



Research Article

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RECREATIONAL ACTIVITIES AND BODY EXERCISE AMONG SECONDARY SCHOOL STUDENTS IN KWARA STATE, NIGERIA

Olaitan, Olukunmi 'Lanre*, Bakinde, Surajudeen Tosho, Ibraheem, Tajudeen Olanrewaju
Department of Human Kinetics and Health Education, University of Ilorin, Ilorin, Nigeria

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*Corresponding author

Dr Olukunmi 'Lanre Olaitan, Ph.D., Department of Human Kinetics and Health Education, University of Ilorin, P.M.B. 1515, Ilorin, Kwara State, Nigeria Email: lanreolives@yahoo.com

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ABSTRACT

This paper investigated the influence of recreational activities and body exercise among secondary school students in Kwara State. This paper explores types of exercise, benefits of physical exercise, risk of physical exercise and well as health and recreation. Four research questions and four research hypotheses were raised and generated to guide the study.

This researcher employed a descriptive research survey method. The population consists of all secondary school students in Kwara State. The sample is made up of 2400 secondary school students selected through a multistage sample technique across the three senatorial districts in Kwara State. Data were collected using a questionnaire, validity of the instrument was established and reliability was ascertained by administering it twice after an interval of three weeks to 60 secondary school students in Oyo State, who were not part of the sample. Data analysis was done using percentage, mean and chi-square for testing the hypotheses formulated at 0.05 alpha levels.

Based on the findings it is revealed that all the hypotheses tested were rejected as there was a significant influencing in the expression of secondary school students based on gender, age, class level and religion. It was recommended that students and other individual should engage themselves in physical activities to explore the benefits as they reduce body fat and improve weight control of both old and young persons, ease and possibly eliminate back pain problems for both the old and young while recreational activities help in relaxing the mind. Recreational activities like reading increases knowledge among others.

Keywords: Recreation, Recreational activities, Body, Body exercise, Aerobic exercise, Anaerobic exercise, Health

INTRODUCTION

Exercise is often perceived by those who need it most as a painful or exhausting process. Properly performed, however, regular moderate exercise should be a life-enhancing part of health maintenance. There is no need for athletic-level effort, highly structured programs, or costly equipment to gain the benefits of increased physical activity for those who are at high risks of cardiovascular disease, a sensible program of exercise can help reduce that risk; and for those who had a heart attack or have other symptoms of coronary heart diseases; a medically supervised program can slow or even partially reverse the loss of cardiac function. Increased physical activity is associated with longer life, and in old age, it can improve quality of life and the ability to continue enjoying work and recreation. In general, exercise provides a positive, enjoyable foundation for a healthier way of living; unlike many health-enhancing measures, it adds something pleasant to one's existence rather than taking something away¹⁻⁷.

Olaitan, Oyerinde, Obiemi and Kayode and Omolawon and Ibraheem said that Recreation is an activity that people voluntarily pursue for personal enjoyment or satisfaction usually during their free time^{8,9}. Recreation takes a wide variety of forms and occurs in many different places, depending on the choice of the individual. Some recreation is passive such as watching television. Many people take part in extremely active forms of recreation, such as jogging or participation in sports. But according to Mull, Bayless, Ross and Jamlession opinion that, although the primary purpose of recreation is to provide a

variety of activities so that the need and interest of the entire population (able, disabled, ill, aged, disadvantaged and handicapped) are met as far as practicable and possible. It serves as a valuable tool in rehabilitation process or for the purposive intervention in some physical, emotional and social behaviors¹⁰.

