DETERMINANTS OF COMMUNITY INVOLVEMENT IN HEALTH AND FITNESS RELATED PHYSICAL ACTIVITIES AS RECREATION IN PLATEAU STATE, NIGERIA

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BY

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DECLARATION

I declare that the thesis entitled 'Determinants of Community Involvement in Health and Fitness Related Physical Activities as Recreation in Plateau state', has been written by me in the Department of Physical and Health Education, under the supervision of Prof. M.A. Chado and Prof. C.E. Dikki.

The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree or diploma at any university.

Wash Chollom Dung	_____	_____
Name of Student	Signature	Date

CERTIFICATION

This thesis entitled "DETERMINANTS OF COMMUNITY INVOLVEMENT IN HEALTH AND FITNESS RELATED PHYSICAL ACTIVITIES AS RECREATION IN PLATEAU STATE," by Wash, Chollom Dung meets the regulations governing the award of the degree of Master of Science in Exercise and Sport Science of the Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This thesis is dedicated to my late Father Pastor Dung Pam, my children Blessing Chollom Dung (daughter), Benjamin Chollom Dung (Son), as well as my wife, Mrs. Rifkatu Chollom Dung Wash for their wonderful love and advice which cannot be quantified.

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ABSTRACT

Sedentary life style is one of the unhealthy life style that affects the health of Nigerians significantly. This development is due to industrialization and automation of activities which reduces the amount of physical exertion of Nigerians. This study examined determinants of community involvement in health and fitness related physical activities as recreation among people of Plateau State. The research technique used in the study for selecting the respondents from the population was the stratified random sampling technique. The population consisted of both male and female between the ages of 12 – 70 years who were resident in both rural and urban communities in the state. A structured questionnaire was designed and administered to selected individuals in the nine selected local government councils of the state. A total of 771 respondents were involved in the study. The data collected were subjected to statistical analysis using Z-test and spearman rho correlation procedure. Among the major findings were that awareness of perceived benefits of regular involvement in health and fitness related physical activities as recreation was significantly related to individual participation in recreational activities. Among other findings were that age, sex and location of residence were found to be significant factors for participation in recreational activities by individuals in the study areas. Among the recommendations were that the aged should be encouraged to walk with friends for at least 30 minutes each day of the week during their leisure time to promote their health and fitness, also the state, local government councils and employers of labour should provide adequate recreational facilities for their workers.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

All over the world, communities have found out that an investment in recreation is an investment in effective, enjoyable community living. The fruits of health and fitness related physical activities as recreation are harvested for many years in more wholesome community life. Today, the primary causes of death and diseases in our society are related to lifestyle choices. Achieving wellness requires that the individual make lifestyle choices that will reduce disease risk factors and promote health. These choices include being physically active on regular basis taking time for relaxation and managing stress effectively (West and Bucher, 2006).

In many cases, man has spent his leisure hours in a constructive and worthwhile manner by participating in such activities as music, dance, games, sports, paintings and other arts. The Chinese, Hindu, Persians, Egyptians, Babylonians and the Greeks left evidence of physical activities as recreation (Bucher, 1979). People engage in recreational physical activities primarily for the enjoyment and relaxation it brings. It does not matter whether you are young or old, rich or poor, strong or weak, active or bedridden, man or woman. It also makes an important contribution on individuals' mental, social and physical health. Hospitals even organize recreational activities under trained supervisors as therapies for patients, (World Book, 2002). Recreation is experiencing a rapid growth and expansion. The number and types of available activities have increased. Schools, and business outfits offers a wide range of activities to meet the fitness and leisure needs of individuals (West and Bucher, 2006)

Suleiman, (2004) explained that recreation has a lot to offer to individuals when utilized in worthwhile activities, especially in areas of mental, physical, social

and psychological development. He added that in Nigeria, recreation can not be looked upon as a new phenomenon in the life of the people, since, Nigerians engaged in different forms of play activities during their leisure hours. Play grounds, village and market squares were used as centers for cultural displays; traditional ceremonies, as well as for different kinds of socio-religious functions.

Omolewa (1988) maintained that the traditional society promoted the art of jumping, wrestling, swimming, climbing trees and hunting during leisure time. Youths and adults were not excluded as demonstrated by; annual festivals and age grade physical competitions in wrestling, racing and hunting. The entire community was involved in the promotion of these activities. Physical activities were also an integral part of indigenous education. Physical activities were recognized as fulfilling basic social and health functions. For example, one had to be in good health to succeed in search of food, and playing social roles of dancing or fighting for the community. The society was also in no doubt the other objective of traditional sports and games designed to encourage the development of prowess (Omolewa, 1988).

Uguru-okorie, (1988), observed that in Nigeria, awareness of the role of physical activities is very low both on the level of decision making and in the population awareness regarding its values and significance in mental health and happiness. He observed that though, Nigeria is still in physical terms largely rural, the finer, psychological healthful elements in traditional civilization have been swept away, almost totally by western civilization. However, community play grounds were and are still serving for encouraging community members of different age groups and sex to engage in various recreational activities; especially active physical activities to promote their health and fitness.

Adaramaja and Adegbite (2005) documented the report of World Health Organization (WHO), where it was stated that "3.5 million Nigerians have mild hypertension, 1.2 million have moderate and 0.5 million have severe hypertension." They explained that the prevalence of cardiovascular diseases, obesity, diabetes and other health and fitness related problems are due to unhealthy lifestyle which is generally estimated at 8 – 10 % for people in rural and 10 – 12% for people in urban communities which comprised adults and youths respectively in Nigeria. According to the report, sedentary lifestyle is one of the unhealthy lifestyles that affect the health of these groups of Nigerians significantly.

1.2 **Statement of the Problem**

Chado (1992) and Heyward (1998) reported that research studies have shown that technology has lessened the physical demands of every day activities like cleaning the house and walking to work. What would have once required an hour of physical work, now can be accomplished in just few seconds by pushing a button or setting a dial. As a result, more time is available for recreation. The unfortunate fact, however, is that many individuals pursue sedentary life styles. Preliminary findings from (WHO, 2005), study on risk factors suggested that sedentary life style is one of the ten leading causes of death and diseases in the world. Physical inactivity increases cases of mortality, doubles the risk of cardiovascular diseases, type II diabetes and obesity, high blood pressure, osteoporosis, depression and anxiety (WHO, 2005). This sedentary life style is one of the unhealthy lifestyles that affect the health of Nigerians significantly and it is assuming an alarming proportion of mortality particularly among adults in Nigeria. The quest for development and industrialization has reduced the amount of physical exertion due to automation in Nigeria.

Some older people in the communities in Plateau state are not aware that death and diseases in the society are related to lifestyle choices. They are also not aware that enjoyable physical activities during recreation can contribute to the quality of their life. Older people in the state also do not engage themselves regularly in physical recreation to improve their health and fitness. Similarly women in the state are usually busy with domestic work during their leisure time and are involved less in physical recreation. Rural communities in the state have less modern recreational facilities for promoting their health and fitness.

Observation made by the researcher reveals that there is a high rural urban migration in search of white-collar jobs in the urban areas of Plateau state. More so, youths in Nigeria nowadays spend much of their leisure in watching videos and European football league instead of being engaged in active recreational physical activities. This pattern of lifestyle is not so much different from the adult who spend their time on news in the satellite television and films. The high number of commercial motor cycles has contributed to this problem since most people prefer to ride motor cycles rather than walk to their various destinations. This study was therefore set to investigate among others the following questions:

1. Does community members awareness of the perceived health and fitness benefits of physical activities influenced involvement in recreational activities in Plateau state?
2. Does age influence the level of involvement in health and fitness related physical activities as recreation in Plateau state?
3. Does gender influence the level of involvement in health and fitness related physical activities as recreation in Plateau state?

4. Does location of residence influence the level of involvement in health and fitness related physical activities as recreation in Plateau state?

1.3 Basic Assumptions

This study was guided by the following assumptions

1. Community awareness of perceived health and fitness benefits of physical activities will influence their participation in recreational activities positively.
2. Adolescents are involved more in physical activities as recreation than adults.
3. Males are involved more in physical activities as recreation than females.
4. Members of rural communities are more physically active in their daily activities than those in urban communities in the state

1.4 Purpose of the Study

The purposes of this study are to determine:

1. Whether community members' awareness of perceived health and fitness benefits of physical activities influenced regular community involvement in health and fitness related physical activities as recreation in Plateau state.
2. The influence of age on the level of involvement in health and fitness related physical activities as recreation in Plateau state.
3. The influence of gender on the level of involvement in health and fitness related physical activities as recreation in Plateau state.
4. The influence of location of community on the level of involvement in health and fitness related physical activities as recreations in Plateau state.

1.5 Hypotheses

For the purpose of this study four hypotheses were formulated.

1. There is no significant relationship between awareness of perceived benefits of health and fitness related physical activities and involvement in recreation in Plateau State.
2. There is no significant difference between the level of involvement of adolescents and adults in health and fitness related physical activities as recreation in Plateau state.
3. There is no significant difference between the level of involvement of male and female in health and fitness related physical activities as recreation in Plateau state.
4. There is no significant difference between the level of involvement of urban and rural communities in health and fitness related physical activities as recreation in Plateau state.

1.6 Significance of the Study

The significance of this study includes:

1. The outcome of the study will help in bridging the gap that exist between community members' knowledge of the health and fitness benefits of regular physical activities and the practice of recreation in Plateau state.
2. The findings will also help people of different age groups in the state to become physically active in their leisure time on regular basses to have improved long term health, be less likely to have a heart attack feel more energetic, manage weight better and have a healthier blood cholesterol level.

3. The findings will also stimulate women to become physically active during their leisure time in spite of the physiological, psychological and sociological constraints to build self esteem, confidence, promote psychological well being and social integration.
4. The health of community members in the state will be maintained through using the natural resources nature has endowed it with for recreational activities, for example, mountaineering, hunting and swimming.

1.7 Delimitation of the Study

The study was delimited to the population in rural and urban communities in Plateau state. Only health and fitness related physical activities engaged in as recreation within the state were investigated. These activities include among others brisk walking, jogging, swimming, folk dance, wrestling, racket games, ball games, cycling and hunting and which are conducted as recreation. The respondents involved in the study were within the age range of 12 and 70years and were made up of males and females who were resident within Plateau state as at the time of this study.

1.8 Limitations of the Study

This study had the following limitations. The information obtained for the study was through questionnaire directly responded to by the people in the selected areas of Plateau state. There was no way the researcher would have determined the sincerity of the opinion expressed, except that the responses were assumed to be the true reflection of the respondents' feelings. To minimize this problem, the questions were carefully phrased and made simple as possible to be understood by the respondents. Research assistance after training, were used to administer and interpret the questions to the respondents in the dialects within the study areas of the state.

1.9 Definition of Terms

The terms below are given their operational meanings as used in this study.

- Urban Community: A settlement with a large population and social amenities like water, good roads, telecommunication facilities, hospitals, electricity, schools and recreational centers in Plateau state.
- Rural Community: A dispersed settlement with a small population with no social amenities in most cases. The population is mostly homogenous and is predominantly farmers.
- Physical fitness: is the ability to perform occupational, recreational and daily activities without becoming unduly fatigued and allows the person's capacity to cope with the physical demands of his or her lifestyle.
- Health and fitness related physical activities: Activities that promote active lifestyle of people when they are done regularly.

