students from participating in physical activities on campus?

2.6 The constraints to sport and recreation participation

The Hierarchical model of constraints proposed by Crawford et al. (1991) posits that there are three factors causing non-participation in sport and recreation, which are experienced in a hierarchical manner. The three factors are classified as intrapersonal, interpersonal and structural constraints (Crawford et al., 1991).

According to the Hierarchical model, one encounters intrapersonal constraints first, followed by interpersonal and then structural constraints (Crawford et al., 1991; Masmanidis, Tsigilis & Kosta, 2015). While the model proposed by Crawford et al. (1991) suggests that constraints to sport and recreation are experienced in a hierarchical order, studies over the years have differed, and have challenged the ranking of constraints (Young et al., 2003; Godbey, Crawford & Xen, 2010; Shifman et al, 2011; Dhurup & Garnett, 2011; Halforty & Radder, 2015).

2.6.1 Intrapersonal constraints to sport and recreation participation

According to Amusa, Toriola, Onyewadume and Dhaliwal (2008), intrapersonal constraints are internal psychological states of the person. Examples of intrapersonal constraints include stress, depression, anxiety, attitude, skills, perceived self-skill, religious beliefs, personal motivation, self-esteem, subjective evaluation of activities (Crawford & Godbey, 1987; Crawford et al., 1991; Amusa et al., 2008; Godbey, Crawford & Shen, 2010; Hashim, 2012).

Yetgin (2014) found that feeling tired and fear of being injured lead to non-participation in sport and recreation among Turkish university students. In the same country earlier in the new millennium, Daskapan, Tuzun and Eker (2006) concluded that students lack the energy to participate in sport and recreation activities on campus after attending academic classes. In their work, Kubayi and Surujal (2014) highlighted students being very self-conscious about how they would be judged by their peers and therefore choosing not to engage in sport and recreation activities.

Peters et al. (2014) reported that students do not participate in sport and recreation at the North-West University because they lack knowledge about sport and recreation activities available on their campus. In his investigation, Hashim (2012) ranks information (lack of knowledge) about available activities as one of the key factors likely to influence one's decision about participating in sport and recreation activities on campus. Yetgin (2014) conducted a study on students pursuing physical education studies and concluded that fatigue, fear of getting injured and not knowing what activities were available served as constraints to participation in sport and recreation activities.

Intrapersonal constraints have a 'knock on effect' as they can lead to challenges when one attempts to build and sustain a social life in the community in which one lives. This is reflected in publications which highlight social challenges emerging as interpersonal constraints causing students not to participate in campus-based sport and recreation activities (Hashim, 2012; McGuirk & Prentice, 2012).

2.6.2 Interpersonal constraints to sport and recreation participation

Interpersonal barriers are those factors that affect sport and recreation preferences, for example, lack of partners (Amusa et al., 2008). Although previous research on the constraints found that interpersonal constraints appear to be less of a challenge when compared to

intrapersonal and structural constraints, these should not be overlooked because student interactions are the driving force to developing social cohesion in the university community (Daskapan et al., 2006; Mugwedi & Mulibana, 2014).

Hoe (2007) found that female students attempting to partake in sport and recreation are more constrained by a lack of partners in comparison to their male counterparts. Hashim (2012) and Shifman et al. (2011) reports that students are more constrained by having few or no partners to participate with in sport and recreation. Forde, Lee, Mills and Frisby (2014) state that social inclusion is an on-going relational process in which institutions and the greater community are active and collaborative agents. Policies and practices of institutions set the scene for the success or lack thereof of subsequent interactions between students and the institution itself (Jensen, 2011; Forde et al., 2014).

2.6.3 Structural constraints to sport and recreation participation

Structural constraints are external factors that intervene between sport and recreation activity preference in an environment (Amusa et al., 2008; Shifman et al., 2011). Structural constraints include finances, season, time, resources and access to or a lack of facilities (Amusa et al., 2008; Masmanidis, Gargalianos & Kosta, 2009; Lovell et al., 2010; Hashim, 2012). Financial circumstances and access to facilities are cited as the leading causes of non-participation in sport and recreation globally (Daskapan et al., 2006; Mchunu & Le Roux, 2008; Gomez-Lopez, Gallegos & Extremera, 2010; Lovell et al., 2010; Hashim, 2012; Pule, Drotsky, Toriola & Kubayi, 2014).

A lack of time, finances, and facilities being inaccessible are cited as the leading reasons why university students do not participate in sport and recreation activity at universities on the African continent (Asihel et al., 2005; Mchunu & Le Roux, 2008; Lovell et al., 2010; Dhurup & Garnett, 2011; Mugwedi & Mulibana, 2014; Halforty & Rader, 2015). At the University of Venda, Mugwedi and Mulibana (2014) found that academic workload, lack of equipment, transport issues and facilities not being in suitable conditions exacerbated non-participation in campus sport and recreation.

Amusa et al. (2008) reported that financial constraints, too much academic work and transport issues are the barriers to sport and recreation participation in Botswana. In their study on adolescence in KwaZulu-Natal, Mchunu and Le Roux (2008) established that economic factors serve as the leading cause of non-participation. In Gauteng, Pule et al. (2014)

described a limited number of coaches and qualified managers, a lack of variety of programmes being offered, an inadequate number of facilities, equipment being too old, lack of finances and lack of financial support from parents as obstacles to participation. Studies by Pule et al. (2014), Mugwedi and Mulibana (2014) support the findings of Masmanidis et al. (2009), Lovell et al. (2010) and Henchy (2011), who reported that limited access to facilities constrains participation in sport and recreation activities.

2.7 Summary

A review of the literature promotes the understanding that leading a physically active lifestyle reduces the risk of non-communicable diseases in one's senior years. With the benefits of participation in sport and recreation well documented, one would expect to find universities' sport and recreation facilities filled to capacity with students heavily involved in physical activities. This appears to not be the case, and a review of the literature suggests that there are serious challenges which are preventing university students from engaging in campus-based sport and recreation activities. The next chapter describes the methodologies used to conduct the present study.

CHAPTER 3: METHODOLOGY

3.1 Introduction

The aim of this study is to ascertain the factors that affect local and international student's participation in sport and recreation, with the intent to provide pertinent information that the University of KwaZulu-Natal can utilize in imminent strategic plans for campus based sport and recreation delivery. This chapter presents the research methods applied to conduct the investigation. According to Thomas, Nelson and Silverman (2011), the methodology section serves two purposes. The methodology makes the dissertation format parallel to the data-gathering steps of the scientific method (Thomas et al., 2011). Furthermore, the methodology describes the study in such detail and clarity that a reader could duplicate the investigation (Thomas et al., 2011).

3.2 Study design

In the absence of instruments to investigate a topic, questionnaires are developed, pilot tested and distributed to respondents who are regarded as being able to provide relevant and reliable information on a specific topic (Mkwalo, Coopoo & Van Heerden, 2013). A descriptive research design was therefore used for this investigation. Questionnaires were distributed to subjects at different levels of study at the University of KwaZulu-Natal, which enabled the researcher to compile a report which reflects student views.

3.3 Setting of the study

The University of KwaZulu-Natal (UKZN) came into existence on the 1st of January 2004, as a result of a merger between the University of Durban Westville (UDW) and the University of Natal, initiated by the National Department of Higher Education and Training to transform public Higher Education institutions in South Africa (UKZN, 2012). The University of KwaZulu-Natal is a teaching and research-led university located in the KwaZulu-Natal province of South Africa. UKZN is comprised of five campuses, namely Pietermaritzburg, Edgewood, Westville, Howard College and the Nelson Rolihlahla Mandela School of Medicine, annually grooming future leaders in various academic disciplines and professions.

The Pietermaritzburg, Edgewood and Westville campuses all have a range of indoor and outdoor sports facilities as listed in Table 3 Each of the campuses has its own tennis and squash courts, swimming pool and jogging areas which are located in close proximity to the

residences (UKZN, 2012). Some of the major sporting activities offered at the Edgewood campus include chess, volleyball, netball, aerobics, swimming, athletics, rugby, cricket and snooker (UKZN, 2012).

Table 3: UKZN Sports and recreation activities/facilities

Aerobics	Gymnastics	Dance sport
Aquatics	Hockey	Darts
Athletics	Judo	Fencing
Badminton	Karate	Football
Basketball	Netball	Golf
Bodybuilding	Rowing	Table-tennis
Boxing	Rugby	Tennis
Canoeing	Softball	Volleyball
Chess	Sports climbing	Yachting
Cricket	Squash	Surfing
Cycling	Pool (snooker)	Indoor and Outdoor Soccer

Pietermaritzburg campus offers athletics, tennis, aerobics, rowing, volleyball, basketball, ballroom dancing, canoeing, cricket, hockey, karate, mountaineering, netball, rugby, soccer and squash (UKZN, 2012). Howard College has an indoor sports complex, offering students the opportunity to engage in activities such as boxing, chess, gymnastics, surfing, rugby, underwater sport and yachting (UKZN, 2012). The Nelson Mandela School of Medicine campus does not have sports and recreation facilities, but students are allowed to use the resources and be members of the teams at Howard College.

Westville campus boasts a modern indoor sports complex and an outdoor olympic-size swimming pool (UKZN, 2012). In addition to these facilities, the campus offers students an opportunity to participate in athletics, aerobics, badminton, basketball, boxing, ballroom dancing, chess, cricket, gymnastics, golf, karate, netball, soccer, softball, squash, swimming, table tennis, volleyball, weightlifting and body building (UKZN, 2012).

3.4 Participants in the study

The participants (n=199) in this study were all full time students living in residences on campus. The participants consisted of Undergraduates and Postgraduates attending courses within the Colleges of Agriculture, Engineering and Science, Humanities, Health Sciences, and Law and Management Studies. The make-up of this study's participants reflects the current constitution of the university residences, where one finds that majority of the students living in these facilities are black Africans. The majority of the white students attending courses at the University of KwaZulu-Natal reside within travelling distance from their homes, whereas the majority of black students come from communities on the outskirts of where the University campuses are located.

3.5 Sampling and sample size

Two hundred and fifty (250) surveys were distributed in three campuses, however one hundred and ninety nine (199) were returned completed. The study sample (n = 199) was based on random sampling drawn from the University of KwaZulu-Natal's residences. A random sampling technique was chosen because each member of a population, in this case students living in residences, had an equal chance of being selected as a participant in this study. The sample included South Africans (96%) and International (4%) student respondents between the ages of eighteen (18) and thirty five (35). The sample represented undergraduate and postgraduate students attending courses in the colleges of Humanities (2%), Health sciences (28%), Law and Management Studies (35%), Agriculture, Engineering and Science (35%).

3.6 Inclusion criteria

Although the study was open to all students at the university, who pay a student levy (fee) for student services irrespective of whether they utilize the services or not, the following inclusion criteria were used to select the participants to answer the questions in this particular study. Participants in the study were registered as full time students at the University of KwaZulu-Natal, between the ages of eighteen and thirty five, attending courses for longer than a semester at the University and living in residences for longer than a period of one semester.

3.7 Exclusion criteria

Potential participants who fell outside of the stipulated inclusion criteria were excluded from participating in the study.

3.8 Data collection tool

Data collection for this study was by means of a questionnaire which was in English as this is the main medium of instruction at the University of KwaZulu-Natal, where the data was collected. The questionnaire served as a means of determining the factors affecting student participation in campus-based sport and recreation. The questionnaire was adopted and adapted from the literature (Mchunu & Le Roux, 2008). The justifications of the author to utilize a questionnaire is because this tool had been validated, was inexpensive, had the same questions for respondents, whilst ensuring individual anonymity and, most importantly, enabled the researcher to investigate and establish the factors affecting student participation in campus-based sport and recreation.

The questionnaire consisted of open-ended and closed-ended questions. The closed-ended questions were Likert in scale, where the respondents had to rank their level of agreement with particular questions from strongly disagree (1) to strongly agree (5). The open-ended questions were drafted in a manner that provided the respondents ample leverage to express their views on factors that affect their engagement in campus sport and recreation activities.

The structure of the sections in the questionnaire was as follows:

Section A reveals the demographics of the respondents which include gender, age, race, nationality, sports committee or non-committee member, college of study, level of study, participant or non-participant in sport and preferred location for participation in sport and recreation activities.