According to Hoeger *et al*, Lafinhan and Olaitan and Fahey, *et al* overall physical fitness consists of several components. The most important of these for most adults is cardiovascular (aerobic) endurance, the ability of the body to take in, transport, and use oxygen efficiently to metabolize carbohydrates and fats for energy. Other components of fitness include muscular strength, flexibility, and body composition (the relative proportion of lean to fat tissue). Ideally, an exercise program will help to improve all these components, but a distinction must be made between the regular physical exertion necessary to produce cardiovascular fitness-thus helping to reduce the risk of coronary artery disease and the level of muscle strength and endurance required for athletic competition. It is well recognized that even moderate exercise can modify heart disease risk. An expenditure of 2000 calories a week through exercise is generally considered sufficient^{2,5,11}. This may come from a variety of sources, including such everyday activities as housework, gardening, and walking the dog. Expending even a modest the amount of energy used is better than being sedentary. Infact, those who have been sedentary will actually derive more cardiovascular benefit from a low-level workout than those who are fit. As their

cardiovascular fitness improves, they will need to expend more energy to produce the same effect^{1,5,12}.

Types of Exercise

There are two primary types of exercise; aerobic and anaerobic

Aerobic Exercise

This type of exercise improves cardiovascular health by increasing the efficiency with which the body uses oxygen for energy. For aerobic exercise, activity must be of sufficient duration to require oxygen consumption. Any rhythmic activity that uses large muscle groups and can be maintained for an extended period of time will increase the body's cardiovascular endurance if performed regularly, examples include walking, running, jogging, swimming, aerobic dancing, skating, cycling, rowing, jumping rope, and a cross-country skiing^{1,4,5,13,14,15}.

Anaerobic Exercise

Short, intense bouts of activity, also called isometric exercise, do not require the muscles to burn oxygen as fuel. The familiar feelings of muscle fatigue and exhaustion result when a person crosses the anaerobic threshold from moderate to more intense activity, causing lactic acid to build up in the muscles in a so called oxygen debt. Examples of isometric exercise include some types of calisthenics, as well as weight lifting and use of Nautilus machines. Isometric exercise is a good way to increase muscle strength and endurance, but it does little to improve cardiovascular fitness. Since it may cause temporary but marked rises in blood pressure; it may be ruled out for people with uncontrolled high blood pressure, or hypertension^{2,4,7,13,14}

Benefit of Physical Exercise

- Increase energy: The right combination of exercise and nutrition creates hormonal environment conducive to fat loss, increased muscle strength and increased energy fat loss, increased muscle strength and increased energy. When the body is working at peak efficiency, energy levels soar everyday, things become much easier to do^{11,12}.
- Increased self-esteem: Gaining control of the body size and weight through fitness is an amazing way to increase self-esteem. One looks better and more confident which empowers him/her in everything he/she do. One will find that the self-discipline required and learned through regular exercise spills over into other areas of his/her life and will be better able to make other necessary and desirable changes^{2,7,11,14,16,17}.
- Increase mental focus: The latest research shows that exercise help keep the brain sharp well into old age. Anything that involves mental acuity (focus and concentration) is improved. One also stands a much better chance of avoiding diseases such as Alzheimer's and senility⁷
- Decrease risk of a heart attack: By exercising regularly and making positive changes in diet, it lower cholesterol and blood pressure and greatly diminish the chances of having a heart attack^{2,12}.
- Decrease risk of osteoporosis: Regular exercise, especially weight-bearing, reduces the risk of

osteoporosis, and can even reverse it by building bone tissue¹².

- Reduce the risk of breast cancer by up to 60%: Estradiol and progesterone; two ovarian hormones linked to breast cancer tumor production are lowered in the body by exercise. A woman's body is most susceptible to these hormones during the time between ovulation and menstruation. Habitual exercise can actually delay ovulation until later in the menstrual cycle. This reduces the time she must fight these hormones. Fat has long been known to be a catalyst in the production of estrogen (estradiol). Regular exercise burns body fat and thus decreases the rate of estrogen production^{12,14}
- Increase strength and stamina; Every physical exercise subject do becomes easier which is immensely useful in everyday life¹.
- Reduce depression; The production of Endorphins (feel good hormones) is increased through exercise. Nothing improves mood and suppresses depression better than those endorphins^{1,2,12}.
- Decrease stress levels; The worries and stresses of everyday living (commuting, work demands, conflicts etc.) can stick long after the work hours. Exercise right after work is the perfect natural therapy that can change your mood. One will sleep better too^{1,2,8}