CHAPTER TWO

REVIEW OF RELATED LITERATURES

2.1 Introduction

In order to determine the community involvement in health and fitness related physical activities as recreation in Plateau state, attempt was made to critically review available related literature under the following sub-headings:

2.2 concept of physical activities

2.3 Benefits of physical activities

2.4 Physical activities and youth

2.5 Physical activities and adults

2.6 Physical activities and males

2.7 Physical activities and females

2.8 Barriers to physical activities

2.9 Recreational activities

2.10 Values of recreational activities

2.11 Physical activities as recreation

2.12 Recreation for health and fitness

2.13 Community involvement in recreation in Plateau State

2.14 Summary

2.2 Concept of Physical Activities

Anshel, Patty, Joseph, Kathleen, Michael, and Sharon, (1991) defined physical activities as movement of the human body that results in the expenditure of energy at a level above the resting metabolic rate. They believe that moderate involvement in physical activities regularly will produce a state of well being that provides a degree of protection against hypo-kinetic diseases. Jackson et al (1999) opined that physical

activity in its simplest terms is “moving about”. They maintained that these physical activities are more accurately described as life style choices rather than formal exercises.

The distinction between physical activities, exercise and physical fitness is important at this point in time. (Heyward, 1998) distinguished between these terms as follows. Physical activity is any body movement produced by skeletal muscles that result in energy expenditure. Exercise is a subset of physical activities that is planned, structured and repetitive and is done to improve or maintain physical fitness. Heyward further maintained that physical fitness is a set of attributes that are either health or skill related. Health related fitness includes cardio respiratory, musculoskeletal fitness, (muscular strength and endurance, flexibility) and body composition. Skill related fitness includes balance, agility, power, reaction time, speed and coordination. From the fore-going concepts it is clear that muscular activities must be performed to produce a rise in body metabolic rate before the desired result of health and fitness are achieved. Adherence to these activities is maintained when it is done as recreational activities.

Jackson, Marrow, Hill and Dishman (1999) traced the relationship between physical activities and health to the study of Jerry N. Morris who investigated London transport authority employees in the 1950s and found out that, bus drivers (sedentary group) had a significant greater number of cases of Coronary Heart Disease (CHD) than conductors (the active group). This study paved the way for a variety of studies over the later half of the century that clearly illustrate the relationship between physical activities and a number of causes of disease and death . Using several of these studies as a basis, many national organizations developed position papers on the links between physical activities, quality of life and health e.g. World Health Organization (WHO) move for health initiative. According to Bucher (1979), it is important that everyone

should develop the knowledge and skills which will enable them to understand their own bodies and how to keep them healthy and have regard for the health of the community.

2.3 Benefits of Physical Activities

Cross sectional studies have shown that there is a high correlation between physical activities and health. Everybody desperately wants to feel relaxed and happy about life, and to possess the extra reserves of energy that often promotes health and fitness. What is required of everyone is not just exercising for health and fitness only but for total well being.

Bucher, (1979) maintained that the way each human being lives will be a major determining factor for the health and fitness of the individual although hereditary plays a part, to a large degree; health and fitness are acquired characteristics. The food that is eaten, amount of rest obtained, physical activities engaged in, and other health practices that are followed, play important roles in determining human welfare.

The report of WHO (2003), on global strategy on physical activities and diet reveals that physical activities have measurable biological effects, affecting cholesterol levels, insulin sensitivity and vascular re-activities. Moreover, these effects are dose dependent, the more exercise the greater the health benefits. However, considerable health benefits can be gained with small increase in moderate physical activities e.g. regular walking. The report also describes the opportunities for people to be physically active in terms of four domains of their day to day lives, at work, for transport, in domestic duties, or in leisure time. People must be made aware of benefits of physical activities to health and be encouraged to be more active on every day basis particularly, during their leisure time.

Ferguson, (1997) explained that people who perform more formal exercise (i.e. structured or planned exercised programmes) can accumulate this daily total through a variety of recreational activities. People who are currently sedentary or minimally active should gradually build up exercise to the recommendation goals of 30 minutes of moderate activities daily by adding a few minutes each day until reaching their personal goals. Lee and Blair, (2002) reported that it is well established that physical activities has numerous health benefits including decreasing body fat, blood pressure and cholesterol levels, all of which may also lower stroke risk. Public health officials recommend moderate physical activities for at least 30 minutes on most, and preferably all days of the week. Every day activities such as walking around the block, washing car by hand or doing yard work, all fit into the moderate activities category and contribute to 30 minutes goal.

Jogging has been found beneficial to some heart attack victims because it increases the flow of blood to the damaged heart and it may help some heart attack patient to rebuild the endurance in their hearts and lungs (Coppeck, 1975). He further stated that exercise such as jogging forces the body to become conditioned to an increased need for oxygen and when the body reaches the levels of fitness that meets this need, cardio-pulmonary and oxygen transport system become more efficient. Suleiman (2002) re affirms that jogging which is a combination of running and walking has become popular as an aid in being physically fit and healthy. Jackson, Marrow and Dishman (1999) said that, if you are physically active regularly, particularly, during leisure time, you tend to:

- Have improved long term health
- Be less likely to have a heart attack
- Feel more energetic

- Manage your weight better
- Have a healthier blood cholesterol level
- Have lower blood pressure
- Have stronger bones and muscles (less osteoporosis)
- Recover better from heart attack

It is now clear that regular physical activities benefits communities and economies in terms of reduced health care, increase productivity, better performing schools, lower worker absenteeism and increased participation in sports and recreational activities (W.H.O, 2005) According to Arobonlo (2007), moderate amount of physical activities can be achieved in a variety of ways. People can select activities that they enjoy and that fit into their lives. He recommended that Nigerians should avail themselves of the numerous cheap and easy to perform recreational activities: such as jogging, walking, continuous running, cycling among others to keep obesity and over weight under check.

Exercises are to be enjoyed, not to be taken very strenuously because the purpose of performing exercise is like taking medicine to cure or prevent diseases and should be recreational. Chado (1991) and Otinwa (2002), asserted that recreation is as important as diet in maintaining proper weight. Weight reduction is accomplished by a reasonable increase in daily physical activities particularly during leisure time along with necessary dietary control.

2.4 Physical Activities and Youth

Most research studies published between 1998 to date have indicated that U.S children and teenagers lead very sedentary live. Children aged 6-17 score extremely poor in areas of strength, flexibility and cardio-respiratory endurance. Television watching and parental inactivity were implicated as major reasons in these studies (Foss

and Keteyian 1998). According to the report of Center for Disease Control (CDC) (2005), on promoting better health for young people through physical activities and sports, physical activities is crucial to our health, happiness, and well being. The staggering consequences of diseases due to lack of physical activities are clear, soaring rates of obesity and diabetes, potential future increases in heart diseases, and devastating increases in health care costs. We now have the opportunity to reshape our sedentary society into one that facilitate and promotes participation in physical activities during childhood, through adolescence and into adulthood.

According to CDC (2000) factors that are positively associated with physical activities as recreation among young people include confidence in one's ability to engage in active recreation that is "self-efficacy", having positive attitudes towards recreation and enjoying physical activities during leisure time. Perceiving benefits from, engaging in physical activities or being involved in sports during leisure time is positively associated with increase in physical activities and recreation among adolescents. These perceived benefits include excitement and having fun, learning and improving skills, staying in shape, improving appearance, and increasing strength, endurance, and flexibility. Research findings generally reveal a positive relationship between the physical activities level of parents in recreation and that of their children, particularly adolescents. Parental support for physical activities as recreation correlated with active lifestyle among adolescents. Physical activities as recreation among young people is also positively correlated with having access to convenient play spaces, sports equipment, and transportation to recreation or fitness centers.

Similarly, Foss and Keteyian (1998) concurred that parents present themselves as a physically active role model to their children plays an integral role in fostering their child's interest in physical activities now and in the future. In the Same vein

Fadoju (1999), pointed out that participating parents in physical recreation are likely to influence the children to take part in active recreational activities, whereas, non-participating ones are more likely to discourage them. When parents educate their children on values of active recreation, their attitudes towards recreation will change positively.

According to Ajiduah (2002), adolescent and youth active recreational activities promote healthy structural development and growth. Their skeletal system as well as their cardio respiratory systems develop well and they become physically fit to be able to perform their day to day activities without undue fatigue. He maintained that children should learn about the importance of physical fitness early in life so that they can develop and cultivate the habits of participation in physical activities which they can use later in life as recreational activities.

CDC, (1997) observes that school and community programmes that promote regular physical activities among young people during their leisure time could be the most effective agencies for reducing the public health burden of chronic diseases associated with sedentary lifestyles. Programmes that provide students with the knowledge, attitudes, motor skills, behavioral skills and confidence to participate in physical activities may establish active life styles among young people that continue into and through out their adult lives. The programmes should promote physical activities, provide health services that encourage and support physical activities, provide community based sports and recreation programmes, evaluate school and community physical activities instruction programmes and facilities. CDC, (2000) suggested that young people should build healthy bodies and establish healthy lifestyle by including physical activities in their daily lives. However, many young people are not physically active on a regular basis, and physical activities declines dramatically

during adolescence. School and community programmes can help young people get active.

Omolewa, (1988) maintained that in traditional society during annual festivals, youths are engaged in age-grade physical competition in wrestling, racing and hunting. The reverse is the case today as youths have been taken to passive recreational activities e.g. watching video tapes and European Football Leagues.

2.5 Physical Activities and Adults

Jackson et al (1999) opined that older adults both male and female can benefit from regular physical activities in form of recreation. Aging is associated with activities limitations due to deteriorating health. WHO (2005) reports that active lifestyle provide older persons with regular chance to make new friendship, maintain social network to interact with other people of all ages. Improved flexibility, balance, and muscle tone can help prevent a major cause of disability among older people. It has been reported that the prevalence of, mental illness is lower among people who are physically active.

Older adults can obtain significant health benefits with a moderate amount of physical activities, preferably daily. A moderate amount of activities can be obtained in longer sessions of moderately intense activities such as walking. Previously sedentary older adults who begin activities should start with short intervals of moderate physical activities and gradually builds up. Physical activities can have positive effects on older people who want to maintain a good quality of life. Hahn and Payne (2003) found out that physical activities preferences among adults who say they exercise regularly during their leisure time prefer the following activities.23% at least 20 minutes aerobic exercise, 19% work out on home equipment, 17% participate in sports, 14% strength training,13% jog/run, 10% workout at club/gym and 4% workout with exercise video.

Bird (1997) observed that for adults, the reported health related benefits of exercise are diverse and can be considered under the following:

- The promotion of physical capacity, to enhance a person's capacity to cope with the physical demands of his or her life style.
- The provision of social environment.
- A reduction in risk of certain hypo-kinetic diseases. He maintained that person's maximum physical capacity is generally considered to increase during childhood reach a peak during the late teens to early 30s and declines as a person gets older. In adults physical activities engaged in during recreation provide satisfying outlets for their physical energy and well-being. These physical activities offer sense of coordination, balance and control of the body, (Akintunde, 2001).