Section B identifies the constraints to participation in campus-based sport and recreation activities. The constraints to sport and recreation participation were grouped into three broad categories of intrapersonal, interpersonal and structural as per the classification by Crawford et al. (1991) in the hierarchical model of constraints.

Section C establishes students' motives for participation in sport and recreation activities. The motives measured in this investigation were achievement/status, skills/development, fun, friendship, competition/competence, energy release, fitness or situational as they are continuously cited in the literature as the main reason for participation by previous

researchers in the field (Weinberg et al., 2000; Hoe, 2007; Ebben & Brudzynski, 2008; Henchy, 2011; Peters et al., 2014).

Section D deals with the perceptions of students on the current delivery of sport and recreation as campus services. In this section of the questionnaire, respondents comment on the state of sport facilities, education campaigns to promote sport and communication by the university on forthcoming sports events, challenges and achievements. The researcher grouped these into the three categories of facilities, education and communication. Selected student perceptions are quoted to express the respondents' views on sport and recreation at the University of KwaZulu-Natal.

Section E is where recommendations to improve campus-based sport and recreation services are made by the respondents based on their personal experiences during their time as a student at the university where the questionnaire was being completed.

3.9 Pilot study

A pilot study was done using a group of twenty students from the University of KwaZulu-Natal living at residences, following which any necessary changes were made. The group of students were informed that their participation was voluntary and that the information received in the pilot phase of the research would not be included in the final results of the study.

3.10 Data collection process

The data collection process commenced once ethics approval had been obtained from the ethics committee (HSS/0202/016M). Participants in the study were full time students recruited from residences at the University of KwaZulu-Natal's Howard College, Westville and Edgewood campus during the evenings. In meetings with the potential participants, the researcher explained that purpose of the study was to ascertain the factors that affect local and international students in participation in sport and recreation, with the intent to provide pertinent information based on the current students views that the University can utilize in imminent strategic plans for campus sport and recreation delivery. The participants were given questionnaires, information sheet of the study and consent forms to sign and return to the author. The completed questions were collected by the research from the students two weeks later. The researcher further followed up the data collection process by observing sport and

recreation participation of students, documenting the state of facilities as well as tracking the information published by the University on sport and recreation.

3.11 Data management

The collected data was stored in a locked cupboard which only the researcher and his supervisor had access to the information. Anonymity of the participants was maintained through the utilization of codes to substitute the real names of the responding participants. As part of the University's ethical procedures, any data collected from the study will be securely stored for a period of five years. After the five year period has lapsed, the data will be destroyed by means of shredding and deletion of all computer stored files.

3.12 Data analysis

The data collected by means of a questionnaire was analysed with the assistance of a statistician at the University of KwaZulu-Natal. There are three main components to the study, namely constraints, motives and perceptions. Each component is composed of a different number of factors, which are in turn composed of a differing number of sub-factors, which are themselves composed of a differing number of questions. Each question was scored on a Likert Scale where 1 is strongly disagree and 5 is strongly agree.

In order to compare the sub-factors, the total score for each sub factor was divided by the maximum possible score on that sub factor which would scale each sub factor to 1 or (100%). To give equal weight to each sub factor, the average of the scores was used. A similar process was followed for the motive and perception sections. The Median and Interquartile Range (IQR) are used as a summary statistic because the frequency distributions were not normally distributed. The non-parametric two-sample Wilcoxon rank-sum (Mann-Whitney) test was used to compare sub-groups. Furthermore, respondents' comments on sport and recreation services at the University of KwaZulu-Natal were provided in the form of quotes to highlight the views of the students.

3.13 Ethical considerations

Prior to the commencement of the investigation, permission to conduct the research was obtained from the University of KwaZulu-Natal's Human and Social Sciences Research Ethics Committee (HSS/0202/016M) and the Registrar at the University of KwaZulu-Natal. Participants were given information letter detailing the research and requested to sign a

consent form which was returned to the researcher. Participants were informed that they could withdraw from the study without any disadvantage to themselves of any kind, nor would they be incentivized for taking part in the study. Furthermore participants were informed that the results of this study could be published in a peer reviewed publication, however any data would not be linked to any specific participant as anonymity will be maintained at all times through the usage of coding.

3.14 Summary

In this chapter the research methodology was presented detailing the procedures that were carried out while conducting the investigation. The subsequent chapter presents the results of the investigation, following the application of the previously described methods.

CHAPTER 4: RESULTS OF THE STUDY

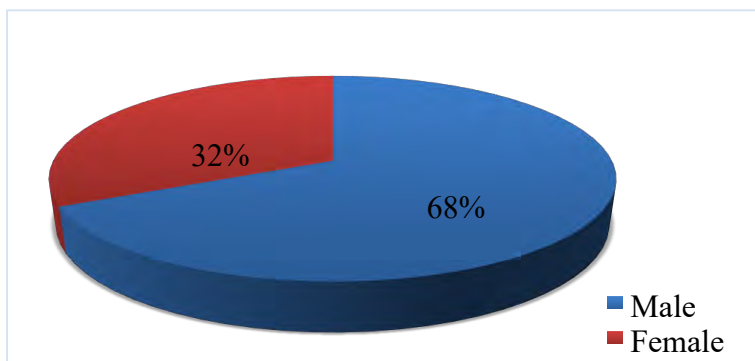
4.1 Introduction

The following chapter presents the findings of the study conducted at the University of KwaZulu-Natal. The three factors affecting student's participation in sport and recreation on campus, constraints, motives and perceptions of the service delivery are presented. Tables and graphs are used to present the descriptive statistics on constraints, motives and students perceptions about sport and recreation services. Furthermore, appropriate comments have been selected as illustrative of the issues that emerged with regard to the current delivery of sports and recreation services on campus.

4.2 Demographic profile of the participants

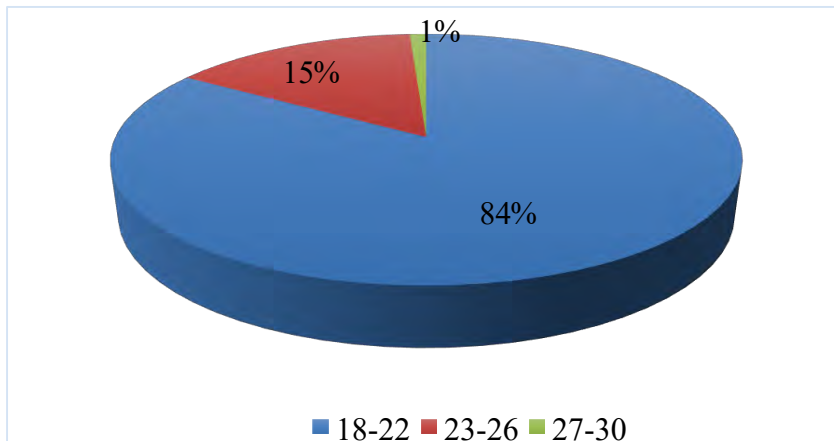
The following section presents the demographical information of the one hundred and ninety nine (n=199) participants the study. The demographics include the participants' gender, age, race and nationalities. Furthermore the participants' involvement in the functioning of sport and recreation committees, academic speciality and level of study are revealed.

Figure 2: Gender of the participants in the study



The results in Figure 2 reveal that the representation of males (68%) was greater than the number of female (32%) respondents in the investigation. The gender results are not reflective of the University's diverse gender construct and represents biasness towards the views of the male students. The uneven distribution of gender was caused by the number of incomplete surveys returned to the researcher. The majority of the incomplete questionnaires were from female students.

Figure 3: Age groups of the participants



In Figure 3 it is revealed that the majority (84%) of the study’s participants (subjects) were between the ages of eighteen (18) and twenty two (22). Fifteen percent (15%) of the study’s participants were between the ages of twenty three (23) and twenty six (26). One percent (1%) of the sample fell into the twenty seven (27) and thirty (30) years age category.

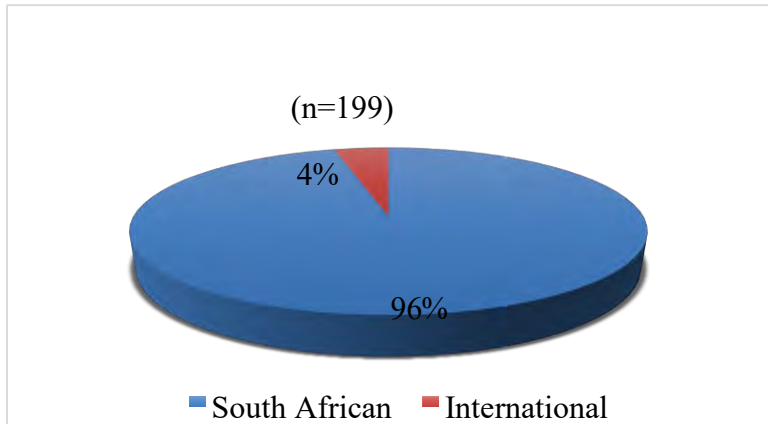
Table 4: Profile of the participants based on race

(N=199)	
Asian	0%
Black	99%
Coloured	0%
Indian	1%
White	0%

Table 4 reveals that the majority (99%) of the respondents were black and the minority (1%) were Indian in race. In this study sample Coloured, Asian and White students were not represented among the respondents in this investigation. The author however is of the view that this reflects the racial composition of the students living in residences on Howard

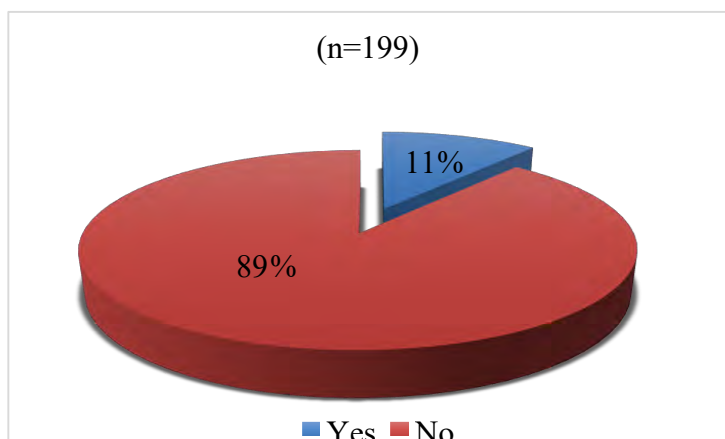
College, Westville and Edgewood campuses, where the majority of students living in residences are black in ethnicity.

Figure 4: Demographic profile of the participants based on nationalities



One of University of KwaZulu-Natal's goals is to be recognized globally as an institution of choice for learners (UKZN, 2012). The University seeks to establish itself as an institution that is reflective of the global community. Results in Figure 4 show that 96% of the participants in the investigation were South African, while 4% of the participants represented the International student community. International students who participated in this investigation were from Cuba, Ghana, Swaziland, England and Zimbabwe pursuing undergraduate studies at the University of KwaZulu-Natal.