Risks of physical exercise

The most common risk in exercising is injury to the muscles and joints. This usually happens from exercising too hard or for too long particular if a person has been inactive for some time. However, most of these injuries can be prevented by building up your level of activity slowly and listening to your body for early warning pains. If precautions are not taken during hot, humid days, heat exhaustion or heat stroke can occur although they are fairly rare. Both can be avoided if you drink enough liquids to replace those lost during exercise^{7,12,18}

Most people have also read about famous people who have died while exercising. These deaths are usually caused by over exertion in people who already had bad heart conditions. In people under age 30, these are usually congenital heart defects. In people over age 40, coronary artery disease (which causes heart attacks) is usually the cause. Many of these deaths have been preceded by warning signs such as chest pain, lightheadedness, fainting, and extreme breathlessness. These symptoms should not be ignored and should be brought to the attention of your doctor^{2,6,13}

All the moderate levels of exercise recommended, there is no need for medical testing for people of any age as long as they are in good health. Moderate exercise is defined as 60 to 75% of the maximum predicted heart rate (220 minus age). More simply, this is equal to a level of activity that is perceived as being moderately hard. However, for those patients with known heart disease or multiple risk factors for heart attack, especially in men over 40 and women over 50 (smoking, high blood pressure, high cholesterol, obesity, diabetes, family history), a medical examination before starting a new moderate to heavy exercise program is recommended^{2,6,12,14}.

Health and Recreation

Recreation has many health benefits and accordingly, recreational therapy has been developed to take advantage of this effect. Such therapy is applied in rehabilitation, and in the care of the elderly, the disabled, or people with chronic diseases. Recreational and physical activity is important to reduce obesity, and the risk of osteoporosis and cancer, most significantly in men that of colon and prostate and in women that of the breast; however, not all malignancies are reduced as outdoor recreation has been linked to a higher risk of melanoma¹². Extreme adventure recreation naturally carries its own hazards, but Mull, *et al* described recreation as an activity or experience voluntarily chosen and carried on within one's leisure, either because of the satisfaction or pleasure it provides or for other important values or benefits for the participants¹⁰.

Fahey, *et al* agreed that a participation choice is shaped by previous experiences and skill level of an individual. If participation is pleasant and satisfying, it usually continues but if it is unpleasant, it usually ceases⁵. Hoeger, *et al* opined that man learns to move efficiently and effectively because skills acquired fitted him for a life time enjoyable experiences whether it be sports, leisure time activities or personally satisfying movement pattern². This research is therefore concerned to investigate on recreational activities and body exercise among secondary school students in Kwara State, Nigeria.

Research Questions

1. Does the age of secondary school students have any influence on their expression on the recreational activities and body exercise?
2. Does the gender of secondary school students have any influence in their expression on the recreational activities and body exercise?
3. Does the class of secondary school students have any influence in their expression on recreational activities and body exercise?

4. Does the religion of secondary school have any influence in their expression on the recreational activities and body exercise?

Research Hypotheses

1. There is no significant influence of recreational activities and body exercise performed by the students on their health status on the basis of age.
2. There is no significant influence of recreational activities and body exercise performed by the students on their health status on the basis of gender.
3. There is no significant influence of recreational activities and body exercise performed by the students on their health status on the basis of these classes.
4. There is no significant influence of recreational activities and body exercise performed by the students on their health status on the basis of religion.

MATERIAL AND METHODS

The population for the study comprised all secondary school students in Kwara State. Multistage sampling technique was employed to select 800 respondents each from the 3 senatorial districts of Kwara state, to include Kwara north, Kwara central and Kwara south to make a total of 2400 respondents used for the study. The instrument used to gather information for this study was structured questionnaire, tagged (PERAQ) thoroughly scrutinized by experts on the field. A reliability Pearson product moment correlation coefficient of 0.79 was obtained which shows that the instrument is reliable enough to carry out the study. The data collected were subjected to a series of statistical instruments using frequency counts, simple percentage, means scores to analyze the bio-data (age, gender, class, religion) of respondents, while Pearson chi-square statistics was employed to determine if there is any significant influence between the variables in the hypotheses formulated at 0.05 alpha level of significance. The result of analysis and interpretation are tabulated.