2.6 Physical Activities and Males

Dubbert (1997) published the results of a study made in 1991 by the Center for Disease Control and prevention, that 57.7% of men and 58.5% women are sedentary in America. This shows that men are more active than women and the situation could be same in Nigeria especially in the cities. Similarly Myers et al (2002), reported in a study on exercise capacity and mortality among men referred for exercise testing that men who were sedentary were 4 times more likely to die than men with regular exercise capacity. This was true for men with and without cardiovascular disease, suggesting that exercise capacity may even offset some of the risks associated with cardiovascular diseases. As exercise capacity decreased the risk of death increased in males.

Tansescu, Leitzman, and Rimm (2002), reported the results of a study on physical activities as a means of reducing the risk of cardiovascular disease. The results of men corresponded with that for women, where brisk walking led to a reduced risk of

-39% to -40%. Regular quick walking is therefore the simplest and at the same time, the most effective way of preventing cardiovascular disease for both men and women. Men can cut odds of dying from heart disease in half in about the time it takes to watch a long movie, new research shows that being fit enough to walk for around 130 minutes per week slashed heart disease death risk by 50% even in men with high cholesterol (Ardern, 2005).

Business Sports (1997), reported the findings of a study in Australia on the fitness generation in touch with the time, that there is a major difference in terms of sports and recreation participation between genders. Males are more likely than females to become involved in sports and recreation, with nearly 80% of males participating in the year 1996 compared to 74% of females. This gender difference is most noticeable in the population of 15 to 35 years.

2.7 Physical Activities and Females

WHO (2005), reports on women and physical activities has it that regular physical activities and good eating habits can improve women's health and prevent many of the diseases and conditions that are major causes of death and disability for women around the world. It also added that regular physical activities helps reduce stress, anxiety, depression and loneliness, this is particularly important for women as rates of depression for women almost double those of men in developed countries. Physical activities also help build self esteem, confidence, promote psychological well being and social integration in women.

According to Arongbonlo (2007), four out of five people who die from coronary heart disease are aged 65 or older. The risk of stroke doubles with each decade after the age of 55. Arongbonlo further added that death rate of women from heart disease and

stroke is twice as high as those for all forms of cancer. The risk for women increases as they approach menopause and continues to rise as they get older, possibly due to the loss of the natural hormone oestrogen.

Dikki (1992), opined that participation in sport by women is a recent phenomenon, taking a more definite dimension in the second half of this century. Women are however still inhibited from participation in sports by societal perception of the women. A good number of Nigerian women find it difficult to engage in recreation. Apart from the cultural and traditional taboos associated with women exposure, the present economic situation comes to mind readily. Most people especially women are busy chasing means of living and survival for the family which has cause them to live a sedentary life. Therefore, only those who are recreation lovers and financially alright can give time for recreational activities (Fatiregun, 1995). According to Phillips (2002) in Nigeria for example, some cultures do not permit a woman to expose her body in public in an act which is associated with recreation.

Similarly, some parents believe that if their female child takes part in sports or recreation, she tends to be sexually promiscuous as well as suffer physical deformity. In addition, it is also their belief that recreation and sports cause sterility in women. Some men do not like their wives to take part in recreational activities, because they believe that other men can get attracted to them through the process. For example, swimming where women put on swimming suits, that exposes certain parts of their body. Kabido and Dashet (1992) observed that numerous Nigerian cultures maintained a greater degree of sports competition for boys than girls. The women participation in competitive sports has been influenced negatively by the various cultures, beliefs, morals, societal norms and superstitions. They cited an example of the influence of

religion in some parts of the north, where women have no time to participate in any form of sports, whether competitive or recreational particularly when married.

In spite of the physiological (including structural), psychological and sociological constraints to female sports performance, the benefits of female participation in recreational sports outweigh the risks. Females who participate in active recreation enjoy good health and score high in most indices of physical fitness (Nwankwo, 2001). Women particularly are often fearful that physical activities will produce unsightly bulging muscles. The end result of participating will be better muscle tone, a replacement of fatty tissue with strong muscles and improved overall fitness (Otinwa, 2002).

2.8 Barriers to Physical Activities

Dubbert, (1997) posited that lack of interest, lack of discipline and lack of enjoyment have been identified by both men and women of varying ages as important barriers to physical activities, lack of knowledge about how to perform the activities and skill are also perceived as barriers. Lack of time, work and family demands have been consistently reported by women as important barriers to physical activities as recreation. Lack of knowledge of the benefits of physical activities to health and fitness could also be a factor. The general barriers militating against people participation in physical activities as categorized by Jackson et al (1999) are personal, social and exercise history and exertion. They maintained that time and poor accessibility to facilities or equipment are the two main barriers people report for not adopting a regular physical activities.

According to Ajiduah (2002), most Nigerian workers would rather claim their leave allowances or bonuses and stay in their offices working than to take their leave

and go to enjoy themselves by participating in recreational activities. He said reasons they give for not participating in recreational activities includes:

- There are no enough recreational activities in the country.
- We are not economically buoyant enough to be able to engage in purposeful recreational activities.
- We are too busy to even think of recreational activities let alone participate in it.
- Recreation is for people who have nothing to do with their time.

He confirmed that lack of awareness about the importance and values of recreation appears to be the main reason for their poor attitude towards recreation.

2.9 Recreational Activities

Recreation has been given a variety of definitions relating to type of experience, specific form of activities, attitude, sports and job. At times it is regarded as play. It is an amusement of diversion, which gives enjoyment, refreshment of strength and spirit after a hard days work, anything providing entertainment or relaxation. (Bucher, 1979; Akintunde, 2001) explained that recreational activities restore physical and mental energy in a way of rest and relaxation after work. Suleiman (2004), sees recreation as voluntary involvement in leisure activities, free from obligation and for the purpose of pleasure.

Udoh (1995), asserted that recreation is worthwhile and socially acceptable. Leisure expresses activities that provide immediate and inherent satisfaction of individuals who voluntarily participate in activities that do not undermine this health and well being. People who participate in sports as recreation seek to continue to play because they have come to value the experience and find enjoyment in doing so. Creed,

(2004), viewed recreation as a distinct phase of human activities, which is beneficial and constructive to the health of an individual.

Bucher (1979), observed that community recreation programmes are growing. Many communities have years round progerammes for persons of all ages that include fitness programmes, swimming pool, tennis courts, camp programme for children, and summer recreation programme for all residents. Fasan (2002), defined community as a conglomeration of people of diverse culture, tribe, skill and profession delineated by artificial or geographical boundaries. He added that community recreation can be seen as people's way of utilizing the natural resources at their disposal to enjoy maximum health. It is a community way of exploring their locality leisure time. Community recreation can be organized on a communal level for all ages, groups and sex with wide variety of activities.

Toyne (1974) is of the view that if used extensively, recreation not only helps to prevent ill-health and sustains good health but also help the ill and handicapped to regain their health. According to Suleiman (2002) recreation has demonstrated its capacity for helping people attain and keep sound health. Physical recreation particularly those activities that involve the use of large muscles, as in active games and sports, athletics and callisthenic, help in developing our structure.

A good recreational programme should have a wide variety of activities that would meet the needs and interest of the people as far as possible (Bucher 1979). This in effect means that activities engaged in voluntarily because of an inner self motivation desire is recreational. Wilmore and Costil (1999), maintained that recreational activities are important to any comprehensive exercise programme. Although people engage in these activities primarily for enjoyment and relaxation, many recreational activities can

also contribute to improving health and fitness. Activities such as hiking, tennis, handball, squash, swimming and certain team sports fall into this category.

Atolagbe (1988), posited that recreation can be used as a form of therapy in the treatment of people with emotional problems. Udoh (1988) recommended recreation for children, youths, adults, and the aged for both sexes. He maintained that a variety of activities abound that everybody no matter the status, can find a worthwhile activity to engage in at his or her own leisure. He subdivided the activities into two groups:

- Individual and dual games and gymnastics.

Awareness has produced an increase interest in the benefits of physical fitness. Many people are using additional leisure time to participate in recreational activities requiring some degree of physical exertion, (Booher and Thibodeau, 2000). Akintunde (2001), suggested that the classification of recreation activities should be based on both the types of activities and the motives which individuals engage in them to achieve. People are becoming more health and fitness conscious than ever before.

2.10 Values of Recreational Activities

According to Bucher, (1979) Guts Mouths the father of physical training in Germany emphasized the creative value of play in his book games for the exercise and recreation of body and mind. The theory of recreation has as its premise the idea that the human body needs some form of play as a means of revitalization. Play is a medium of refreshing the body after long hours of work. It is an antidote for tense nerves, mental fatigue and emotional unrest.

Awopetu (2002) said that though the primary motivation for recreational participation is personal enjoyment, it usually results in intellectual, physical and social growth. It is usually stressed that when recreation is provided as part of a community

service programme it must meet appropriate standards morality and provide healthy and constructive experience. He further said that there is no clean distinction between recreation and other activities because the same activities may be work at sometime and recreation at other times. Recreation include a wide range of activities such as sports, games, craft, performing art, fine arts, music, drama, traveling hobbies and so on.

Since the turn of the century, recreation has been considered more and more to be fundamental human need. All individuals should experience the joy that comes from engaging in recreational activities that fit their needs, interest and desires (Bucher, 1979). According to Fatiregun (1995), certain social factors stimulate sports and recreation movement. They are changing home situations, modern development in homes as well as the country's increased need for recreation especially women who tend to live sedentary life. Arcola (1979) gave the following as broad national objectives of recreation development in Nigeria.

- The continuous improvement of the quality of life of the entire citizens of Nigeria, as a group and as individuals.
- The promotion and continuous improvements and initiative and programmes of recreation aimed at improving the health and well being of the aged, children and youth, in both urban and rural populations.
- The maintenance of high moral standards among citizens of the country.
- The maximization of the contribution of the recreation sector towards the attainment of the country's economic and social integration.

Akintunde (2001), suggested that there is the need for man to be healthy and physically fit through participation in recreational activities because of technological development which has changed the working condition of man in most industries; there is drastic decrease in the demands upon the workers physical and mental powers. This

has set nervous tension, body fatigue and boredom on workers. Recreation helps a lot in physical, mental, social and psychological development of man. It fosters general development of man with the aim of building a complete personality.

- According to American therapeutic recreation association (2004), participation in a variety of physical recreation significantly increase cardiovascular fitness, decreased body weight and body fat; decreased blood pressure, increased flexibility and strength.
- Recreation is devoid of discrimination and it provides a common forum where differences may be forgotten in the joy of participation or achievement. It welcomes people from different professions, races, classes. It involves a cross section of the community.
- Recreation has also been acknowledged as a factor in the prevention and correction of anti-social tendencies. Studies have shown that boys and girls who are non-delinquent have been participating in recreational activities (Akintunde, 2001).
- People develop their natural talents in games and acquisition of other sports related skills from regular participation in recreation programmes involving sports and games.

According to Ekeh (2003), recreational programmes can contribute immensely to cardio respiratory fitness of community dwellers. People who are physically fit have better blood and lymphatic circulation and experience a feeling of well being. There is good reason to believe that proper recreational activities within the community can significantly delay the ageing process and increase the joy of living. There is no doubt that those people who maintain regular physical activities have better performance

records, less degenerative disease and probably a longer life expectancy than the general population.