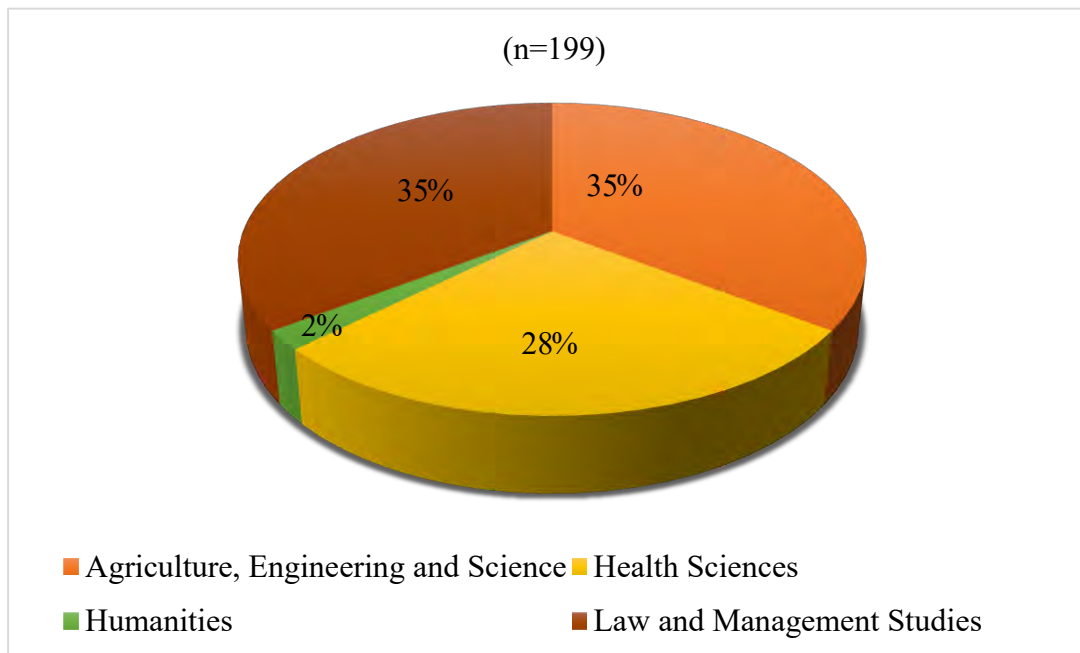
Figure 5: University sport and recreation committees



Eleven percent (11%) of the respondents in this study indicated that they were members of sport or recreation committees at the University of KwaZulu-Natal. The positions of the

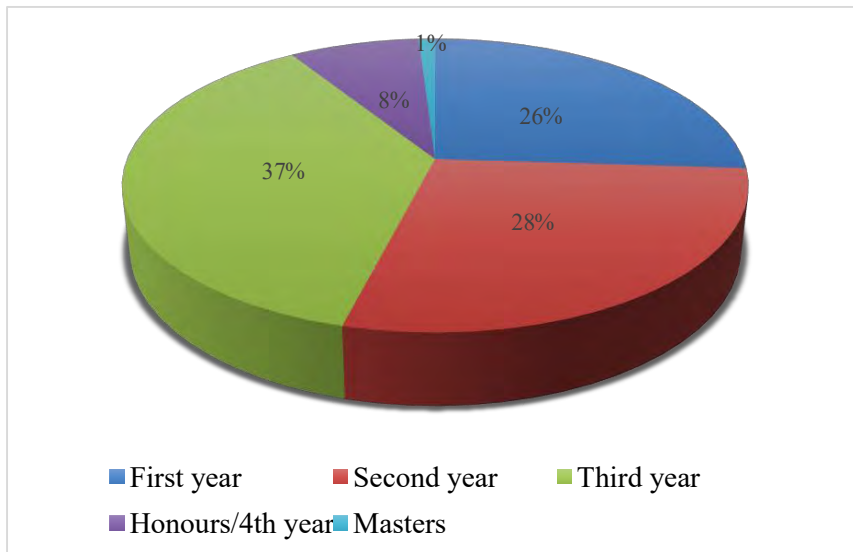
students who stated that they were involved in sport committees on their respective campuses included, members of sport unions, club captains and a secretary general. The remaining majority (89%) of the respondents were not involved in any sport committees or leadership structures at the University of KwaZulu-Natal, as revealed by Figure 5.

Figure 6: College of study



The University of KwaZulu-Natal's academic structure is made up of four colleges, which in turn are made up of several schools. The results in Figure 6 show that respondents in this investigation were attending courses within the four colleges at the University of KwaZulu-Natal. Thirty five percent (35%) of respondents attended courses within the college of Agriculture, Engineering and Sciences. Twenty eight (28%) attended courses within the college of Health Sciences. Law and Management students constituted 35%, while the remaining 2% attended courses in the college of Humanities.

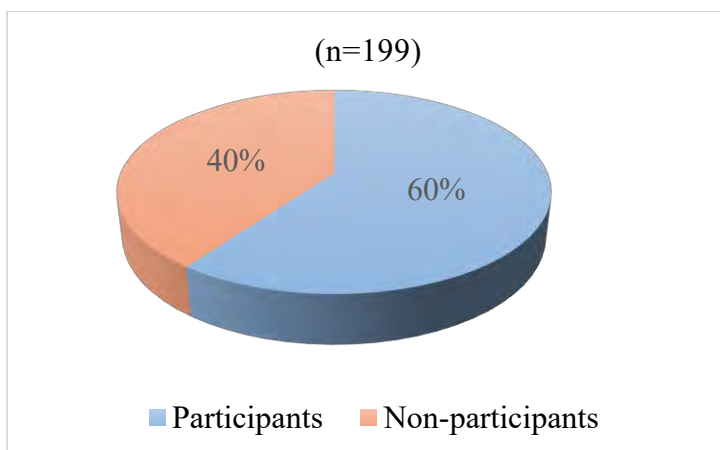
Figure 7: Level of study



The results in Figure 7 display that 26% of the respondents (n=199) were First year students, 28% were in Second year, 36% were in Third year, 8% were in Fourth/Honours year and the remaining 1% was studying towards a Masters' degree. None of the respondents in the investigation were pursuing doctoral or postdoctoral level of study. The level of study indicates that the responses of the study were mostly from undergraduate students at the University of KwaZulu-Natal where the data was collected.

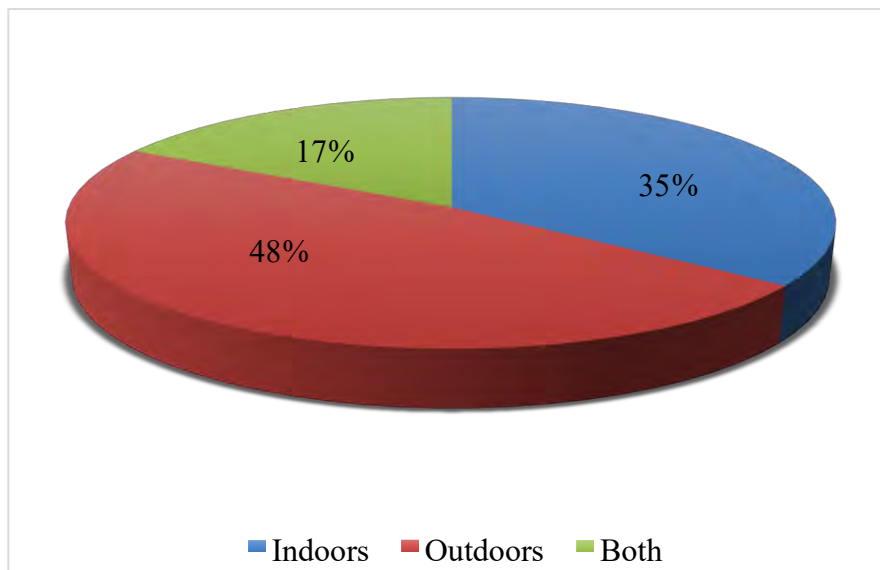
4.3 Participation in sport and recreation activities on campus

Figure 8: Sport and Recreation participation



The results in Figure 8 show that out of the total sample (n=199), the majority (60%) of the respondents actively participate in sport and recreation activities, whilst 40% indicated that they did not participate in sport and recreation activities on campus. The results indicate a significantly higher number of non-participants (40%) in comparison to Hoe whose work in 2007 reported that 14% of students did not participate in sport or recreation activity at a Malaysian University, investigating a similar sample size.

Figure 9: Preferred setting for sport and recreation participation



The results in Figure 9 illustrates that 35% of the respondents who indicated that they participated in sport and recreation stated that their preferred location for sport and recreation participation was in an indoor environment. The main indoor activities cited by respondents included indoor volleyball and soccer, dance sport and usage of the gymnasium. Forty eight (48%) of the participants indicated a preference for participating in outdoor settings. These results differ slightly to the work of Azlan, Mohd and Farhana (2010) who reported that fifty five percent (55%) of students preferred participation in outdoor based activities. Some of the preferred outdoor sport activities cited by the respondents included outdoor soccer, cricket, hockey, netball, basketball, rugby, swimming and tennis. Seventeen percent (17%) of participants indicated that they enjoyed participating in both indoor and outdoor sports activities.

4.4 The constraints to sport and recreation participation

The constraints to sport and recreation participation were grouped into three broad categories of intrapersonal, interpersonal and structural as per the classification in the constraints model of Crawford, Godbey and Jackson (1991). The median (M), interquartile range (IQR), minimum, maximum and p-value are presented, based on the responses of the participants in this investigation. In order to compare the sub-factors, the total score for each sub factor was divided by the maximum possible score on that sub factor which would scale each sub factor to 1 or 100 %. To give equal weight to each sub factor, the average of the scores was used. The Median (M) and Interquartile Range (IQR) is used as a summary statistic because the frequency distributions were not normally distributed. The non-parametric two-sample Wilcoxon rank-sum (Mann-Whitney) test was used to compare sub-groups.

Table 5: The constraints to sport and recreation participation

Item measured	Respondents (n= 199)			
Constraints	Median	IQR	Min.	Max.
Structural constraints	0.58	0.15	0.20	0.87
Interpersonal constraints	0.40	0.30	0.20	1.00
Intrapersonal constraints	0.42	0.16	0.20	0.88
Overall constraints	0.47	0.19	0.21	0.82

The results in Table 5 show that the respondents ranked structural constraints (M = 0. 58) as the cause of their non-participation in campus-based sport and recreation activities. This was followed by intrapersonal constraints (M = 0. 42). Interpersonal constraints (M = 0. 40) were

ranked as the lowest constraint to sport and recreation participation by the participants in the investigation. Structural constraints ($M = 0.58$) have a slightly higher score, consistent with the findings of (Asihel et al., 2005; Daskapan et al., 2006; Masmanidis et al., 2009; Gomez-Lopez et al., 2010; Mugwedi & Mulibana, 2014), who reported that the structural constraints are the main factors responsible for students' non-participation in campus-based sport and recreation activities. Intrapersonal ($M = 0.42$) and interpersonal ($M = 0.40$) constraints are less significant in the collective sample measured in this investigation.

4.5 The motives for participation in sport and recreation activities on campus

Participation in sport and recreation activities is associated with various form of psychological, social and health-related benefits. Previous researchers (Brodkein & Weiss, 1990; Weinberg et al., 2000; Hoe, 2007; Henchy, 2011) list eight factors as the key justifications for engagement in sport and recreational activities. These factors include achievement/status, energy release, fun, skills/development, friendship, competition/competence, fitness, situational or health reasons. The eight factors listed by the previous researchers (Brodkein & Weiss, 1990; Weinberg et al., 2000; Hoe, 2007; Henchy, 2011) were measured in this study to understand the rationale behind participation in sport and recreation activities on campus.

Table 6: Motives for sport and recreation participation

Item measured	Respondents (n=199)			
	Median	IQR	Min.	Max.
Achievement/status	0.80	0.4	0.2	1
Energy release	0.80	0.4	0.2	1
Fun	0.70	0.2	0.2	1
Skills/development	0.65	0.1	0.35	0.95
Friendship	0.60	0.2	0.27	0.93
Competence/competition	0.60	0.1	0.2	1
Fitness	0.60	0.2	0.2	1
Situational	0.60	0.13	0.3	0.97

The results displayed in Table 6 reveal that the respondents are in agreement that the three significant motives for sport and recreation participation are achievement/status (M= 0.80), energy release (M = 0.80) and fun (M = 0.70). Skills development, friendship, competence/competition, fitness and situational were all found to receive an equal (M = 0.60) score. In comparison to other research, the results in this study differed from the findings of Hoe (2007) as the respondents in this present study indicated that their main motives for sport and recreation participation were for achievement/status (M = 0.80), energy release (M = 0.80) and fun (M = 0.70).

4.6 Perceptions on sport and recreation services

In this section respondents commented on the state of facilities, education campaigns to promote sport and communication by the university on forthcoming sports events/opportunities, challenges and achievements. The researcher grouped these into the three categories of facilities, education and communication.

Table 7: Student’s perceptions of campus-based sport and recreation services

Item measured	Respondents (n=199)			
Perception about:	Median	IQR	Min.	Max.
Facilities	0.7	0.2	0.2	1
Awareness/Education	0.6	0.4	0.2	1
Communication	0.6	0.16	0.2	1
Overall perceptions	0.6	0.2	0.3	0.9

The results in Table 7 highlight the responses related to perceptions of current sports and recreation services. Facilities (clearly marked, well maintained, clean, good lighting when I participate in the evenings) received the highest rating by respondents (M = 0.7). Raising awareness (educating students on the benefits of sport participation) and communicating (roles/responsibilities of university sport officials, the annual university sport and recreation budget, achievements of university sport teams/athletes, challenges faced by the department in delivering sport services, plans to improve availability of sport delivery activities on campus) received equal scores (M = 0.6).