Table 1: Bio-data of respondents by Age, Gender and Class (Grade level)

Variables	Frequency	Cum. Freq.	Percentage (%)
Age			
≤ 10years	248	2400	10.3
11 – 15years	816	2152	34
16 – 20years	912	1336	38
≥ 21years	424	424	17.7
Total	2400		100
Gender			
Male	1400	2400	58.3
Female	1000	1000	41.7
Total	2400		100
Class (Grade Level)			
JSS I	311	2400	12.9
JSS II	365	2089	15.3
JSS III	444	1724	18.5
SSS I	429	1280	17.9
SSS II	411	851	17.1
SSS III	440	440	18.3
Total	2400		100
Religion			
Christianity	815	2400	34
Islam	1564	1585	65.1
Traditional	21	21	0.9
Total	2400		100

Key: JSS = Junior Secondary School, SSS = Senior Secondary School

Table 2: Recreational activities and body exercise performed by the students based on age, gender, class and religion

Hypothesis	Item	SA	A	D	SD	Df	Cal. value	T.value	Decision
1: Age	1	970	1358	60	12	9	34.93*	16.92	Rejected
	2	660	1668	60	12				
	3	936	1104	324	36				
	4	672	996	228	504				
	Total	3538	5126	672	564				
	Means score(X)	884.5	1281.5	168	141				
2: Gender	5	624	1308	432	36	9	26.30*	16.92	Rejected
	6	660	1200	528	12				
	7	504	1380	432	84				
	8	588	996	708	108				
	Total	2376	4884	2100	240				
	Mean score (X)	594	1221	525	60				
3: Class	9	552	984	468	396	9	28.85*	16.92	Rejected
	10	588	1488	300	24				
	11	696	1368	24	72				
	12	780	1380	228	12				
	Total	2616	5220	1260	504				
	Mean score(x)	654	1305	315	126				
4: Religion	13	432	996	276	696	9	19.30*	16.92	Rejected
	14	660	1140	336	264				
	15	672	960	192	576				
	16	1044	1032	300	24				
	Total	2808	4128	1104	1560				
	Mean score(X)	702	1032	276	390				

p<0.05, *significant

RESULTS

Table 1 shows the age range; 912 (38%) of the respondents fall within 16 – 20 years, 816 (34%) are within 11 – 15 years, 425 (17.7%) are 21 years and above, while 248 (10.3%) are within 10 years and below. Also in the same Table, the respondents' gender clearly shows that, 1400 (58.3%) are male and 1000 (41.7%) are female. With regard to class, 444 (18.5%) are in JSS III, 440 (18.3%) in SSS III, 429 (17.9%) in SSS I, 411 (17.1%) in SSS II, 365 (15.3%) JSS II and 311 (12.9%) in JSS I. Whereas, in the religions of respondents, 1564 (65.1%) are Moslems, 815 (34%) are Christians and only 21 (0.9%) are Traditional religion worshippers.

In table 2, since the degree of freedom (df) of 9, with the calculated Chi-square value of 34.93 which is greater than the Table value of 16.92 at 0.05 alpha level of significance hence hypothesis one was rejected. Therefore, there is a significant influence of recreational activities and body exercise performed by the students on their health status on the basis of age. This means that recreational activities and body exercise significantly influence the health status of the students based on age.

For hypothesis two, at the degree of freedom of 9, with the calculated Chi-square value of 26.92 which is greater than the Table value of 16.92 at 0.05 alpha level of significance, the hypothesis was rejected. Therefore, there is significant influence of recreational activities and body exercise of the health status of the students on the basis of gender.