Ntui (1987), affirms that most of the symptoms caused by inactivities or lack of recreational activities are well known and alarming. The body that is not exercised deteriorates. The lungs become inefficient, the heart grows weaker, the blood vessels become pliable, the muscles lose tone, the body generally weakens throughout living, and it becomes vulnerable to a whole catalogue of diseases and illness. Fatiregun (1995) believed that recreation is surer way of dealing with the stresses of modern life. If this is strictly adhered to, it may bring about self awareness, improved health and fitness increased interest and capacity of work, enjoy relationship with others some inner quietness and stability in changing society.

2.11 Physical Activities as Recreation

Udoh (1998), believes that any physical exertion which is inherent in many physical activities creates organic and physiological efficiency. All the attributes of physical exercises apply to recreation of physical nature. He went on to differentiate between recreation of physical nature and physical exercise that in the former the participant derive satisfaction in the activities. James et al (2000) saw physical recreation as physical participation opportunities for all members of the community in their leisure time:

According to Ajiduah (2002), in some cases people recreate themselves with certain physical activities which they engage in purely for enjoyment and not for competition. They can for example go for swimming dancing, jogging, aerobic dance, calisthenics and running. These activities are often used for acquiring physical fitness and good health. He also maintained that many people also prefer activities which give

them opportunity to compete with others. Activities which provide competition and recreation for people are sports like badminton, table tennis, volleyball, basketball, golf and squash of all which provide enjoyment, thereby improving their health and fitness status.

Ademuwagun (1988), maintained that physical exercise is a form of recreation once it is undertaken for fun, relaxation or self expression and not as formal exercise programme under commands in a gymnasium. Nwankwo (1988), opined that the more active type of recreation leads to more efficient functioning practically in all the systems of the body which in turn brings about increase in general physical fitness and health. Udoh (1988) and Ekeh (2003), divided recreational activities into physical activities, social activities, nature and outing activities and intellectual activities.

Physical activities as recreation provide physical exertion and exercise which are classified as active sports and games. They include individual and dual sports, gymnastics, group and team games (Udoh, 1988). He also maintained that youths who are full of energy and exuberance need mostly recreation of physical nature such as sports and games. Social activities such as dance and group recreational activities are appealing to this group.

2.12 Recreation for Health and Fitness

Oke (1988) stated that recreation is important in the achievement of physical, social, mental and emotional health. Physical activities are the obvious means of achieving these goals which have been a leading leisure time pursuits over the years. He observed that other factors which have made physical recreation easier are automation, modern communications, transportation and urbanization.

Phillips (2002) opined that physical recreational activities such as walking, jogging, swimming, tennis, squash, badminton and cycling have significant effects on the health of individuals. He added that scientist have generally agreed today that physical activities plays a major role in weight control. Obesity among adults has grown steadily and is now a serious health problem throughout the world. This physical health condition is brought about by physical inactivity. According to Omolawon and Achugbu (2007), indoor and outdoor recreational activities have important role to play in the lives of young and old people. Sedentary living kills more than any disease. They suggested that when ever someone is free, he/she should not hesitate to participate in various recreational activities. Modern technology now increased vocation time, flexible work schedules and more time to participate in recreational activities. Many people are now able to start enjoying more recreation and leisure than any other periods in our history.

Health is wealth they say. A healthy nation is therefore a wealthy nation. When the health and fitness status of members of the community is maintained through participation in active recreational activities; they will become more productive in their jobs and this will promote the economy of the community because no nation has ever risen above the health of its citizens. Ekeh (2003), is of the same view that recreational activities can also help in preventing the onset of cardiovascular disease. Proper physical activities as a way of life help to keep the heart healthy and prevent the onset of cardiovascular diseases. The problem of obesity begins early in life and is much a matter of under activities as of over eating. Hence recreation saves community members the embarrassment of having pot bellies. Conversely, to most Nigerians having pot bellies are admired that they are evidence of good living and not minding the health implications of such pot bellies. Hahn and Payne (2003), believed that fitness

is achieved when the various systems of the body are healthy and function efficiently so as to enable the fit person engage in activities of daily living, as well as in recreational and leisure activities, without unreasonable fatigue. Suleiman (2004), is of the view that recreation, particularly those activities that involve the use of large muscles in games, sports and athletics, help in developing the physical structure. In such activities strength and endurance as well as agility and motor coordination are improved. Individuals who are predisposed to obesity, diabetes and hypertension would have their conditions controlled through regularly exposing the circulatory, muscular, and skeletal and nervous systems through physical recreation.

2.13 Community Involvement in Recreational Activities in Plateau State

Before the coming of the colonial masters, communities indulged themselves in so many forms of recreational activities. Every community had its own mode of recreation and various times or occasions of participation. In plateau state, there are many ethnic groups in the seventeen Local Government Areas of the state. Most of the inhabitants of the rural communities are farmers and indeed some of them are craftsmen and women who rest on market days, Sundays and special days. The civil servant rest on Saturdays and Sundays which they engage themselves in active recreation like playing volley ball, football and other games of their interest. The resting days are set apart for cultural festivals, dances, burial ceremonies, marriages. Some youths also engage themselves in wrestling and other physical displays. Girls and the young ones are not left out in moon light games, dances, songs and jokes. Apart from the resting days, some of these ceremonial and recreational activities also take place when the farmers and traders return from their farms and markets respectively (Nyam, 2005).

According to Chado (1992), there are so many government sponsored established exercise centres in Nigeria where citizens could be offered with scientifically organized programmes. However, in recent years, some states have started encouraging participation among civil servants. In plateau state attempts to organize recreational exercise programmes such as jogging and different forms of sports have taken place only among elite communities. In towns and big cities, the people's life styles have been greatly influenced by western civilization (Ekele, 2007). The draft of people especially the youth from the rural areas to the towns and cities is on the increase. Every one is so busy in search of money, the clubs and some centres that provide some recreational opportunities are not for the poor.

Most people in the communities engage themselves in playing draft, watching television or drinking beer and local wine. In Plateau State the government has one physical fitness centers in Jos main stadium for all members of the community at minimal fee for recreation. The top civil servants are involved in monthly jogging exercise to improve their health and fitness status. Nature has endowed the state with land mark and hills that are used for recreational purposes of hiking and mountaineering. Some other recreational activities that communities in the state are involved in are swimming, dancing and cultural festivals. For example the Berom people organize hunting festival among communities in the Berom Land which affords the people opportunity to exercise themselves and their horses (Nyam, 2005). Nyam further maintained that in the Berom Society, almost every village had more than ten hunting grounds which are uphill; today they are used for recreational activities. The Principal reason for the numerous hunting grounds is the availability of large expanse of rocky uncultivated land which became hunting grounds that are used for hunting during dry season.

The Berom Community organizes annual cultural festivals where all communities in Berom land come together and display their rich cultural heritage in dancing; horse back riding, wrestling and so on. Other tribes in the state organize their annual traditional festival to display their cultural heritage and also to recreate themselves. It is believed that when these recreational activities are performed regularly by the communities, it help the participants develop active lifestyle because physical inactivity among people of any age reduces the individual's capacity for physical exertion.

Traditionally, Physiologists have called for an intensity of effort near the ventilatory threshold of 60% to 70% of peak aerobic power (Shepherd, 1997) to improve health and fitness. Change in blood lipids, especially an increase in high-density lipoproteins (HDL) cholesterol from the endothelial surfaces of blood vessels and physical activities associated reduction in arterial blood pressure may prevent the development of atheroma. (Chado,1992) observed that not very many people understand that recreational exercise programme helps very much in ways of using the available time to promote personal health. A higher intensity of active leisure might be needed to enhance cardiovascular health, because most leisure pursuits are relatively short duration. According to Maximin – Agha (2003), at any age; physical activities has dramatic effects on body function. This results in an increased stroke volume and a slowing of pulse rate. He maintained that regular physical activities may have a positive role in the prevention of cardiovascular disease.

In Nigeria nowadays, there is increasing number of people who have recognized the importance of participating in organized regular exercise program. The purpose of taking part in exercise may vary, but it is a well known fact that the ultimate goal is to improve health and become more productive whether at home or at work (Chado,

1992). Recreation has become a fundamental and universal human need because man has found outlets in it for self – expression, personal development, self- satisfaction and improved heath and fitness.

In plateau state, some individuals in the communities are involved in some physical recreational activities like hiking, mountaineering, dancing, hunting, swimming, wrestling, horse back racing, and cultural festivals. These recreational activities are not being done regularly. It is observed that they are involved more in inactive recreational activities like watching television, listening to radio, playing of draft which may promote the malfunctioning of cardiovascular organs and obesity among the population and could be a cause of mortality. Involvement in physical recreational activities regularly contributes greatly to the growth and development of individuals as members of a family and the community in general in which they live. Recreation promotes healthy structural development in individuals. Consequently, it provides motivation for life long participation which can be best achieved through individual or group recreational activities such as walking, jogging swimming. Tennis, football, volleyball, Cycling among others. If communities in plateau state are involved in these recreational activities regularly their health and fitness status will be improved through living an active lifestyle.

2.14 Summary of Review of Related Literature

Health is not static. The health you had yesterday no longer exist. The health you aspire to have next week or next year is not guaranteed. However, scientific evidence suggests that what you do to day will help determine the quality of your future health, (Hahn and Payne 2003).

The literature made it crystal-clear that moderate involvement in physical activities regularly will produce a state of well being that provides a degree of protection against hypo-kinetic diseases. The effects are dose dependent, the more the activities the greater the health benefits. Moderate physical activities lasting for at least 30minutes for most days of the week is recommended. Physical activity is beneficial to people of all ages and of different sex. However there are some barriers that are against people's full participation in physical activities to improve their health and fitness.

People tend to participate more in physical activities when they are done as a form of recreation. This also helps people to improve their physical, social, mental emotional health status. The health of the community members is maintained through regular involvement in physical activities as a form of recreation. Schools and community base recreational programmes will provide youths in particular with the knowledge, attitude, motor skill, behavioral skills and confidence to participate in physical activities which will establish active lifestyle throughout their adult lives and remain healthy. Hahn and Payne (2003) are of the view that "your ability to process and act on information, clarify values and beliefs and exercise your decision-making capacity is one of the most important aspect of total health".

The review also identified opportunities which exist for people to be physically active in terms of four domains of their day-to-day lives, at work, for transport, in domestic duties or in active recreation. In developed countries of the world, physical activities at work and in the home has diminished as sedentary life has become more common, and physical activities as a recreation is playing an increasing role in promoting health and fitness of the people. These changes are being seen across the life course and inactivity is becoming increasingly common among young people, in particular as daily duration of television viewing increases.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The purpose of the study was to assess determinants of community involvement in health and fitness related physical activities as recreation in Plateau state. This chapter describes the research design, population, sampling techniques, instrumentation, administration of the research instruments and statistical techniques.

3.2 Research Design

The research design used for this study was the Ex-Post-facto research design. This method was used because the study is investigating past events among the people of Plateau state and experimentation is not feasible. The study was based on identification of communities' involvement in health and fitness related physical activities as recreation. The use of this design is the most appropriate because the study is investigating past events (Asika, 1990). The ex-post facto research design is suitable where a large population is required and in this study, the population was very large (Steel and Torrie, 1980).