4.7 The constraints to sport and recreation participation based on gender

Table 8: Constraints to sport and recreation participation based on gender

Item measured	Males (n=136)				Females (n=63)				
	Median	IQR	Min.	Max.	Median	IQR	Min.	Max.	P-value
Structural	0.60	0.18	0.2	0.87	0.55	0.1	0.28	0.8	0.20
Interpersonal	0.40	0.4	0.2	1	0.50	0.3	0.2	1	0.08
Intrapersonal	0.41	0.16	0.2	0.88	0.45	0.15	0.2	0.68	0.31
Overall Constraints	0.47	0.2	0.21	0.82	0.47	0.18	0.29	0.71	0.34

Comparatively, the results in Table 8 reveal that females find interpersonal constraints (I do not have anyone to participate with, my friends don't participate) more of an issue than male ($P = 0.08$) in their attempts to participate in sport and recreation activities. Comparatively the gender-based results on constraints do not find a significant difference in intrapersonal (individual, lack of knowledge, lack of interest) and structural constraints (facilities/services, accessibility/financial, time) between the genders.

4.8 Constraints to sport and recreation participation based on age

Table 9: Constraints to sport and recreation participation based on age

Item measured	Age group 1				Age group 2				
	Median	IQR	Min.	Max.	Median	IQR	Min.	Max.	P-value
Structural	0.58	0.17	0.23	0.87	0.57	0.1	0.2	0.8	0.34
Interpersonal	0.40	0.3	0.2	1	0.4	0.3	0.2	0.9	0.82
Intrapersonal	0.42	0.15	0.2	0.88	0.43	0.24	0.2	0.65	0.39
Overall constraints	0.47	0.19	0.21	0.82	0.47	0.2	0.21	0.7	0.93

The age groups were divided into two groups due respondents in the investigation being under 30 years of age. Group 1 was comprised of respondents between 18 and 22 years of age. Group 2 was comprised of respondents between 23 and 30 years old. The comparison was done between the groups because all the respondents fell within these age ranges. The results in Table 9 found that there was no significant difference in structural (facilities/services, accessibility/financial, time), interpersonal (lack of partners) and intrapersonal constraints ($M = 0.47$) to sport and recreation participation comparing the age groups of current respondents.

4.9 Gender comparison of motives for sport and recreation participation

Table 10: Motives for sport and recreation participation based on gender

Item measured	Males (n= 136)				Females (n=63)				
	Median	IQR	Min.	Max.	Median	IQR	Min.	Max.	P-value
Achievement/Status	0.80	0.40	0.20	1.00	0.80	0.20	0.20	1.00	0.2
Energy release	0.80	0.40	0.20	1.00	0.80	0.20	0.20	1.00	0.3
Fun	0.80	0.30	0.30	1.00	0.70	0.10	0.20	1.00	0.0009
Skills/development	0.65	0.10	0.35	0.95	0.65	0.10	0.40	0.85	0.3
Friendship	0.60	0.13	0.27	0.93	0.60	0.20	0.27	0.87	0.008
Competition	0.60	0.10	0.20	1.00	0.60	0.10	0.30	1.00	0.7
Fitness	0.60	0.20	0.20	1.00	0.70	0.20	0.20	1.00	0.9
Situational	0.63	0.10	0.30	0.97	0.60	0.13	0.33	0.80	0.07

Although it was not an objective of the present study, an analysis of the motives for sport and recreation participation based on the gender of the respondents was conducted. Firstly, males were motivated by fun ($P = 0.0009$) significantly more than females. Secondly, males were motivated by friendship ($P = 0.008$) significantly more than females. Furthermore, the author can speculate that males were motivated by situational ($P = 0.07$) factors more than

females. A significant difference was not found in the remaining 5 motives (achievement/status, energy release, skills development, friendship, competition/competence, fitness) for sport and recreation participation based on gender.

4.10 Motives for sport and recreation participation based on age groups

Table 11: Motives for sport and recreation participation based on age

Item measured	Age group 1				Age group 2				
	Median	IQR	Min.	Max.	Median	IQR	Min.	Max.	P-value
Achievement/Status	0.80	0.77	0.2	0.2	0.80	0.78	0.40	0.40	0.78
Energy release	0.80	0.77	0.4	0.2	0.80	0.78	0.40	0.20	0.79
Fun	0.70	0.72	0.2	0.2	0.70	0.74	0.20	0.40	0.58
Skill development	0.65	0.64	0.1	0.35	0.65	0.68	0.15	0.50	0.08
Friendship	0.60	0.62	0.2	0.27	0.67	0.65	0.10	0.40	0.20
Competition	0.60	0.63	0.1	0.2	0.60	0.68	0.20	0.40	0.12
Fitness	0.60	0.65	0.2	0.2	0.70	0.70	0.20	0.20	0.18
Situational	0.60	0.62	0.1	0.3	0.67	0.67	0.13	0.47	0.02

In Table 11 the motives for sport and recreation participation were compared based on the age of the respondents in the investigation. The age groups were divided into two groups and classified as younger (group 1) and older (group 2) students. The results in table 4.10 reveal

that older students (group 2) were motivated by situational factors ($P = 0.02$) more than younger students (group 1). Furthermore, a borderline significance reveals that older students (group 2) were more motivated by skills development ($P = 0.08$) than younger students (group 1) to participate in sport and recreation activities.

4.11 Student perceptions on sport and recreation services based on gender

Table 12: Perceptions on sport and recreation services based on gender

Item measured	Males (n=136)				Females (n=63)				
	Median	IQR	Min.	Max.	Median	IQR	Min.	Max.	p value
Facilities	0.70	0.2	0.2	1	0.70	0.2	0.2	1	0.8
Education/awareness	0.60	0.4	0.2	1	0.60	0.4	0.2	1	0.8
Communication	0.60	0.2	0.2	1	0.60	0.12	0.2	0.8	0.6
Overall perceptions	0.60	0.2	0.3	0.9	0.62	0.2	0.3	0.9	0.9

The results in Table 12 revealed no significant difference in the gender responses, which looked into the state of sport and recreation facilities, education/awareness about the importance of sport and recreation participation, as well as communication of available sport and recreation programmes on campus. Analysis of the perception sport and recreation services reveals that males ($M = 0.70$) and females ($M = 0.70$) are in agreement that sport and recreation services (facilities) could be improved. The overall perception of services differed slightly between males ($M = 0.60$) and females ($M = 0.62$). The respondents'

personal views are narrated in the subsequent section (4.14) of this chapter highlighting the students' views on the delivery of sport and recreation as a service.

4.12 Sport and recreation perceptions based on age

Table 13: Perceptions of sport and recreation services based on age

Item measured	Age group 1				Age group 2				
	Median	IQR	Min.	Max.	Median	IQR	Min.	Max.	P-value
Perceptions of:									
Facilities	0.70	0.20	0.20	1.00	0.70	0.15	0.20	0.90	0.18
Education/awareness	0.60	0.40	0.20	1.00	0.60	0.30	0.20	0.80	0.77
Communication	0.60	0.16	0.20	1.00	0.60	0.16	0.20	1.00	0.72
Overall perceptions	0.62	0.18	0.27	0.90	0.59	0.15	0.33	0.85	0.19

The results in Table 13 indicate the group one (age 18-22) students' perceptions of facilities (M = 0.70), education/awareness (M = 0.60) and communication (M = 0.60) of sport and recreation information on campus. The older (group two) students (23-30) reported similar results perceiving at the state of sport and recreation facilities (M = 0.70), education/awareness (M = 0.60), communication (M = 0.60). Overall there was no significant difference between the age groups in their views on the three aspects of campus sport and recreation services.

4.13 A comparative analysis of structural constraints

Table 14: Comparison of structural constraints participants versus non-participants in sport

Item measured	Participants in sport activities (n=119)				Non-Participants in sport activities (n=80)				
	Median	IQR	Min.	Max.	Median	IQR	Min.	Max.	P-value
Time (I have too much work)	0.80	0.2	0.2	1	0.80	0.2	0.2	1	0.003
Sport and recreation facilities	0.5	0.2	0.2	0.9	0.5	0.15	0.2	0.7	0.4
Sport and recreation activities	0.5	0.2	0.2	0.9	0.5	0.15	0.2	0.7	0.4
Finances	0.5	0.2	0.2	1	0.5	0.2	0.2	0.9	0.3
Overall structural constraints	0.6	0.2	0.2	0.8	0.6	0.1	0.3	0.9	0.6

A comparative analysis of the structural constraints between participants (60%) and non-participants (40%) in Table 14 reveals that both participants and non-participants sport and recreation engagement is constrained by time, because it is taken up by too much academic work ($P = 0.003$). Halforty and Radder (2012) reported that students at Nelson Mandela Metropolitan University (NMMU) sport and recreation participation was constrained by time and scheduling as students were too busy with their academic work. Halforty and Radder (2012) further opine that university students should be taught time management skills to overcome these structural constraints. The state of and accessibility to sport facilities ($P = 0.4$), the delivery of sports activities ($P = 0.4$) and finances ($P = 0.3$) reveals no major differences in the views of respondents when a comparative analysis of the structural constraints was conducted by the researcher and statistician.

4.14 Student perceptions about sport and recreation services

The descriptive results revealed a high median score for sport facilities ($M = 0.70$) in comparison to education/awareness on the importance of participation ($M = 0.60$) and communication about sport and recreation on campus ($M = 0.60$). In this light, the author takes the perceptions of student's one step further and highlights the main noted views of respondents on sport and recreation, looking at sport and recreation facilities, education on the health benefits of participation and communication of information on campus.

4.14.1 Perceptions about sport and recreation facilities

Participants' (survey) numbers were used in place of the real names of respondents who expressed their views. Forty percent (40%) of the Respondents ($n = 199$) indicated that more effort needs to be put into sport or recreation facilities. By effort, the author is referring to maintenance, accessibility and the state of facilities for sport and recreation activities. The author selected the following views which highlights the student's dissatisfaction with the state of the available facilities.

- Respondent (1), _ “I think that the sports facilities need to be painted so they can be attractive and keep them clean every time”.
- Respondent (2), _ “improvements to the sports grounds as they lack maintenance this year in comparison to my previous years of studying at Westville”.
- Respondent (3), _ “the grounds must be well maintained and marked clearly as this semester they are hardly marked”.
- Respondent (4), _ “the facilities need to accommodate students with disabilities. This is a reason my friends don't play sport on campus because it is difficult for them to move around”.
- Respondent (5), _ “facilities like the gym must stay open longer for those students like me who do not get time to participate during the day”.
- Respondent (6), _ “the gym in the Westville indoor sports centre seems as if no one is taking care of it most of the stuff there is broken or doesn't work well”.

On numerous occasions the author visited the respective campuses to conduct a visual inspection of the facilities to check the accuracy of the views expressed by the respondents above and found the statements to be true. Markings on sports grounds are not of quality, one finds that the paintings on grass fields are not clear and do not get done consistently. The Westville campus swimming pool does not have any signage informing students about the

cleanliness of water. Furthermore, of great concern to the author, one finds students swimming without any qualified lifeguard present in the evenings.

While the University has attempted to make itself more accessible to education for students with disabilities, it would appear that access to sports facilities are still lagging behind in this regard. One does not find or see students with disabilities participating in activities in these facilities because they cannot easily access the gymnasiums and fields to participate.

4.14.2 Education/awareness of the importance of sport and recreation participation

An examination of the students' perceptions of the University's current awareness campaigns, educating them on the importance of participating in sport and recreation, reveals some of the following views.

- Respondent (1), _ “they (UKZN) need to introduce more sport wise people to lead campus sport. I don't really see why I should play any sport on campus because the people who coach us are not really creative or informative”.
- Respondent (2),_ “the university sport staff needs to hold more talks about the benefits of participating in sport activities, not enough is known I think by many students”.
- Respondent (3), _ “the university should encourage students to telling us of highlight the benefits of participation in such activities, many of us really do not see the need to play sport”.
- Respondent (4), _ “there must be more professionals who manage teams and promote sport and not anyone who just feels like coaching without a passion for it or money”.
- Respondent (5), _ “the university should provide more knowledgeable and young coaches, who we can relate to”.
- Respondent (6), _ “the university must do more than just offer sports, it must give us reasons as to why it is important to take part in sports because not everybody has a clear idea or understanding of the benefits of taking part”.

Advocating the significance of participation in physical activities during leisure time requires the efforts of multiple stakeholders. Students at this university come from diverse backgrounds (households, communities and schools) therefore university managers, sport promoters, coaches and student leaders. While the University of KwaZulu-Natal makes a great effort to publicise the appointment of executives and managers to lead and work

towards academic excellence at the institution, the same cannot be said when it comes to the University's sport and recreation.

4.14.3 Communication of information by the sport and recreation office

The key to creating awareness is communicating information to students timeously, and the views below show that based on the subjects' responses, communication is not undertaken transparently when it comes to the various sport and recreation activities offered by the University of KwaZulu-Natal.

- Respondent (1), _“I have no idea of what other sports there are on campus besides rugby which I don't like”.
- Respondent (2), _'would be great if other sports like soccer can be advertised in the community of the university in order to know what is going on about soccer not only the sports for minority advertised”.
- Respondent (3), _“I think more effort needs to be put into informing us students about the sport and recreation. The info they provide us is not diverse enough, nothing about other sports teams is ever shared unless it's about the rugby”.
- Respondent (4), _“all sports on campus should be equally promoted by the university.
- It's always rugby that's being showcased don't we have hockey, football, societies and basketball teams?”
- Respondent (5), _“advertise all games equally. Focusing on rugby only is an insult”.
- Respondent (6), _“clean the swimming pool at oval residence I felt sick after swimming in it because there is no notice informing students that it is not clean”.

While the University of KwaZulu-Natal has information about the available sports and recreation activities in the undergraduate prospectus and on its website, this information is still not enough, and more must be done to diversify the delivery of information about available sports. The time dedicated to them, and most importantly the blatant undermining of sporting codes, placing rugby above all other sport and recreation activities, need to be addressed, as it is not the only sport offered at the University of KwaZulu-Natal.

CHAPTER 5: DISCUSSION

5.1 Introduction

The aim of this study was to ascertain the factors affecting participation by students in sport and recreation, with the intention of providing information that the University could utilize in the delivery of campus-based sport and recreation. The present chapter discusses the results that were presented in chapter three. The discussion will be undertaken with reference to the literature review and research questions of this investigation. The structure will follow the layout of the previous chapter with the discussion being presented in the following order: Demographics profiles of the participants, Constraints, Motives and Perceptions on sport and recreation.

5.2 Demographics of the study

It is well documented in the literature that there is a global decline in physical activity, and a rapid increase in this phenomenon among young people, but there is a dearth of information on the reasons causing non-participation in physical activities at merged institutions of higher learning. Following a call from previous researchers to investigate the factors affecting participation in sport and recreation and advance the knowledge in this field of study, the researcher distributed three hundred questionnaires at residences on the Howard College, Westville and Edgewood campuses.

The majority of the respondents were males, black and Indian in racial representation, falling within the youth category of between eighteen (18) and thirty five (35). The sample of the study included South African (96%) and International students (4%) who were attending courses within the Colleges of Humanities (2%), Health Sciences (28%), Law and Management Studies (35%), Agriculture, Engineering and Sciences (35%) at the University of KwaZulu-Natal. The majority (60%) of the sample were active participants in sport and recreation activities, whilst forty per cent (40%) of the sample indicated that they were non-participants. The majority of the active participants indicated a preference for engaging in outdoor sport and recreation activities.

5.3 The constraints to sport and recreation participation

There is a general consensus in the literature that participation in sport and recreation has declined and sedentary behaviour has increased over the last decade (Daskapan et al., 2006; Gomez-Lopez et al., 2010; Adedoyin et al., 2014; Awotidebe et al., 2014). According to Crawford et al. (1991) there are three factors which constrain students from engaging in sport and recreation activities. Constraints begin at the individual (intrapersonal) level, moving towards social functioning (intrapersonal) and the (structural) factors in the environment over which a person has no control (Crawford et al., 1991). In the present study, structural and interpersonal constraints were reported as the leading factors preventing student participation in sport and recreation activities on campus.

In the study sample (n=199) there was general consensus that not having enough time to participate in sport because of heavy academic workload was the leading structural constraint ($P = 0.003$) affecting sport and recreation participation. The results support the findings of Mugwedi and Mulibana (2014) who found that structural constraints served as the leading cause of non-participation in sport at the University of Venda, South Africa. It is interesting to note that while respondents show agreement that they have too much academic work, the majority of the respondents still make time in their busy academic schedule to engage in sport and recreation activities on campus. One can question what time-management assistance tools the non-participants are using in comparison to the active participants of sport and recreation on campus.

An analysis of the constraints based on gender reveals that females experience interpersonal constraints (lack of partners/friends don't participate so I don't either) as a leading cause of non-participation in comparison to their male counterparts. These results differed from the findings of Mugwedi and Mulibana (2014) who reported interpersonal factors as less of a constraint to sport and recreation among students at the University of Venda in South Africa. The author can therefore conclude that female students at the University of KwaZulu-Natal, where this investigation was conducted are strongly influenced by friends/partners in their decision to pursue sport and recreation activities.

A comparison of the younger (18-22) and older (23-30) student age groups did not find a major difference, contrary to the work of Hoe (2007) who reported that younger students are more constrained by intrapersonal factors when attempting to participate in campus-based

sport and recreation activities. While the research did not support the findings of the previous author, the reader must take into account that these conducted in different ethnic groups in different counts and must therefore take into careful consideration the social and cultural beliefs of the respondents.

5.4 The motives for sport and recreation participation

It is well documented in the literature that participation in physical activities yields outcomes that promote an improved quality of life (WHO, 2014; Grace, Bosch & Du Toit, 2015; Soundy et al., 2015). In this investigation, eight motivating factors were used to establish the influences behind participation in sport and recreation activities. The respondents in this study indicated that their motives for participation are achievement/status ($M = 0.80$), energy release ($M = 0.080$) and for fun ($M = 0.70$). This research supports the work of Peters et al. (2014), who reported that students at North-West University (Potchefstroom) participated in sport and recreation for recognition and status. Skills development ($M = 0.65$), friendship ($M = 0.60$), competition ($M = 0.60$), fitness ($M = 0.60$) and situational ($M = 0.60$) reasons were the least reported motivational factors.

An analysis with respect to motives (and benefits) of participation in sport and recreation found that the views of non-participants did not differ from those of frequent participants. It was evident in the findings that students (non-participants) are not aware of the benefits of participating in sport and recreation activities. Campus life is a critical environment in which young people's experiences are likely to inform future habits, therefore the university's sport promoters and directors need to look into this area, stressing the benefits of sport and recreation on one's health (Kozechian, Heidary, Saiah & Heidary, 2012). Judging by the number of non-participants (40%) in this present study, the current efforts to promote the benefits of sport at the University of KwaZulu-Natal need to be revised. The author is of the view that administrators and personnel responsible for sport cannot function under the attitude that every student knows the significance of participation in physical activities.

The results reveal that males are more motivated to participate in sport and recreation for fun ($P = 0.0009$), friendships ($P = 0.08$), and situational ($P = 0.07$) reasons. Dealing with the demanding task of completing a qualification at university, these three motivating factors can assist in shaping adolescents into adulthood (Lutz, Cornish, Gonnerman, Ralson & Baker, 2009). By engaging in sports, students form meaningful friendships that ease the burden of

dealing with daunting workloads and the challenges that come with being at university. The formation of meaningful friendships enables a student to enjoy the experience with someone close and changes the individual situation (good or bad) into a learning adventure with meaning from which one could hopefully grow.

A significant finding emerged when a comparison of the two age groups was done: older students were motivated by situational factors ($P = 0.02$) and skills development ($P = 0.08$). These findings shed new light, as the work of Hoe (2007) did not find any significant difference in the motives for sport participation based on age. University students' motives for participating in sports and recreation change as they get older, the attitudes of sports administrators must therefore adapt with these changes, delivering a service that meets the needs of both young and older students.

5.5 Students' perceptions on the delivery of campus-based sport and recreation

It is clear in this study that while students are aware of the delivery of sport and recreation as a student service, there is dissatisfaction with the unequal treatment of the various sporting codes offered at this university. The delivery of sport and recreation requires some revision in two particular areas: communication of information, and the education programmes and campaigns on the significance of leading an active lifestyle.

Although it was not a major focus of this investigation, the author tracked publications and communicate for the calendar year of this study and several speculations arose. Rugby appears to be treated and run more professionally than all other sports codes. Greater emphasis and advertising efforts are put in place to ensure that the university community is aware of this sport and it's functioning during the early months of the academic year, while nothing is said about the other sport and recreation activities on offer throughout the year.

While rugby receives "a lot of television time" in the form of coverage from participating in the Varsity Shield tournament aired on SuperSport, therefore promoting the UKZN name to potential donors and sponsors, sports officials at this university cannot continue to undermine other sporting codes. The University of KwaZulu-Natal markets itself as being able to cater to every student's sport and recreation need, from the elite to the recreational enthusiast (UKZN, 2012). Therefore, resource distribution and talent exposure in various sporting codes needs to be conducted in a more transparent manner, one which does not create bias and favouritism towards one sport code.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

The aim of this study was to ascertain the factors affecting participation in campus-based sport and recreation by students staying in residences, with the intention of providing relevant information that the University sport and recreation office could utilize in the development of strategic plans for campus-based sport and recreation delivery as a student service. This chapter addresses the main study findings and the limitations of this study, and concludes with recommendations for the delivery of sport and recreation student services as well as future research in the field.

6.2 Conclusion to the study

The present study found a greater volume of non-participants in physical activities in comparison to the historical literature. Academic workload and time management (structural constraints) were reported to be constraining students from engaging in sport activities and leading a physically active lifestyle. Female students cited that a lack of partners (interpersonal constraint) was causing their non-participation in sport and recreation activities. Participants in sport and recreation activities on campus reported that their motives for participation were achievement/status, energy release and fun. Furthermore, students expressed dissatisfaction with the maintenance and accessibility of sport facilities. The University of KwaZulu-Natal invests significant resources in marketing major sports such as rugby and cricket during the academic year to ensure that stadia is filled by spectators to support these competitive participants. Scant information, however is publicized on the health, social and psychological benefits of participating in physical activities. To ensure that the value of sport and recreation participation is appreciated by students, policymaker, health promoters and sport staff at the will need to annually deliver unique programmes which are centred on time management, stress management and social cohesion in an accessible facilities.

6.3 Limitations of the present study

6.3.1 This study was confined to the views of black students at University of KwaZulu-Natal living in residences at three campuses, namely Edgewood, Westville and Howard College. The views of students living at home were not considered for this study. This study does not

adhere to the call by previous researchers in the field to conduct a study of this type in different racial groups of students.

6.3.2 International students were less represented in terms of the study's sample. The researcher on numerous occasions had a challenge with getting students from the international community to complete the survey. The international students who were approached by the researcher stated that they did not have an issue with the researcher, but they expressed the view that their opinions on sports-related matters were not taken seriously, and they therefore choose not participate in this study's survey.

6.4 Recommendations for university managers responsible for sport and recreation

6.4.1 University Management needs to develop a plan for sport and recreation provision which is open to public scrutiny from its stakeholders. Furthermore this plan needs to be measured and reported on annually to the university community. Reporting on successes alone is not enough, any challenges related to sport and recreation provision should be made public to create greater accountability and integrity of the service within the student development context.

6.4.2 The implementation of current extra-curricular fee structure known as the student levy needs to be revisited. Forty percent (40%) of the respondents in this investigation indicated that they do not participate in sport and recreation on their respective campuses. Although it is of serious concern that such a high number of students don't participate in sport and recreation, students should not be forced to pay a fee for service that they do not directly benefit from.

6.4.3 Academic assistance programmes to deal with time management of students' lives need to be improved and must be in place for all students, not just for those that are not performing well academically. Furthermore, students performing well within disciplines and colleges should be encouraged to run workshops to advise other students on the best practices for good academic performance.