3.3 Population

The population for this study consisted females and males between the ages of 12 and 70years from both rural and urban communities of Plateau state. The selection was based on the assumption that there is variation in their levels of involvement in health and fitness related physical activities as recreation.

3.4 Sample and Sampling Technique

The techniques adopted for the selection of the sample was the stratified random sampling technique. The choice of this technique was informed by the large population

involved in the study. Stratification adds precision in ensuring that the sample contains the same proportional distribution of respondents on selected parameters as the population (Tuckman, 1978). Tuckman further maintained that stratification is used to prevent potential source of selection bias which is ensured by screening members of the population into and out of the study and for reducing the variability of the sample. According to (Steel and Torrie, 1980), the selected strata could be therefore a true representation of the entire population. With this technique, the state was stratified according to the three senatorial zones in the state; northern, central and southern zones, to reduce the size of the areas as well as the number of people involved. The random sampling technique was then adopted to select the desired number of local government councils from each of the stratum.

The names of the local government councils in each of the three zones were written on pieces of paper and wrapped. The papers were put in containers and shuffled. Three names were picked randomly without replacement in each zone. The names of the local governments selected from the three zones were used in this study. The Local Government's thus selected for the study are as follows.

Table 3.1: Local Governments Selected From the Three Districts

	District	Local Government Council
1	Northern Senatorial District	1. Barkin Ladi 2. Jos North 3. Riyom
2.	Central Senatorial District	1. Bokkos 2. Mangu 3. Pankshin
3	Southern Senatorial District	1. Mikang 2. Langtang North 3. Shendam

A total of nine Local Government Councils were randomly selected out of the 17 Local Government Councils in the state for this study. The local governments selected were further stratified into urban and rural communities as indicated in Table 3.2.

Table 3.2: Urban and Rural Communities in the Three Districts

District	LGC	Urban	Rural
Northern	B/Ladi	1. Barkin Ladi 2. Heipang 3. Dorowa Babuje 4. Gana Ropp 5. Bisichi	1.Ropp 2. Fan 3. Gashish 4. Kafi abu 5.Bakin kogi 6. Foron
	Jos North	1. Jos town 2. Mister Ali 3. Babale	1. Fudawa 2. Zagum 3. Shere
	Riyom	1. Riyom 2. Ganawuri	1. Atakar 2. Bashit 3. Bum 4. Kwi 5. Rim 6. Jol
Central	Bokkos	1. Bokkos 2. Kuba 3. Daffo	1. Mushere 2. Sha 3. Toff 4. Kamwai 5. Richa
	Mangu	1. Mangu 2. Gindiri 3. Hale 4. Panyam 5. Kerang 6. Pushit	1. Mangun 2. Ampang west 3. Jeneret 4. Langai 5. Kombun 6. Jipal 7. Shakfem 8. Kadunung
	Pankshin	1. Pankshin 2. Dawaki 3. Amper 4. Chip	1. Lankang 2. Feir 3. Tal 4. Wokkos 5. -Kadung Pai
Southern	Mikang	1. Tunkus 2. Laling 3. Garkawa	1. Mugum 2. Lifidi 3. Kung
	Langtang North	1. Langtang 2. Pilgani 3. Gazum	1. Bwarat 2. Lokmak 3. Zamkwo
	Shendam	1. Shendam 2. Yelwa	1. Dorok 2. Derteng 3. Dokantofa

The names of urban and rural communities from each of the selected local governments from the three senatorial districts within the state were written on pieces of paper and were wrapped. The wrapped papers were put in two containers, one for urban and the other for rural communities. The papers were shuffled; one paper was picked at random from each of the containers. The names picked were selected to represent urban and rural communities respectively from the local governments selected from each zone giving a total of 18 communities to be studied in the state. The names of the communities selected are shown in Table 3.3.

Table3.3: Urban and Rural Communities Selected from the Three Senatorial Districts

District	L.G.C	Urban community	Rural community
Northern	B/Ladi	B/Ladi	Fan
	Jos North	Jos Town	Fudawa
	Riyom	Riyom	Kwi
Central	Bokkos	Bokkos	Mushere
	Mangu	Mangu	Langai
	Pankshin	Pankshin	Feir
Southern	Mikang	Garkawa	Lifidi
	Langtang North	Langtang Town	Zamkwo
	Shendam	Shendam	Dokantofa

To determine the population quantitatively, the national census figure of 1991 which stood at 2,104,536 was used to determine the sample size of the study. Morgan and Kreycie (1970) suggested that 771 could be a proportionate representation of the entire population stated above. This figure (771) was therefore used for the study after removing the unsuccessfully completed questionnaires.

3.5 Instrumentation

The instrument used for this study was designed by the researcher (See Appendix I). It was the main source with which the data for the study were collected.

Akenezuilo and Agu (2003) believed that the questionnaire is the most appropriate instrument that could be used in survey research.

3.5.1 Development and validation of the instrument

The instrument was designed by the researcher and consisted of 40 items with 5sections. Section "A" was on awareness of perceived health and fitness benefits of regular involvement in physical activities as recreation, Section "B" was on actual involvement in physical activities as reaction, section "C" was on factors that could influence involvement in physical activities as recreation, Section "D" was on personal information of the respondents, section "E" was on ways of improving, participation in health and fitness related physical activities as recreation in Plateau state.

The instrument was validated by experts to ensure content and face validity. The final draft of the corrected copy was used to collect data for the study.

3.6 Administration of the Instrument

A total of 840 questionnaire, were administered for the study. The researcher and nine research assistants, one from each of the Local Government Areas selected for the study were involved in the administration of the questionnaire. Copies of the questionnaire, were shared proportionally according to the number of the respondents selected from each senatorial zone. They were further shared to both urban and rural communities in the 9 Local Government Councils that were selected for the study. Out of the total of 840 questionnaire, 771 representing 92% were used for the study.

3.7 Statistical Techniques

The data collected were subjected to statistical analysis using frequency counts and percentages to describe the demographic characteristics of the respondents. Means

and standard deviations were used in the analysis of main variables of awareness, influence of age, gender and location on the communities' involvement in physical activities as recreation. This was because of the interval measurement of the respondents' opinions on these variables. However, chi-square was used in testing for significant difference in opinion where non-parametric measurements were used. In this case the opinion of the respondents was not quantitative. This was also the case in the test of hypothesis I, where the Spearman rho correlation procedure was used to test for relationship between the two variables. In hypothesis II, III and IV the Z-test Statistics were used to test for possible difference between the two groups because of the non-parametric nature of the data. All tests and the hypotheses were carried out at 0.05 level of significance.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

In this chapter, the data collected in relation to the community involvement in health and fitness related physical activities as recreation in Plateau State were analyzed. The analysis consisted of the demographic variables of the respondents presented in a table of frequencies and percentages. The second part of the chapter is made up of the answers to the research questions raised in the study. These were addressed with different statistical procedures because of the type of measurement scale adopted in the research instrument. In the case of awareness and factors influencing involvement in physical activities as a recreation, mean scores along with standard deviations were used. In cases where involvement in physical activities as recreation in relation to the occupation of the respondents was tested, the chi-square was used in the analysis. In the analysis of the Chi-square test, the frequency scores and their corresponding percentages were omitted from the table. These are presented as Appendix II respectively.

The hypotheses were tested separately and were followed by a test of the effects of the demographic variables on the opinion of the respondents on the community involvement in health and fitness related physical activities as recreation in Plateau State. In the case of the five point Likert scale, the establishment of agreement was determined with a mean score of 3.5 on the interval scale while a lower score indicate disagreement. Discussions of the findings were presented at the end of the chapter.

4.2 Results

4.2.1 Demographic characteristics of the respondents

Seven hundred and seventy one (771) out of 840 respondents from 17 local government areas that make up the three senatorial zones of Plateau state who had completed the questionnaire correctly were involved in the study. Demographic characteristics of the respondents were age, gender, marital status, Senatorial District, occupation and highest educational qualification are presented in Table 4.1.

Table 4.1: Demographic Characteristics of the Respondents

N = 771

Variables	Responses	Respondents	Percentage
Age	12 - 18years	134	17.4
	19 – 25years	197	25.6
	26 – 32years	84	10.9
	33 – 39years	204	26.4
	40years and above	152	19.7
Highest Educational qualification	Secondary	191	24.8
	OND/NCE	179	23.2
	HND/Degree	75	9.7
	Post graduate Degree	37	4.8
	Others	289	37.5
Gender	Male	387	50.2
	Female	384	49.8
Marital status	Single	391	50.7
	Married	170	22.0
	Widowed	110	14.3
	Divorced	67	8.7
	Separated	33	4.3
Occupation	Civil servant	221	28.7
	Farmer	108	14.0
	Housewife	23	3.0
	Business/Trader	27	3.5
	Others	382	50.8

The classifications of the respondents' ages in the table revealed a relatively proportionate distribution of the respondents. However, their numbers in terms of educational qualification were skewed towards lower levels of secondary and diplomas or the Nigeria Certificate in Education (NCE). Those that were with higher certificates

of Higher National Diploma or First degree and above were relatively few as indicated in the table, the respondents declined as their educational level increase. The least group among the respondents, were those with post graduate degrees 37, who accounted for only 4.8% of the total respondents others were 289 being 37.5%.

Of the total respondents 387 being 50.2% of them were males while 384 (49.8%) were females. In terms of the occupational classifications, more than half of the respondents were either not employed or were engaged in other occupations. But 221 (28.8%) of the respondents were civil servants while 108 (14.0%) of the respondents indicated that they are farmers. The numbers of housewives involved in the study were 23 (3.0%) while those who are business men or women and traders or artisans accounted for 27 (3.5%) of the total respondents.

4.2.2 Assessment of the awareness of the perceived health and fitness benefits of regular involvement in physical activities as recreation

Some major factors considered in relation to the awareness of the perceived health and fitness benefits of regular involvement in physical activities as recreation of the respondents' were awareness, age, gender and location. The investigation therefore revolves around these four variables. These variables were assessed on Likert five point scale. The mean scores on the variables are presented in Table 4.2.

Table 4.2: Mean Scores on the Factors Influencing Participation in Physical Activities as Recreation

Factors	Mean	S D
1. Gender	3.9260	.71423
2. Location	3.8630	.79413
3. Awareness	3.8494	.59394
4. Age	3.7655	.50486

The table revealed that gender, location, awareness and age are major factors in community involvement in health and fitness related physical activities as recreation in the state. The mean scores of gender, location, awareness and age are all above 3.5 indicating that they are major determinants of the community involvement in health and fitness related physical activities as recreation in Plateau state.

In relation to these factors, the study used the following research question as guide to the investigation of the community involvement in the health and fitness related physical activities as recreation in the state. One of the purposes of the study was the determination of the community's awareness of the perceived health and fitness benefits of participation in recreational activities in Plateau State. The following research question was postulated to aid the attainment of the purpose.

1. Does community's awareness of the perceived health and fitness benefits influences their involvement in recreational activities in Plateau State?

The awareness of the respondents on the perceived health and fitness benefits of participation in recreational activities was assessed on a Likert five point scale. The points were rated 5 for strongly agree, 4 for agree, 3 for undecided, 2 for disagree and 1 for strongly disagree. The opinion or level of awareness was measured in terms of the mean scores on the items used in the assessment of the respondents' opinion as indicated in Table 4.3. Decision of agreement or disagreement was based on the expressed opinion exceeding 3.4 implying agreement or from 3.4 and below implying disagreement.

Table 4.3: Mean Scores of the Respondents on the Awareness of the Perceived Health and Fitness Benefits of Regular Involvement in Physical Activities as Recreation

	Awareness	Mean	S D
1.	I engage regularly in physical activities to minimize stress and to improve or maintain my level of fitness	4.432	0.745
2.	I engage in recreational and fitness activities to improve my physical, emotional health and social well-being	4.351	0.851
3.	I engage regularly in recreational activities to control my weight	4.125	1.073
4.	I engage regularly in physical activities as a recreation to increase muscular strength	4.029	1.121
5.	I include walking fast and jogging among the recreational activities I engage in regularly	3.926	1.019
6.	I engage in physical activities that involve a range of joint motion	3.738	1.085
7.	I engage regularly in recreational activities to reduce high blood Pressure	3.715	1.253
8.	Regular engagement in physical activities helps me to reduce the incidence of developing diabetes	3.636	1.216
9.	I engage regularly in physical activities as a recreation to prevent premature death from heart diseases	3.598	1.285
10.	I select some recreational activities that are hard rather than simple in nature	3.253	1.228

The mean score (4.432) on item 1 revealed that the respondents were aware that their engagement in regular physical activities was to minimize their stress and to improve or maintain their level of fitness. The mean score (4.351) in item 2, also

revealed that the respondents engaged themselves in recreational and fitness activities to improve their physical, emotional and social well-being. In item 3 the respondent agreed that they engaged regularly in recreational activities to control their weight with a mean score of (4.125). In items 4 with a mean score of (4.029) the respondents agreed that regular physical activities as recreation will increase their muscular strength. In item 5 the respondents agreed that they included walking fast and jogging among the recreational activities they do regularly. The mean score for the item is (3.926).

The mean score for item 6 in the table is 3.738, an indication that the respondents are aware that recreational physical activities that involve a wide range of motion improves health and fitness. In item 7 with the mean score 3.715 revealed that the respondents are aware that regular involvement in recreational physical activities will help in reducing high blood pressure. This awareness also reflected in the mean score of (3.636) for item 8 in the table were regular engagement in recreational physical activities help in reducing the incidences of developing diabetes. The mean score of item 9, (3.598) also revealed that the respondents are aware that regular involvement in physical recreational activities prevents death from heart diseases. In item 10 the respondents did not agree that they select some recreational activities that are hard rather than those that are simple in nature to improve their health and fitness.

The second purpose is to determine the level of influence imposed by age of respondents in their involvement in recreational activities within the state. The research question attached to this objective is:

2. Does age influence the level of participation in health and fitness related physical activities as recreation in Plateau State?

The influence of age on the respondents' participation in health and fitness related physical activities as recreation in the various locations where they were selected within Plateau state was assessed with four items and scored in mean and standard deviation in Table 4.4. Decision of agreement or disagreement was based on the expressed opinion exceeding 3.4 implying agreement or from 3.4 and below implying disagreement.

Table 4.4: Mean Scores of the Respondents on the Influence of Age as a Factor of Community's Involvement in Health and Fitness Related Physical Activities as Recreation

Age related factors	Mean	S D
1. Adolescents engage more in physical activities as recreation than adults	4.433	0.730
2. Adults participate more in physical activities as recreation than adolescents	3.447	0.819
3. Adolescents are physically active daily as part of play	4.248	1.019
4. Many older people do not see physical activities as appropriate for their age	2.934	1.375

The responses in the table clearly revealed that the respondents were of the opinion that age is an important factor of participation in the physical activities. From the score on item 1, the expressed opinion is that adolescents engaged more in physical activities as a recreation than adults and in item 2 this is further emphasized with the respondents disagreeing with the notion that adults participate more in physical activities as recreation than adolescents. The respondents were of the opinion that adolescents were more active this is further reflected in item 3 where the respondents mean score is 4.248. This opinion was not because the older people did not recognize

the merits of recreational physical activities but because they do not see physical activities as appropriate for their age.

The influence of age on community involvement in physical activities as recreation is further explained in Table 4.5 where the ages of the respondents were classified into two groups of adolescents and adults and the chi-square (X^2) was applied to test for possible association in the involvement of the two groups in physical activities as recreational exercise. In the table, the observed chi-square (X^2), the level of significance (P), the degree of freedom (DF) and the remark for each item tested are presented. The use of the chi-square is due to the nature of the measurement of the respondents' opinion which was not based on quantitative response (See Appendix I).

Table 4.5: Chi-square Test on Community's Involvement in Physical Activities as Recreation by Age

Involvement	X^2	DF	P	Critical value	Remark
1. Does your current level of fitness allow you to participate actively in daily physical activities?	4.412	1	0.036	3.841	Sig.
2. Do you participate regularly in a wide variety of recreational activities for health and fitness?	4.128	1	0.043	3.841	Sig
3 If yes, tick the appropriate group of activities you participated in during your leisure time.	25.720	2	0.000	5.991	Sig
4 How often do you engage your self in recreational activities during the week?	4.086	5	0.537	11.070	NS
5 How much time do you spend each time you are participating in recreational activities?	25.903	5	0.000	11.070	Sig
6 Which of the following best describes your occupation	10.638	2	0.005	5.991	Sig
7 Which of these is your regular means of transportation?	0.922	2	0.630	5.991	NS
8 How confident are you that you can continue to be regularly active in recreational activities for the next 3 months	6.992	3	0.072	7.815	NS
9. Self-motivation encourages you to participate regularly in recreational activities	2.452	1	0.117	3.841	NS
10. Lack of time affects my regular engagement in physical activities as recreation	2.621	1	0.106	3.841	NS

Note: Sig=Significant at 0.05 ($P<0.05$) NS=Not Significant ($P > 0.05$)

The actual frequency count and the corresponding percentages for the two groups on each of the questions are attached as Appendix II. In the result, it was discovered that the adolescents were significantly different from the adults in the rate of involvement in physical exercise as recreation. This was the case in item 1, where the respondents were tested on their current level of fitness and their abilities to participate actively in daily physical activities. The differences arising from age was also reflected in item 2, 3, 5 and 6 where the involvement in the routine, type and regularity of physical activities as recreation were concerned. This means that age is a significant factor in the communities' involvement in health and fitness related physical activities as recreation in the state. The influence of gender on the communities' involvement in health and fitness related physical activities as recreation was another purpose of this study. The related research question accompanying this objective is:

3. Does gender influence the level of involvement in health and fitness related physical activities as recreation in Plateau state?

In providing the solution to this problem, the opinion of the respondents on the effect of gender on the communities' involved in physical exercise as a recreation was scored in mean and standard deviation in Table 4.6.

Table 4.6: Mean Scores of the Respondents on the Influence of Gender Factor in Community's Involvement in Health and Fitness Related Physical Activities as Recreation

Gender factors	Mean	S D
1. Women are less regularly involved in physical activities as recreation than men	4.023	1.029
2. Men are more regularly involved in physical activities as recreation than women	3.940	1.088
3. Pregnancy and early child rearing can prevent women from engaging regularly in active recreation	3.671	1.329
4. Culture does not hinder men from participating in active Recreation	4.070	1.159

The table revealed that gender is a major issue of community involvement in health and fitness related physical activities as recreation in the state. Women, from the table are restricted by circumstances beyond the scope of this study in their involvement in recreational activities. The men on the other hand are more enhanced to participate in recreational activities. These are clearly indicated in the mean scores for items 1, 2, 3 and 4 in the table.

Their actual involvement, were tested in Table 4.7 using chi-square procedure because of the qualitative nature of the responses. In the table, the observed chi-square (X^2), the level of significance (P), the degree of freedom (DF) and the remark for each item tested are presented.

Table 4.7: Chi-square Test on Community Involvement in Physical Activities as Recreation by Gender

Involvement	X^2	DF	P	Critical value	Remark
1. Does your current level of fitness allow you to participate actively in daily physical activities?	0.457	1	0.499	3.841	NS
2. Do you participate regularly in a wide variety of recreational activities for health and fitness?	1.223	1	0.269	3.841	NS
3 If yes, tick the appropriate group of activities you participated in during your leisure time.	1.132	2	0.568	5.991	NS
4 How often do you engage your self in recreational activities during the week?	2.401	5	0.791	11.070	NS
5 How much time do you spend each time you are participating in recreational activities?	15.906	5	0.014	11.070	Sig
6 Which of the following best describes your occupation	5.440	2	0066	5.991	Sig
7 Which of these is your regular means of transportation?	7.197	2	0.027	5.991	Sig
8 How confident are you that you can continue to be regularly active in recreational activities for the next 3 months	1.781	3	0.619	7.815	NS

9. Self-motivation encourages you to participate regularly in recreational activities	0.688	1	0.407	3.841	NS
10. Lack of time affects my regular engagement in physical activities as recreation	10.641	1	0.001	3.841	Sig

Note: Sig=Significant at 0.05 (P<0.05) NS=Not Significant (P > 0.05)

The table revealed that the major difference between the male and the female is the amount of time available for them to participate in recreational activities, the type of physical activities and the routine or regularity of such activities. The issue of fitness is not a limiting factor as observed in the test for items 1 to 4 and items 8 and 9 in the table. This means that the restriction of the female from involvement in health and fitness related physical activities could be attributed to other factors outside the scope of this study. Items 5, 6, and 10 indicated significant differences in males and females involvement in physical activities as recreation in Plateau state.

The effect of the location of the communities and the possible influence it could have on their involvement in physical activities as recreation was another objective of the study. The research question raised to aid the attainment of the objective is:

4. Does location influence the level of involvement in health and fitness related physical activities as recreation in Plateau state?

The communities were classified into urban and rural settings. In Table 4.8, the opinions of the respondents on the influence of location on the communities' involvement in physical activities as recreation were scored in mean and standard deviations.

Table 4.8: Mean Scores of the Respondents on the Influence of Location as a Factor in Community's Involvement in Health and Fitness Related Physical Activities as Recreation

Location related factors	Mean	S D
1. Easy access to recreational facilities in the urban communities positively influence participation in active recreation	3.838	1.215
2. Lack of recreational facilities in the rural communities negatively influence participation in active recreation	3.960	1.025
3. The people of urban communities are less physically active than people of the rural communities	3.820	1.103
4. The people of rural communities are less physically active than people of the urban communities	3.834	1.155

The mean scores in the table all point to the fact that location of a community could play a major role in their involvement in health and fitness related physical activities as recreation. In the test, the urban communities were observed to have more advantage and were more likely to be involved in health and fitness related physical activities as recreation more than communities in the rural settings of the state. Their actual involvement in physical activities as recreation, are tested in Table 4.9 with a chi-square procedure.