6.4.4 Marketing and communication of University sports needs to be done across all codes of sport and recreation with equal effort. In terms of equal effort the author means that human, capital and physical resources need to be in place to ensure that there are no challenges for

student participants to perform at their best or enjoy a meaningful activity during their leisure time.

6.4.5 The move by institutions of higher learning globally to professionalize sport and recreation warrants that the appointment of sports coaches and managers needs to be undertaken in more transparent manner. Appointed sports staff members therefore must be formally introduced to the university community in the same manner that is followed when an institution appoints an academic within a discipline or colleges of study.

6.4.6 To increase the participation frequencies of students, indigenous games should be introduced and promoted to diversify the sport and recreation programme. By implementing indigenous games, this institution can move closer to validating its mission statement of being a premier university of African scholarship.

6.4.7 The establishment of a body that deals specifically with Recreational activities in South African higher institutions of learning, needs to be consider. Recreation is a field that seems to not be understood clearly in South Africa from an implementation perspective and therefore gets overshadowed or subsumed by competitive sport. Establishment of a body that deals with recreation would ensure that students who do not enjoy competitive sports have a variety of programmes to participate in, to improve their quality of life.

6.5 Recommendations for future research

6.5.1 Studies on sport and recreation facilities must be conducted in universities to establish the accessibility and the quality of these environments. The studies should focus on accessibility to, and the state and maintenance of, campus sport facilities based on the collective views of able-bodied and differently able-bodied students.

6.5.2 To create greater understanding and advance the current knowledge of sport and recreation participation in higher education institutions, a comparative study on the factors affecting student participation in sport and recreation in South Africa's Technical Vocational Education and Training colleges needs to be undertaken. This would enable policy makers to understand the trends and constraints of participation at a national level when designing student development programmes in public institutions of higher learning.

6.6 Summary

The present study investigated the factors affecting student participation in sport and recreation, using students living at residences as respondents of the investigation. The investigation further affirmed that sports plays a crucial role in personal development outside of academics, as participants stated that they engage in sport and recreation for achievement/status, for energy release and for fun. Students further expressed their views on the provision of sports services. University sports managers therefore need to work with academics and student leaders to develop sports programmes with a focus on student achievement, social cohesion and time management.

REFERENCES

Adedoyin, R.A., Ibrahim, R.A., Awotidebe, T.O., Ativie, R.N., & Oyeyemi, A.L. 2014. Psychosocial correlates of physical activity participation among Nigerian university students. *International Journal of Sports Science*, 4, 205-211.

Afsanepurak, S.A., Hossini, R.N.A., Seyfari, M.K., & Fathi, H. 2012. Analysis of motivation for participation in sport for all. *International Research Journal of Applied and Basic Sciences*, 3, 790-795.

Allender, S., Cowburn, G., & Foster, C. 2006. Understanding participation in sport and physical activity among children and adults: a review of qualitative studies. *Health Education Research*, 21, 826-835.

Amusa, L.O. Toriola, A.L., Onyewadume, I.U., & Dhaliwal, H.S. 2008. Perceived barriers to sport and recreation participation in Botswana. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, 14, 115-129.

Asihel, S.G., Jones, D.E.M., & Malcolm, C. 2005. Perceptions of constraints to recreational sports participation: a case study of the University of the Western Cape (UWC) undergraduate female students. Unpublished MA mini thesis. University of the Western Cape, South Africa.

Australian Bureau of Statistics (ABS). 2007. Motivators and Constraints to Participation in Sports and Physical Recreation. National Centre for Culture and Recreation Statistics. [Accessed Online] available online at:http://www.ausport.gov.au/_data/assets/pdf_file/0011/142220/ABSMotivators_and_Constraints_to_participation_in_Sports_and_Physical_Recreation.pdf [Accessed 2 June 2016].

Azlan, A.K., Mohd, S.A.K., & Farhana, W.Y. 2010. The perception and constraints towards recreational activity among female students. *International Journal of Sport Management, Recreation and Tourism*, 6, 62-75.

Awotidebe, T.O., Adedoyin, R.A., Adegbesan, O., A. Babalola, J.F. Olukoju, I.O., Mbada, C.E., Chirwa, E., & Bisiriyu, L.A. 2014. Psychosocial correlates of physical activity participation among Nigerian university students. *International Journal of Sports Science*, 4, 205-211.

Brodkein, P., & Weiss, M.R. 1990. Development differences in motivation for participation in competitive swimming. *Journal of Sport and Exercise Psychology*, 12, 248-263.

Caspersen, C.J., Powell, K.E., & Christenson, G.M. 1985. Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public Health Reports*, 100, 126-131.

Chen, L., Dean, J., Frant, J., & Kumar, R. 2014. What Does “Service Delivery” Really Mean. World Policy Institute, 13 May 2014. [Accessed online] available online at: <http://www.worldpolicy.org/blog/2014/05/13/what-does-service-delivery-really-mean> [Accessed 26 November 2015].

Coakley, J. 2001. *Sport in Society: issues and controversies*. New York: McGraw Hill.

Crawford, D.W., & Godbey, G. 1987. Reconceptualising barriers to family leisure. *Journal of Leisure Sciences*, 13, 309-320.

Crawford, D.W., Jackson, E.L., & Godbey, G. 1991. A hierarchical model of leisure constraints. *Journal of Leisure Sciences*, 13, 309-400.

Daskapan, A., Tuzun, E.H. Eker, L., & 2006. Perceived barriers to physical activity in university students. *Journal of Sports Science and Medicine*, 5, 615-620.

Department of Health South Africa (DOHSA). 2015. Strategy for the prevention and control of obesity in South Africa 2015 – 2020. [Accessed online] available online at: <http://cdn.24.co.za/files/Cms/General/d/4776/e9776ca8f6a44f3099dbde892bb0afbb.pdf> [Accessed 23 June 2016].

Department of Higher Education and Training South Africa (DHETSA). 1997. Higher Education ACT 101 of 1997.

Department of Sport and Recreation South Africa (DSRSA). 1994. Sport and Recreation White Paper. [Accessed online] available online at: <http://www.gov.za/documents/sport-and-recreation-white-paper> [Accessed 23 June 2015].

Desrochers, D.M. 2013. Academic Spending Versus Athletic Spending: Who Wins? Delta cost projects at American Institute for Research. [Accessed online] available online at: <http://www.air.org/sites/default/files/downloads/report/Academic-Spending-vs-Athletic-Spending.pdf> [Accessed 21 November 2015].

Dhurup, M., & Garnett, A. 2011. Self-reported constraints to physical activity participation among university students. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, Supplement 1, 86-103.

Eben, W., & Brudzynski, L. 2008. Motivations and barriers to exercise among college students. *Journal of Exercise Physiology*, 11, 1-11.

Edgington, C.R., Chin, M.K., & Bronichowski, M. 2011. Health and Physical Education: a new global statement of consensus (from a Polish perspective). *Open forum. Biomedical Human Kinetics*, 3, 44-48.

Forde, S.D., Lee, D.S., Mills, C., & Frisby, W. 2014. Moving towards social inclusion: manager and staff perspectives on an award winning community sport and recreation programme for immigrants. *Sport Management Review*, 18, 126 -138.

Gist, N.P., & Fava, S.F. 1964 in Veal, A. J. (1992) *Definitions of Leisure and Recreation*. *Australian Journal of Leisure and Recreation*, 2(4), 44-48, 52, Republished by School of Leisure, Sport and Tourism, University of Technology, Sydney, as Working Paper No. 4. [Accessed online] available online at: <http://www.business.uts.edu.au/lst/research> [Accessed 5 January 2017].

Godbey, G., Crawford, D.W., & Shen, X.S. 2010. Assessing hierarchical leisure constraints theory after two decades. *Journal of Leisure Research*, 1, 111-134.

Gomez-Lopez, M., Gallegos, A.G., & Extremera, A.B. 2010. Perceived barriers by university students in the practice of physical activities. *Journal of Sport Science and Medicine*, 9, 374-381.

Grace, J., Bosch, M., & Du Toit, J. 2015. The effect of a walking programme on the psychological well-being and selected physical and physiological parameters of overweight and obese adolescents. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, 21 (4:2), 1363 -1375.

Halforty, G.A., & Radder, L. 2012. Constraints to students' participation on a formalised level: implications for marketers. Unpublished MA thesis. Nelson Mandela Metropolitan University. Eastern Cape, South Africa.

Halforty, G.A., & Radder, L. 2015. Constraints to participation in organized sport: case of senior undergraduate students at a new generation university. *South African Journal for Research in Sport, Physical Education and Recreation*, 37, 97-111.

Hashim, H.A. 2012. Perceived barriers to recreation sport participation in university students: a comparison between international and local students in the United States. *Pertanika Journal of Social Sciences and Humanities*, 20, 197-203.

Hassmen, P., Koivula, N., & Uutela, A. 2000. Physical exercise and psychological well-being: a population study in Finland. *Journal of Preventive Medicine*, 30, 17-25.

Henchy, A. 2011. The influence of campus recreation beyond the gym. *Recreational Sports Journal*, 35, 174-181.

Higher Education HIV and AIDS (HEAID) programme. 2010. HIV prevalence and related factors – Higher Education Sector Study, South Africa, 2008 – 2009. Pretoria: Department of Higher Education, South Africa.

Hoe, W. E. 2007. Motives and constraints to physical activities participation among undergraduates. Shah Alam, Selangor, Malaysia: Universiti Teknologi MARA. [Accessed online] Available online at: <http://www.isdy.net/pdf/eng/200721.pdf> [Accessed 8 June 2015].

Jackson, E.L. 2000. Will research on leisure constraints still be relevant in the twenty-first century? *Journal of Leisure Research*, 32, 62-68.

Jensen, U. 2011. Factors influencing student retention in Higher Education. Summary of influential factors in degree attainment and persistence to career or further education for at-risk/high educational need students, by Pacific Policy Research Canter. Honolulu, HI: Kamehameha Schools – Research and Evaluation Division. [Accessed online] Available online at: www.ksb.edu/assets/spi/pdfs/RetentionBrief.pdf [Accessed 8 July 2016].

Kimm, S.Y.S., Glynn, N.W., Kriska, A.M., Barton, B.A., Kronsberg, S.S., Daniels, S.R., Crawford, P.B., Sabry, Z.I., & Liu, K. 2002. Decline in physical activity in black girls and white girls during adolescence. *The New England Journal of Medicine*, 347 (10), 709-715.

Knight, J.A. 2012. Physical inactivity: associated diseases and disorders. *Annals of Clinical and Laboratory Science*, 42, 320-337.

Kozechian, H., Heidary, A., Saiah, A., & Heidary, M. 2012. Campus recreation worldwide: A literature review. *International Journal of Academic Research in Business and Social Sciences*, 2, 133-139.

Kubayi, N.A., & Surujal, J. 2014. Perceived benefits of and barriers to exercise participation among secondary school students. *Mediterranean Journal of Social Sciences*, 5, 121-126.

Letseka, M., & Maile, S. 2008. High university drop-out rates: a threat to South Africa's future. Policy brief. Pretoria: Human Sciences Research Council. [Accessed online] Available online at: <http://www.hsrc.ac.za/en/research-data/view/4274> [Accessed 8 June 2015].

Lovell, G., Ansari, W.E., & Parker, J.K. 2010. Perceived exercise benefits and barriers of non-exercising female university students in the United Kingdom. *International Journal of Environmental Research and Public Health*, 7, 784-798.

Lutz, G.M., Cornish, D.L., Gonnerman, M.E., Ralston, M., & Baker, P. 2009. Impacts of participation in high school extracurricular activities on early adult life experiences: a study of Iowa graduates. University of Northern Iowa. Centre for social and behavioural research. Cedar Falls, United States of America.

Masmanidis, T., Gargalianos, D., & Kosta, G. 2009. Perceived constraints of Greek University students' participation in campus recreational sport programmes. *Recreational Sports Journal*, 33, 150-166.

Masmanidis, T., Tsigilis, N., & Kosta, G. 2015. Perceived constraints of campus recreational sports programmes: development and validation of an instrument. *Journal of Physical Education and Sports Management*, 6, 9-18.