Table 4.9: Chi-square Test on Community Involvement in Physical Activities as Recreation by Location

Involvement	X^2	DF	P	Critical value	Remark
1. Does your current level of fitness allow you to participate actively in daily physical activities?	3.232	1	0.072	3.841	NS
2. Do you participate regularly in a wide variety Of recreational activities for health and fitness?	0.011	1	0.916	3.841	NS
3 If yes, tick the appropriate group of activities you participated in during your leisure time.	8.784	2	0.012	5.991	Sig
4 How often do you engage your self in recreational activities during the week?	7.011	5	0.220	11.070	NS
5 How much time do you spend each time you are participating in recreational activities?	11.97	5	0.063	11.070	NS
6 Which of the following best describes your occupation	9.006	2	0.011	5.991	Sig
7 Which of these is your regular means of transportation?	3.567	2	0.168	5.991	NS
8 How confident are you that you can continue to be regularly active in recreational activities for the next 3 months	9.888	3	0.020	7.815	Sig
9. Self-motivation encourages you to participate regularly in recreational activities	6.249	1	0.012	3.841	Sig
10. Lack of time affects my regular engagement in physical activities as recreation	4.111	1	0.043	3.841	Sig

Note: Sig=Significant at 0.05 ($P<0.05$) NS=Not Significant ($P > 0.05$)

The test revealed that the urban communities were significantly different from their rural counterparts in the type of recreational activities they participated in and the regularity with which they participate in recreational activities as indicated in items 3, 6, 9, and 10. In all other aspects of involvement as indicated in the table, no significant difference was observed between the respondents from the two communities. As indicated in items 1, 2, 4, 5 and 7. In effect, the types of recreational activities available to the urban communities are not adequately available to the rural communities in the state. This accounted for the differences in type of recreational activities observed in the test.

4.2.3 Test of hypotheses

The hypotheses raised in the study are as follows:

Hypothesis I: There is no significant relationship between awareness of perceived benefits of health and fitness related physical activities and involvement in recreation in Plateau State.

This hypothesis was tested with the Spearman rho correlation procedure because of the non-parametric nature of the responses obtained in the respondents' involvement in physical activities as recreation in the study. The result of the Spearman rho procedure is presented in Table 4.10.

Table 4.10: Correlation between Awareness and Involvement in Recreation in Plateau State

Groups	Mean	SD	DF	r-value	P	r-critical
Awareness	21.1840	5.0486	769	0.147	.000	0.061
Involvement	17.7017	4.2407				

Note: SD= Standard Deviation, r-value=observed correlation coefficient, DF= Degree of Freedom, P = Observed level of significance

The result revealed that awareness is significantly correlated with the communities' involvement in health and fitness related physical activities as recreation in the selected locations of Plateau State. The observed correlation coefficient for the test is 0.147 and is higher than the critical value of 0.061. The significant level obtained in the test is 0.000 ($P < 0.05$). This means that the hypothesis could be rejected. This means that awareness is a significant factor in the involvement of the communities in physical activities as recreation in plateau state.

Hypothesis II: There is no significant difference between the level of involvement of adolescents and adults in health and fitness related physical activities as recreation in Plateau State.

The hypothesis was tested with the responses on the communities' involvement in questions 11 to 20 in the questionnaire. The scores were subjected to non-parametric procedure because of their qualitative nature. The Kolmogorov-Smirnov Test (Z) for two sample test was used in the test of the hypothesis because of the two groups involved in the test and the non-quantitative nature of the variable tested in the hypothesis. A summary of the result of the test is presented in Table 4.11.

Table 4.11: Two Sample Test on Community Involvement in Physical Activities as Recreation by Age

Age Classification	Mean Rank	Sum of Ranks	z-value	P-value	z-critical	Remarks
Adults	334.57	40482.50	2.486	0.014	1.96	Significant
Adolescents	388.04	247178.50				

The result in the table revealed that significant differences exist between the adults and the adolescents in their involvement in health and fitness related physical activities as recreation in the areas covered by the study. The observed Z-value is 2.486 while the critical value is 1.96. These all indicated that there is a significant difference between the adults and the adolescents in their involvement in physical activities as

recreation in the selected locations within the state. The p-value (0.014) observed for the test is lower than 0.05 ($P < 0.05$). Therefore the null hypothesis that there is no significant difference between the level of involvement of adolescents and adults in health and fitness related physical activities as recreation in Plateau State could be rejected.

Hypothesis III: There is no significant difference between the level of involvement of males and females in health and fitness related physical activities as recreation in Plateau State.

This hypothesis was tested with non-parametric procedure because of the non-quantitative nature of the data involved in the measurement. The Kolmogorov-Smirnov Test (Z).for a two sample procedure was used in the test because of the two independent groups involved in the hypothesis. The result of the test is summarized in Table 4.12.

Table 4.12: Two Sample Test on Community Involvement in Physical Activities as Recreation by Sex

SEX	Mean Rank	Sum of Ranks	z-value	P-value	z-critical	Remarks
Male	422.93	161557.50	5.515	0.000	1.96	Significant
Female	335.38	126103.50				

The result revealed that the males were significantly different from their female counterparts in the respective communities with regards to their involvement in health and fitness related physical activities as recreation in the state. The observed z-value is 5.515 which is greater than the critical value of 1.96. The significant level obtained from the test is 0.000 ($P < 0.05$). This means that the null hypothesis could be rejected. This means that the sex of the respondents in the selected locations within the state

accounts for their involvement or non-involvement in physical activities as recreation in Plateau state.

Hypothesis IV: There is no significant difference between the levels of involvement of urban and rural communities in health and fitness related physical activities as recreation in Plateau State.

The non-parametric two sample procedure was used for the hypothesis. The Kolmogorov-Smirnov Test (Z) was used in the test of the hypothesis because of the non-quantitative nature of the variable involved in the test. The result is presented in Table 4.13

Table 4.13: Two Sample Test on Community Involvement in Physical Activities as Recreation by Location

Location	Mean Rank	Sum of Ranks	z-value	P-value	z-critical	Remarks
Rural	334.73	107449.50	4.834	0.000	1.96	Significant
Urban	412.38	180211.50				

The test in the table revealed significant difference in the communities' involvement in physical activities as recreation by their location. Communities in urban areas tended to be more involved in recreational activities than communities from rural areas. The computed statistics used in the case of the Kolmogorov-Smirnov Test (Z). The z-value obtained is 4.834. The observed significant level is (0.000) in the table which is lower than 0.05 ($P < 0.05$). This means that the null hypothesis that there is no significant difference between the level of involvement of urban and rural communities in health and fitness related physical activities as recreation in Plateau State could be rejected.

4.3 Discussions

The main objective of this study was the survey of communities' involvement in health and fitness related physical activities as recreation in Plateau State. In the assessment of the level of involvement, the factors that influenced their involvement were also investigated. Such factors were awareness of the perceived benefits of regular involvement in physical activities by the individuals in the communities, the influence of age, gender and location of such communities.

From the opinions of the respondents, it was observed that awareness could be a significant factor of involvement. In the test of hypothesis I, the level of awareness of the perceived benefits derived from participation in regular exercise were observed to be positively and significantly correlated with individual's involvement in health and fitness related physical activities as recreation in the communities covered by the study. This finding is consistent with (CDC, 2000) report that perceived benefits from engaging in physical activities or being involved in sports during leisure time is positively associated with increase in physical activities and recreation. This perceived benefits are excitement and having fun, learning and improving skills, staying in shape, improving appearance, increasing strength, endurance, flexibility and reducing the risk of cardiovascular disease, high blood pressure and diabetes. This awareness has encouraged the people of the state to use the natural resources nature has endowed them with for recreation so as to remain healthy.

According to (Fasan, 2002), community recreation can be seen as people's way of utilizing the natural resources at their disposal to enjoy maximum health. Communities in Plateau state use the mountains nature has endowed it with for mountaineering and catching fun during their leisure time to improve health. Chado (1992), concurred that in Nigeria nowadays, there is increasing number of people who have recognized the importance of participating regularly in exercise as recreation. The

purpose of taking part may vary, but it is a well known fact that the ultimate goal is to improve health and become more productive whether at home or at work.

It was observed that the individuals' involvement in health and fitness physical activities as recreation were determined to some significant extent by their age. In this study the adolescents were more involved in health and fitness related physical activities than the adults who were involved in the study. School and community programmes promote regular physical activities among young people during their leisure time. These programmes provide students with the knowledge, attitudes, motor skills, behavioural skills and confidence to participate in physical activities to establish active lifestyles among young people that continue into and throughout their adult lives (CDC, 1997). Adolescents are regularly involved in physical activities during their leisure time because they have the confidence, knowledge and the skill. Ajduah (2002), supports this finding that adolescents are regularly involved in physical activities to promote healthy structural development and growth as well as their cardio-respiratory system develops well and they become physically fit to be able to perform their day to day activities without undue fatigue. This as observed in Table 4.3 was partly attributable to the more active nature of the adolescents and the fact that older people viewed some physical activities as inappropriate for their ages. Jackson et al (1999) also supported this finding that aging is associated with physical activity limitations due to deteriorating health among older adults who see physical activity not appropriate for their age. This was reflected in Table 4.5 where type of activities and time duration of involvement were observed to be significantly different between the adolescents and the adults involved in the study.

The gender of individual in the communities was another major factor of involvement in the health and fitness related physical activities as recreation in the

state. In Table 4.4 of this chapter, it was observed that the men were more mobile for recreational activities. Some of the limitations on the parts of the women were issues relating to family responsibilities and the constraints imposed by biological differences as well as the culture in the respective communities. This finding is in line with the submission of (Dubbert, 1997) that lack of time, work, and family demands have been consistently reported by women as important barriers to their involvement in regular physical activities as recreation. Fatiregun (1995) also supported the finding that a good number of Nigerian women find it difficult to engage in recreation. Apart from the cultural and traditional taboos associated with women exposure, the present economic situation comes to mind readily. Fatiregun further maintained that women are busy chasing means of living and survival for the family which has caused them to live a sedentary lifestyle. In the same vein (Philips, 2002) believes that some men do not like their wives to take part in recreational activities, because they believe that other men can get attracted to them through the process; for example, swimming, where women put on swimming suits that expose certain parts of their body. Due to the present economic hardship women in the state are not regularly involved in recreational physical activities except for a few who are recreation lovers and are financially alright, give time for recreational physical activities.

Another major factor was the location of communities. Rural communities were observed to be less involved in health and fitness related physical activities as recreation than the communities in urban settings. These differences were partly attributable to accessibility to recreational facilities. Jackson et al (1999) reported that time and poor accessibility to facilities or equipments are two main barriers people report for not adopting regular physical activities. This was the case in rural communities in Plateau state where there are no recreational facilities within the

communities which people can use during their leisure time. The only facilities they have are football fields that are found within the schools in such communities which are used for recreational activities.

The effect of the demographic variables on the involvement of the individuals in the communities in health and fitness related physical activities as recreation were also found to be significant in this study. These included the marital status, level of education and occupations of the individual in the communities. For example, marital status was a major determinant of the type, time and regularity the individual was observed to be involved in health and fitness related physical activities in the study areas. This was also the case with occupation and level of education of the individuals in the communities.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

This study investigated community's involvement in health and fitness related physical activities as recreation in Plateau State. The ex-post facto research design was adopted for the study. The stratified random sampling technique was used to select the sample of males and females between 12 and 70 years from the 17 local government areas of the state for the study. A total of 840 questionnaires were administered to the respondents in the selected Local Government Areas. A total of 771, the filled questionnaire were used for the analysis. The study was structured into five chapters to enhance the investigation.