McGuirk, E., & Prentice, G. 2012. Physical activity, its relationship with psychological wellbeing and self-perception, and in keeping us all psychologically healthier. Unpublished BA thesis. DBS School of Arts. Department of Psychology. Dublin, Ireland.

Mchunu, S.A., & Le Roux, J.G. 2008. Reasons for non-participation by black learners at secondary school level. Unpublished MA thesis. University of South Africa. Department of Education. Pretoria, South Africa.

McVeigh, J., & Meiring, R. 2014. Physical activity and sedentary behaviour in an ethnically diverse group of South African school children. *Journal of Sport Science and Medicine*, 13, 371-378.

Mittlestaedt, R., Robertson, B., Russell, K., Byl, J., Temple, J., & Ogilvie, L. 2006. Chapter 11, unique groups: campus recreation. In Human Kinetics ed. *Introduction to Recreation and Leisure*. Champaign, IL: Human Kinetics.

Mkwalo, S.C., Coopoo, Y.G., & Van Heerden, J. 2013. The role of the department of sport and recreation in the provision and delivery of sport and recreation in KwaZulu-Natal. Unpublished MA thesis. University of KwaZulu-Natal. College of Health Sciences. Westville, South Africa.

Mohlala, M., & Ramalivhana, F.W. 2014. Anthropometric and physical activity profiles of University of Venda students, South Africa. *African Journal for Physical, Health Education, Recreation and Dance*, December (Supplement 1:2), 435-445.

Moss, J. 2014. Physical activity: the South African context. Faculty of Health Sciences. North West University. Potchefstroom, South Africa. [Accessed online] available online at:

<https://prodwp.pub.coke.com/wpcontent/uploads/sites/55/2014/08/PhysicalActivityTheSouthAfricanContext.pdf> [Accessed 8 July 2016].

Mugwedi, N.P., & Mulibana, P.K. 2014. Constraints faced by University of Venda students in sport and recreation participation. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD) Supplement 1:2*, 359-369.

Mungal-Singh, V. 2015. National obesity week: South Africa's weighty problem. The Heart and Stroke Foundation of South Africa. [Accessed online] available online at:

<http://www.heartfoundation.co.za/media-releases/national-obesity-Hoek-south-africa%E2%80%99s-weighty-problem> [Accessed 2 February 2016].

National Intramural-Recreational Sports Association (NIRSA). 1996. General and specialty standards for collegiate recreational sports. Corvallis, OR: National Intramural-Recreational Sports Association.

Nolan, V.T., & Surujlal, J. 2011. Participation in physical activity: an empirical study of undergraduate university students' perceptions. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, September (Supplement 1), 70-85.

Noorbhai, M.H., Hoosen, T.G., Lategan, L., & Noakes, T.D. 2014. Analysis of physical activity and health profiles and the utilization of the Biokinetic Humanitarian Project among senior university students. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, 20, 1551-1563.

O' Sullivan, E. 2006. Chapter 1: Power, promise, potential and possibilities of parks, recreation and leisure. United States of America. In: *Human Kinetics. Introduction to Leisure and Recreation*. Champaign, IL: Human Kinetics, 3-16.

Peltzer, K., & Pengpid, S. 2016. Leisure time physical inactivity and sedentary behaviour and lifestyle correlates among students aged 13–15 in the Association of Southeast Asian Nations (ASEAN) member states, 2007–2013. *International journal of Environmental Research and Public Health*, 13, 217.

Peters, N., Scholtz, E, M., & Weilbach, J.T. 2014. Determining the demand for recreational sport at a university. Unpublished MA mini-thesis. North-West University. Potchefstroom, South Africa.

Pule, R.E.J., Drotsky, G.A.P., Toriola, A.L., & Kubayi, N.L 2014. Barriers to sport participation among learners at a public township school in Tshwane, South Africa. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, 20, 1414-1423.

Rice, E.A. 1929. A brief history of physical education. New York: Barnes.

Sawir, E., Marginson, S., Duenert, S., Nyland, C., & Ramia, G. 2007. Loneliness and International Students: An Australian study. *Journal of Studies in International Education*, 12, 148-180.

Shifman, R., Moss, K., D'Andrade, G., Eichel, J., & Forrester, S. 2011. A comparison of constraints to participation in intramural sports between international and non-international students. *Recreational Sports Journal*, 36, 2-12.

Smith, B.D. 2008. Motivational factors for student participation in collegiate club sports at Indiana University. Unpublished MA thesis. Indiana University. School of Health, Physical Education and Recreation. United States of America.

Soleymani, M., Farshard, A.Z., & Fharzard, G. 2012. A study of the relationship between the quality of service and customers satisfaction with recreational sports programmes with regards to moderating role of identity. *European Journal of Sports and Exercise Science*, 1, 29-35.

Soundy, A., Freeman, P., Stubbs, B., Probst, M., Roskell, C., & Vancampfort, D. 2015. The psychosocial consequences of sports participation for individuals with severe mental illness: a metasynthesis review. *Advances in Psychiatry*, 1-8.

Sport Science Institute of South Africa (SSISA). 2010. Report card on the physical activity, nutrition and tobacco use for South African children and youth. [Accessed online] available online <https://www.ssisa.com/healthy-active-kids-south-africa-report-card-2010/> [Accessed 8 July 2016].

Sport24. 2015. UKZN Crowned Varsity Shield Champions. Sport24, 7 April 2015. [Accessed online] available online at: <http://www.sport24.co.za/Rugby/VarsityCup/UKZN-crowned-Varsity-Shield-champions-20150407> [Accessed 5 January 2016].

Thomas, J.R., Nelson, J.K., & Silverman, S.J. 2011. Research methods in physical activity. 6th edition. Champaign, IL. Human Kinetics.

Toriola, O.M., & Monyeki, M.A. 2013. Health-related physical fitness, physical activity and body composition status of adolescent learners residing within the Tlokwe Municipality: PAHL study. Unpublished doctoral thesis. North West University. Potchefstroom, South Africa.

University of KwaZulu-Natal (UKZN). 2015. UKZN Cricket Team Crowned 2015 Champions and Promoted to the KZN Premier League. [Accessed online] available online at: http://alumniaffairs.ukzn.ac.za/News/15-04-17/UKZN_Cricket_Team_Crowned_2015_Champions_and_Promoted_to_the_KZN_Premier_League.aspx [Accessed 5 January 2016].

University of KwaZulu-Natal (UKZN). 2014. UKZN Women's Sevens Rugby Team Triumphs at Championships. [Accessed online] available online at: <http://ndabaonline.ukzn.ac.za/UkzndabaStory/NdabaOnline-Vol2-Issue56/UKZN%20Womens%20Sevens%20Rugby%20Team%20Triumphs%20at%20Championships/> [Accessed 18 May 2015].

University of KwaZulu-Natal (UKZN).2012. University of KwaZulu-Natal Strategic Plan 2007-2016 (revised June 2012). [Accessed online] available online at: <http://www.ukzn.ac.za/aboutus/strategicplan.pdf> [Accessed 21 March 2014].

University Sport South Africa (USSA). 2016a.The history of a unified student sport movement in South Africa. [Accessed online] available online at: <http://ussa.org.za/1history.php> [Accessed 22 January 2016].

University Sport South Africa (USSA). 2016b.The constitution of University Sport South Africa. [Accessed online] available online at: <http://ussa.org.za/1constitution.php> [Accessed 22 January 2016].

University Sport South Africa (USSA). 2016c. Member institutions. [Accessed online] available online at: <http://ussa.org.za/2institutions.php> [Accessed 22 March 2016].

University of the Western Cape (UWC). 2014. Major facelift for UWC sports stadium. [Accessed online] available online at: <https://www.uwc.ac.za/News/Pages/Sport-stadium-upgrade.aspx> [Accessed 12 October 2015].

Venugopala, R., & Taylor, M. 2013. Perceptions of undergraduate students of University of KwaZulu-Natal regarding HIV counselling and testing in the year 2012. Unpublished MA thesis. University of KwaZulu-Natal. Nelson Rolihlahla Mandela School of Medicine. Durban, South Africa.

Webber, D.J., & Mearman, A. 2005. Student participation in sporting activities. School of Economics. University of the West of England. Bristol, United Kingdom. [Accessed online] available online at: <http://dx.doi.org/10.1080/00036840601019216> [Accessed 19 May 2015].

Weinberg, R., Tenenbaum, G., McKenzie, A., Jackson, S., Anshel, M., Grove, R., & Fogarty, G. 2000. Motivation for youth participation in sport and physical activity: relationships to culture, self-reported activity levels, and gender. *International Journal of Sport Psychology*, 31, 321-346.

World Health Organization (WHO). 2010. Global status report on non-communicable diseases. [Accessed online] available online http://www.who.int/nmh/publications/ncd_report2010/en/ [Accessed 5 January 2016].

World Health Organization (WHO). 2014. Global status report on non-communicable diseases. [Accessed online] available online at: http://apps.who.int/iris/bitstream/10665/148114/1/9789241564854_eng.pdf?ua=1 [Accessed 5 October 2015].

World Health Organization (WHO). 2016. South Africa: country health profile. [Accessed online] available online at: <file:///C:/Users/Michael/Downloads/south-africa-country-health-profile-2016.pdf> [Accessed 9 December 2016].

Xaba, M.J., & Watson, E. 2014. A comparative study of the alpha related fitness levels of 12 to 13 year old boys from different schools in Johannesburg. Unpublished MA thesis. University of the Witwatersrand. Centre for Exercise Science and Sports Medicine. Johannesburg, South Africa.

Yetgin, M.K. 2014. Views of students in the School of Physical Education and Sports on leisure constraints. *International Journal of Social Science and Education*, 4, 818-828.

Young, S.J., Craig, C.M., Ross, R., & Barcelona, R.J. 2003. Perceived constraints by college students to participation in campus recreational sports programmes. *Recreational Sports Journal*, 27, 47-62.

APPENDICES

1. Editors confirmation letter
2. Gate-keeper's request letter
3. Gate-keeper's approval letter
4. Ethical clearance
5. Participant information letter
6. Consent form
7. Questionnaire

Mr. Colin Muller

Editor

Contact: colin@durbanet.co.za

Mrs. Victoria Hathorn

Co-editor and Prof Reader

EDITORS LETTER OF CONFIRMATION

5 January 2017

To whom it may concern,

This is to confirm that we have edited Mthokozisi Michael Mthethwa' dissertation titled 'factors affecting participation in sport and recreation of students staying in residences at the University of KwaZulu-Natal'.

The editing we did was limited to proof-reading (spelling, punctuation, layout and typing errors) and to matters affecting clarity and consistency of expression (grammatical usage, word order, sentence structure, choice of vocabulary). We did not in any way contribute to or alter the content or overall structure of the dissertation.

Durban

South Africa

Department of Sport Science
University of KwaZulu-Natal
Westville Campus
Private Bag X45001
Durban
4000

4 January 2016

The Registrar: University of KwaZulu-Natal

RE: PERMISSION TO CONDUCT STUDY

Dear Mr. Mokoena

I earnestly request permission to conduct a study titled 'Factors affecting participation in sport and recreation of students staying in residences at the University of KwaZulu-Natal.

The study will commence once ethical clearance is granted and will require full time students at the University of KwaZulu-Natal. I, as the researcher will administer a questionnaire over a 3-month period at Howard College, Edgewood and Westville campus. The students will be given the document to complete and return to the researcher on their respective campuses.

The participation process will be entirely voluntary and only 20 minutes of the student's time will be required to complete the questionnaire. The study will enable the researcher to investigate and compare the perceptions, constraints and attitudes of local and international students towards the university recreational sport participation and delivery at the University of KwaZulu-Natal.

This study will play an important role in highlighting student involvement in and perceptions of, sport and recreation at the University of KwaZulu-Natal. Firstly, it will identify the challenges faced by students which prevent them from participating in recreational sport programmes and activities on campus. Secondly it will provide information about student attitudes and perceptions towards campus-based sport and recreation activities. Furthermore,

it will provide a theoretical and practical framework which can inform the University's strategy around sport and recreation, to better meet the needs of local and international students.

Attached is the questionnaire and protocol of the study for your attention and consideration.