Chapter one gave the background to the study, the statement of the problem, the purpose of the study, basic assumptions and hypotheses. The significance of the study delimitation and definition of terms used in the study were all given in the chapter.

In chapter two, the related literatures were reviewed. These included the concept of physical activities, the benefits of participation in physical activities as recreation, physical activities and youth development and, adults (men and women) and physical activities. Recreation for health and fitness were reviewed in relation to the benefits of physical activities. This was followed with a summary of the chapter.

The research design, population and the sampling technique used in collecting the sampled population were given in chapter 3. The chapter gives a description of the research instrument and the method used in data collection for the study. The statistical procedures used in the analysis of the data were given at the end of the chapter.

The statistical analysis and interpretation of the findings from the analyzed data were presented in chapter four. The chapter is made up of the description of the

demographic variables of the respondents as well as the analysis of the variables in relation to communities' participation in physical activities as recreation in the study areas. Four hypotheses were raised in the study and tested in the chapter as follows:

Hypothesis I test the relationship between awareness of the health benefits of regular involvement in physical activities as recreation. The Spearman rho correlation procedure was used in this test. The result revealed that awareness of the health benefits of regular involvement in physical activities as recreation is significantly and positively correlated with individual's involvement in physical activities as recreation in the state. The hypothesis was therefore, rejected.

Hypothesis II tested the differences between adolescents and adults in their involvement in the health and fitness related physical activities as recreation in Plateau State. The non-parametric two sample test procedure was used. The result revealed significant difference between the adults and the adolescents in their involvement in health and fitness related physical activities as recreation in the State The hypothesis was therefore rejected.

Hypothesis III tested the differences in the level of involvement between males and females in health and fitness related physical activities as recreation within the state. The two sample non-parametric procedure was used in this test. The result revealed that the males were more involved in physical activities as recreation more than the females. Reasons attributed for these differences included cultural and biologically imposed differences. The hypothesis was therefore rejected.

Hypothesis IV tested the level of involvement in physical activities as recreation between urban and rural communities. The two sample non-parametric test procedure was used. The results revealed significant differences between the urban and the rural

communities' involvement in health and fitness related physical activities as recreation. The hypothesis was therefore rejected.

It was observed that apart from age, awareness, gender and location of the individuals in the communities, other demographic factors also significantly influence their involvement in health and fitness related physical activities as recreation in the state. Such factors were marital status, type of occupation and the level of educational attainment of the individuals in the communities.

5.1.1 Summary of findings

Some of the major findings of study were as follows:

1. That awareness of the perceived benefits of regular participation in physical activities as recreation is significantly related to individuals' involvement in physical activities as recreation as shown in table 4.10.
2. That the age of individual in a community was a significant factor of their involvement in health and fitness related physical activities as recreation as shown in table 4.11.
3. That gender is a significant factor in the individuals' involvement in health and fitness related physical activities as recreation in the communities involved in the study as shown in table 4.12.
4. That the location of the community could be a significant factor in their involvement in health and fitness related physical activities as recreation as shown in table 4.13.

5.2 Conclusion

From the analysis of the data collected, it was observed that:

1 The communities' awareness of perceived benefits of regular participation in physical activities as recreation is a significant factors of communities participation. This was tested in hypothesis one and was found to be a significant factor for participation of communities in physical activities.

2 Age was found to be another factor of participation in physical activities by the communities. This was revealed in hypothesis II where youth were found to have higher frequencies of participation than adults of older ages. This hypothesis was therefore rejected.

3. Gender was another factor of communities' participation in physical activities revealed in the study. The female were less in the frequencies of participation from observation in the study. In the test of hypothesis III, significant difference was observed between the males and the females in their involvement in physical activities as recreation in the study areas.

4. Involvement in physical activities was observed to reflect the dichotomy of urban and rural dwellers. Respondents in urban areas of the state were observed to be involved more in physical activities as recreation more than the respondents who were from the rural setting of the state. In the test of hypothesis IV, significant difference was observed between the two groups of respondents. It was observed from the test of the effect of the demographic characteristics of the respondents that marital status, occupation and level of education of respondents in the communities were factors that significantly influenced their involvement in physical activities as recreation in the state.

5.3 Recommendation

Based on the findings of this study, the following recommendations were made to increase the involvement of communities in health and fitness related physical activities as reaction in Plateau state.

1. Older people should be encouraged to have a moderate amount of physical activities on most days of the week, especially walking with a friend during leisure time.
2. Despite the tight schedules of women at home, they should create time to participate in recreational activities to improve their health and fitness.
3. Government should provide more re\creational facilities in both urban and rural communities to ensure adequate involvement of these communities in physical recreation.
4. The state, local government councils and employers of labour should provide adequate recreational facilities for their workers in their work places.

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Appendix

DEPARTMENT OF PHYSICAL AND HEALTH EDUCATION
AHMADU BELLO UNJIVERSITY, ZARIA.

QUESTIONAIRE

Dear Respondent,

The researcher is a Post Graduate (M.Sc.) Student of Exercise and Sport Science in the above named Department. He is conducting a research on the Topic: **Determinants of Community Involvement in Health and Fitness Related Physical Activities as Recreation in Plateau State."** The researcher seeks your cooperation to answer the questions by ticking (√) the correct alternative that best describes your feeling to each statement, relating to the topic or fill the blank space provided. All information given will be used mainly for the purpose of this study and strictly treated confidential.

Yours sincerely,

Chollom Dung Wash

Section 1

AWARENESS OF PERCEIVED HEALTH AND FITNESS BENEFITS OF REGULAR INVOLVEMENT IN PHYSICAL ACTIVITIES AS RECREATION

Please tick (√) the option that best describes your feeling

KEY
S.A - Strongly Agreed
A. - Agreed
U>D - Undecided
D - Disagreed
S.D - Strongly Disagreed.

		SA	A	UD	D	SD
1.	I engage regularly in physical activities. To minimize stress and to improve or maintain my level of fitness					
2	I engage in recreational and fitness activities to improve my physical, emotional health and social well-being					
3	I engage regularly in recreational activities to control my weight					
4	I engage in regular physical activities as recreation to increase muscular strength.					
5	I include walking fast and jogging among the recreational activities I engage in regularly.					
6	I engage in physical activities that involve a range of joint motion					
7	I engage in recreational activities to reduce high blood pressure					
8.	Regular engagement in physical activities helps me to reduce the incidence of developing diabetes.					
9	I engage regularly in physical activities as recreation to prevent premature death from heart diseases					
10.	I select some recreational activities that are hard rather than simple in nature					

SECTION II

INVOLVEMENT IN PHYSICAL ACTIVITIES AS RECREATION

Instruction: Please tick (√) the appropriate alternative that best describes your opinion on each statement

11. Does your current level of fitness allow you to participate actively in daily physical activities ? (a) Yes () (b) () No

12. Do you participate regularly in a wide variety of recreational activities for health and fitness. (a) Yes () (b) () No

13. If yes tick (√) the appropriate group of activities you participate in during your leisure time.

a) Hard ( )	(b) Moderate ( )	(c) Sedentary ( )
Jogging	Walking	Reading
Swimming	House work	Playing cards
Fast cycling	Gardening	Watching TV
Single (racket game)	slowing cycling	Playing Ludo
Farming	Folk dance	Resting in bed
Football	any other specify	any other specify
Any other specify	_____	_____

14. How often do you engage yourself in recreational activities per week ?

(a) Every day of the week ( ) (b)Three (3) times a week ( )

(c.) 2-3 times a week ( ) (d) two (2) times a week ( ) (e) 1 -2 times a week ( )

(f) None of the above ( )

15. How much time do you spend each time you are participating in recreational activities. (a) 60 minutes and above ( ) (b) 50 – 59 minutes ( )

(c) 40 – 49 minutes ( ) (d) 30 – n39 minutes ( ) (e) 20 – 29 minutes

(f) 10 – 19 minutes ( ) (g) 1 – 9 minutes ( ) (h) none of the above ( )

16. Which of the following best describes your occupation?

(a) Hard work ( ) (b) Light work ( ) (c) Inactive ( )

Farming	Cleaner	Executive Officer
Carpentry	Conductor	Clerk
Lifting heavy objects	Messenger	Typist
Black smiting	House work	Driver

(d) Any other Specify _____

17 Which of these is your regular means of transport? (a) Trekking ( )

(b) Bicycle ( ) (c) Motor cycle ( ) (d) Car ( )

18. How confident are you that you can continue to be regularly active in recreational activities for the next 3 months?

(a) Highly confident ( ) (b) Medium confident ( ) (c) Low confident ( ) (d) no confident ( )

19. Self motivation encourages you to participate regularly in recreational activities.

(a) Yes ( ) (b) No. ( )

20. Lack of time affects my regular engagement in physical activities as recreation.

(a) Yes ( ) (b) No ( )

FACTORS INFLUENCING PHYSICAL ACTIVITIES AS RECREATION

Instruction: Please tick (√) the appropriate option that appeals to you.

	A. AGE	**SA**	**A**	**UD**	**D**	**SD**
21	Adolescence engage more in physical activities as recreation than adults					
22	Adults participate more in physical activities as recreation than adolescence					
23	Adolescence are physically active daily as part of play					
24	Many older people do not see physical activities as appropriate for their age					
	B. GENDER					
25	Women are less regularly involved in physical activities as recreation than women					
26	Men are more regular involved in physical activities as recreation than women					
27	Pregnant and early child rearing can prevent women from engaging regular in active recreation					
28.	Culture does not hinder men from participating in active recreation					
	C.LOCATION					
29	Easy access to recreational facilities in the urban community positively influences participation in active recreation.					
30	Lack of recreational facilities in the rural community negatively influences participation in active recreation					
31	The people of urban community are less physically active than people of the rural community					
32	The people of rural community are physically more active than people of the urban community					

SECTION IV

DEMOGRAPHY

33. Age: Kindly tick (√) against your age bracket

(a) 12 – 18yrs ( ) (b) 19 - 25yrs ( ) (c) 26 – 32yrs ( )

(d) 33 – 39yrs (e) 40 – 46yrs ( ) (f) 47 – 53 ( ) (g) 54 and above.

34. Gender Tick (√) as applicable (a) Male ( ) (b) Female ( )

35. Marital Tick (√) as applicable (a) Single ( ) (b) Married ( )
(c) Widow ( ) (d) Divorced ( ) (e) Separated ( )

36. Senatorial zone Tick ( ) as applicable. (a) Northern ( ) (b) Central ( )

(c) Southern ( )

37. Occupation Tick (√) as applicable. (a) Civil servant ( ) (b) Farmer ( )

(c) Craft man ( ) (d) House wife ( ) (e) Trader ( )

(f) Others (Specify) _____

38. Qualification. Tick (√) against your higher qualification.
(a) Post graduate ( ) (b) Bachelor's degree/HND ( ) (c) OND/NCE ( )
(d) GIL, SSCE, NECO ( ) (e) Other (Specify) _____

SECTION V
SUGGESTIONS

Suggest two ways in which community members in Plateau State can improve their

Involvement in physical activities as recreation to promote their health and fitness

39_____

40._____