Yours faithfully

Mr. Michael Mthethwa

Researcher

TELEPHONE: 031 260 8284

EMAIL: ZIMUP@ukzn.ac.za

Mr. Patrick Zimu

Research Supervisor

25 February 2016

Mr Michael Mthokozisi Mthethwa
School of Health Sciences
College of Health Sciences
UKZN
Email: 211527851@stu.ukzn.ac.za

Dear Mr Mthethwa

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

"Factors affecting participation in sport and recreation of students staying in residences at the University of KwaZulu-Natal".

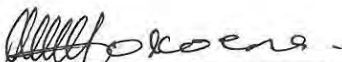
It is noted that you will be constituting your sample by handing out questionnaires to students on the Howard College, Westville and Edgewood Campuses.

Please ensure that the following appears on your questionnaire/attached to your notice:

- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

Data collected must be treated with due confidentiality and anonymity.

Yours sincerely





MR SS MOKOENA
REGISTRAR






Office of the Registrar

Postal Address: Private Bag X54001, Durban, South Africa

Telephone: +27 (0) 31 260 8005/2206 Facsimile: +27 (0) 31 260 7824/2204 Email: registrar@ukzn.ac.za

Website: www.ukzn.ac.za

 1910 - 2010 
100 YEARS OF ACADEMIC EXCELLENCE

Forming Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

11 March 2016

Mr Michael Mthokozisi Mthethwa 211527851
School of Health Sciences
Westville Campus

Dear Mr Mthethwa

Protocol reference number: HSS/0202/016M

Project Title: Factors affecting participation in sport and recreation of students staying in residences the University of KwaZulu-Natal

Full Approval – Expedited Application

In response to your application received 4 March 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
Dr Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

Cc Supervisor: Mr Patrick Zimu
Cc Academic Leader Research: Professor Mershen Pillay
Cc School Administrator: Ms Phindile Nene

Humanities & Social Sciences Research Ethics Committee

Dr Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/63504557 Facsimile: +27 (0) 31 260 4609 Email: www@ukzn.ac.za / smyrnaom@ukzn.ac.za / mohupoo@ukzn.ac.za

Website: www.ukzn.ac.za



1910 - 2010
100 YEARS OF ACADEMIC EXCELLENCE

Forming Centuries: Edgewood Howard College Medical School Pietermaritzburg Westville

**FACTORS AFFECTING PARTICIPATION IN SPORT AND RECREATION OF STUDENTS
STAYING IN RESIDENCES AT THE UNIVERSITY OF KWAZULU-NATAL**

INFORMATION SHEET

Good day (Sawubona)

My name is Michael Mthethwa, I am currently enrolled as a Master's student at the Discipline of Sport Sciences at the University of KwaZulu-Natal. You are requested to participate in a study that involves research on students' perceptions of sport and recreational services at the University of KwaZulu-Natal. This survey is being undertaken as part of the requirements for a Master's degree by research in the College of Health Sciences at the University of KwaZulu-Natal. This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number HSS/0202/016M).

1. What is the aim of the study?

The aim of the study is to ascertain the factors that affect local and international student's participation in sport and recreation, with the intention of providing pertinent information that the University of KwaZulu-Natal Sport Administration Office can utilize in imminent strategic plans for campus based sport and recreation delivery.

2. What will be required of the participants?

The study will involve student participants recruited from four University of KwaZulu-Natal campuses. As a participant of this study you will be required to complete a structured self-administered questionnaire which will include sections:

- Section A: Demographics
- Section B: Constraints to participation in campus-based sport and recreation activities
- Section C: Motives for participation in campus-based sport and recreation activities
- Section D: Perceptions towards campus-based sport and recreation services
- Section E: Recommendations to improve campus-based sport and recreation services.

3. How much time will be required to complete the survey?

The duration of your participation, if you choose to participate in the study is expected to be 20 minutes. The study involves no risks and/or discomforts to the participants. The study offers you an opportunity to raise your concerns and recommendations about the sport and recreation service delivery and factors that affect your participation in sport and recreational activities on campus.

4. Can a participant change their mind and withdraw from the study?

You may withdraw from participation in the project at any time and without any disadvantage to yourself of any kind.

5. What data or information will be collected and what use will be made of it?

The data collected will be securely stored in such a way that only the researcher and his supervisor will have access to it. The researcher will use the data collected to compile his research report. Results of this study may be published in journals and presented at conferences but any data included will in no way be linked to any individual participant. You are most welcome to request a copy of the results of the project should you wish.

At the end of the project all personal information will be destroyed immediately except that, as required by the University's research policy, any raw data on which the results of the project depend will be retained in secure storage for five years, after which it will be destroyed.

6. What if participants have any further questions or concerns about the study?

In the event of any concerns or further questions you may contact:

HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE

University of KwaZulu-Natal

Westville Campus

Govan Mbeki building

Private bag X55001

Durban

5000

TELEPHONE: 031 260 4557

Fax: 031 260 4609

Email: HSSREC@ukzn.ac.za

**FACTORS AFFECTING PARTICIPATION IN SPORT AND RECREATION OF STUDENTS
STAYING IN RESIDENCES AT THE UNIVERSITY OF KWAZULU-NATAL**

CONSENT FORM

I _____ (name and surname)
have been informed about the study by Mr. Michael Mthethwa (the researcher).

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have been provided with satisfactory answers by the researcher.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study, I understand that I may contact the researcher. If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers conduct, then I may contact:

HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE
UNIVERSITY OF KWAZULU-NATAL
WESTVILLE CAMPUS
GOVAN MBEKI BUILDING
PRIVATE BAG X55001
DURBAN
5000
TELEPHONE: 031 260 4557
Fax: 031 260 4609
Email: HSSREC@ukzn.ac.za

I hereby provide my consent to participate in this research study.

Signature of Participant

Date

**FACTORS AFFECTING PARTICIPATION IN SPORT AND RECREATION OF STUDENTS
STAYING IN RESIDENCES AT THE UNIVERSITY OF KWAZULU-NATAL**

QUESTIONNAIRE

Section A. Personal Information

1. Are you male or female?

Male	
Female	

2. Age?

18-22	
23-26	
27-30	
31-34	
35	

3. Race?.....

4. In which country were you born?

5. Do you have any disabling conditions that you are willing to disclose?

Yes	
No	

If yes, what is the name of your disability?

.....

6. Do you belong to any student leadership committees or groups at the University of KwaZulu-Natal?

Yes	
No	

If you answered yes, please list the leadership group or committees you belong to

.....

7. What is the name of the course you are currently enrolled for at the University of KwaZulu-Natal?

.....

8. Which college does your course fall under? (tick below)

Health Sciences	
Humanities	
Law and Management studies	
Agriculture, Engineering and Science	

9. Level of Current Studies (Tick below)

1 st Year	
2 nd Year	
3 rd Year	
4 th Year	
Honours	
Masters	
PhD	

10. Which campus are you based at for the duration of your studies?

Edgewood	
Westville	
Howard College	

11. What is the name of the residence you live in during the academic year?

.....

12. What sport or recreation activities you currently participate during your free time and how often?

Sport and Recreation activity/s	Frequency of participation				Hours per week
	1 x Week	2-3 x per week	4-5 x per week	< 5 x per month	

Section B. Constraints to participation in sport and recreation activities

The following are statements about your non-participation in campus-based sport and recreation activities. Please indicate your choice by ticking a number between 1 and 5 which best describes your views.

13. I do not participate in campus-based sport and recreation because..... (Circle below)

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
a. I am taking medication	1	2	3	4	5
b. I have been advised by a doctor not to partake	1	2	3	4	5
c. I have allergies, and participation will make it worse	1	2	3	4	5
d. I do not know the benefit of participation to my health	1	2	3	4	5
e. I have too much academic work	1	2	3	4	5
f. The facilities are not accessible with my disability	1	2	3	4	5
g. I do not enjoy sport and recreation activities	1	2	3	4	5
h. Activities offered on my campus do not interest me	1	2	3	4	5
i. I am afraid of getting hurt	1	2	3	4	5

j. I do not have anyone to participate with	1	2	3	4	5
k. My friends don't participate so I don't either	1	2	3	4	5
l. I work in the evenings to pay for my studies	1	2	3	4	5
m. I cannot stand being criticized by others	1	2	3	4	5
n. My religion does not allow me to participate	1	2	3	4	5
o. I don't know what activities are available on my campus	1	2	3	4	5
p. The equipment and resources on my campus is in poor condition	1	2	3	4	5
q. Gym and club membership fees are too expensive	1	2	3	4	5
r. I do not get selected into the university teams I train for	1	2	3	4	5
s. People who are not UKZN students get picked in the teams ahead of me	1	2	3	4	5

t. To get into the team is very difficult, especially if you are not South African	1	2	3	4	5
u. There is a lack of knowledgeable and qualified coaches	1	2	3	4	5
v. Coaches are always late at training sessions	1	2	3	4	5
w. Coaches speak in a language I do not understand	1	2	3	4	5
x. Activities are poorly organized on campus	1	2	3	4	5
y. Clubs and teams are poorly run	1	2	3	4	5
z. Some students have been assaulted and robbed during events	1	2	3	4	5

Section C. Motives for participation in campus-based sport and recreation

The following are statements about participation in campus-based sport and recreation activities. Please indicate your choice by circling a number between 1 and 5 which best describes your views.

14. I participate in campus-based sport and recreation because..... (Circle below)

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
a. It reduces my chances of relying on medication	1	2	3	4	5
b. I have been advised by a health expert to do so	1	2	3	4	5
c. It reduces my chances of a non-communicable diseases and allergies	1	2	3	4	5
d. I know the benefit of participation to my health	1	2	3	4	5
e. It reduces the stress of too much academic work	1	2	3	4	5
f. The facilities are easily accessible	1	2	3	4	5
g. I enjoy sport and recreation activities participation	1	2	3	4	5
h. Activities offered on my campus are interesting	1	2	3	4	5
i. I am not afraid of getting hurt	1	2	3	4	5

j. I have a lot of friends to participate with	1	2	3	4	5
k. Because my friends also participate	1	2	3	4	5
l. It keeps me active and makes me feel good about myself	1	2	3	4	5
m. I make new friends	1	2	3	4	5
n. It teaches me a lot about the diverse cultures that are present within the student community	1	2	3	4	5
o. I am well informed about what activities are available on my campus	1	2	3	4	5
p. The equipment and resources on my campus are well maintained	1	2	3	4	5
q. Gym and club membership fees are affordable	1	2	3	4	5
r. The university's teams are made up of players picked on merit	1	2	3	4	5
s. Coaches and sport staff are knowledgeable and competent	1	2	3	4	5
t. Coaches are punctual and deliver well planned training sessions	1	2	3	4	5
u. Coaches communicate in a language that I can understand	1	2	3	4	5
v. I feel safe participating in campus-based sport facilities during the day or at night	1	2	3	4	5

w. I have nothing else to do	1	2	3	4	5
------------------------------	---	---	---	---	---

Section D. Perceptions towards campus-based sport and recreation service

The following are statements about campus-based sport and recreation services. Please indicate your choice by circling a number between 1 and 5, which best describes your views.

15. My campus has (circle below)

Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Clearly marked grounds and sport facilities	1	2	3	4	5
b. Sports grounds and facilities that are well maintained	1	2	3	4	5
c. Clean and well maintained change rooms	1	2	3	4	5
d. Good lighting on sport and recreation facilities when I participate in the evenings	1	2	3	4	5
e. Informed me about the benefits of participating in sport and recreation	1	2	3	4	5
f. Communicated the responsibilities of Sport Administration Department officials	1	2	3	4	5
g. Communicated the University's Sport and Recreation budget for the coming year	1	2	3	4	5
h. Communicated the achievements of the Sport Admin Department	1	2	3	4	5
i. Communicated the challenges faced by the Sport Admin Department in delivering sport services	1	2	3	4	5

j. Communicated plans to improve sport and recreation service delivery in the coming year	1	2	3	4	5
---	---	---	---	---	---

Section E. Recommendations

16. What recommendations would you make to the University of KwaZulu-Natal to?

(i) increase the levels of participation in campus-based sport and recreation activities, by local and international students;

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

(ii) improve the quality of campus-based sport and recreation activities;

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

(iii) improve the current service delivery of sport and recreation;

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

(iv) improve any other aspect of campus-based sport and recreation activities?

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