Hypothesis three was rejected because, the calculated Chi-square value of 28.85 is greater than the Table value of 16.92 with 9 degree of freedom at 0.05 alpha level of significance. Therefore, there existed a significant influence of recreational activities and body exercise on the students' health status on the basis of class level.

For the fourth hypothesis, the degree of freedom is 9, with the calculated Chi-square value of 19.30 which is greater

than the Table value of 16.92 at 0.05 alpha level of significance. The hypothesis was rejected. Therefore, there is significant influence of recreational activities and body exercise performed by the students on their health status on the basis of religion. This means that recreational activities and body exercise significantly influence the health status of the students based on religion.

DISCUSSION

The first hypothesis which states that there is no significant influence of recreational activities and body exercise performed by the students on their health status on the basis of age was rejected. This means that recreational activities and body exercise influence the health status of the students based on age. This finding corroborate with the findings of Mull, *et al*, Hoeger, *et al*, Armstrong and Welsman who opined that recreational activities and body exercise are meant for all individual of all age range for healthy living^{2,10,14}. The authors opined that, recreational activities and body exercise have positive contribution on the well being of every individual regardless of age, but that intensity may vary according to the age of individual.

For the second hypothesis which states that there is no significant influence of recreational activities and body exercise performed by the students on their health status on the basis of gender. The hypothesis was rejected in line with the findings of Hoeger, *et al*, Armstrong and Welsman, Hall, Talabi, Olatan, who asserted that recreational activities and body exercise is of great importance to the health of both male and female for healthy living^{1,2,6,12,14}. No wonder, Olaitan stressed that recreation and exercise have positive impact on the reproductive health status of both male and of female, even during pregnancy¹².

In the third hypothesis; there is no significant influence of recreational activities and body exercise performed by the students on their health status on the basis of class level. The hypothesis was rejected. This finding is in support with the findings Hoeger, *et al*, Armstrong and Welsman, Hall, Talabi, Fahey, *et al* who asserted that recreational activities and body exercise are of great importance to the health of all individual either young or old, in junior class for healthful living^{1,2,5,6,14}. Also tally with the findings of Olaitan who ascertained that recreation and prescribed exercises play an important role in the reduction of evidence of elevated blood pressure among the secondary school students in Ilorin regardless of their grade levels¹⁹. The fourth hypothesis states that, there is no significant influence of recreational activities and body exercise performed by the students on their health status on the basis of religion was rejected. This finding is in line with the findings of Olaitan, *et al* and Mull, *et al* who asserted that recreational activities and body exercise is of great importance to the health of both male and female of different religious group for healthy living^{8,10}. The authors are of the opinion that, Christians, Moslems and Traditional worshippers exercise themselves either directly or indirectly with their modes of worships, because, the Christians way of dancing, singing, clapping and sometimes praying are informal forms of agility, endurance and aerobic exercise. The Moslems way of praying in as informal form of flexibility, balance and aerobic exercise, and Traditional worshippers also perform a lot of moving here and there for their festivities are informal form of strength, balance agility and aerobic and anaerobic exercise.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings, the researchers concluded this study as follows:

1. Recreational activities and body exercise performed by the secondary school students of different age range positively influenced their health status.
2. Male and female secondary school students' health status is positively influenced recreational activities and body exercise they performed.
3. Recreational activities and body exercise performed by the students of different class (grade level) have positive influence on their health status.
4. Health status secondary school students of different religious groups are positively influenced by recreational activities and body exercise they performed.

Therefore, the researchers have the following recommendations as a way forward:

Students and other individual should engage themselves in physical activities as it reduced body fat and improved weight control of both old and young persons and possibly eliminates back problems and pain for both the old and young, while recreational activities help in relaxing the mind and recreational activities like reading brings about gaining of more knowledge.

Exercise plays an important role in weight control by increasing energy output, calling on stored calories for extra fuel. Exercise does not only increase metabolism during a workout, but also causes the body metabolism to

stay increased for a period of time after exercising, allowing the body to burn more calories.

One of the relevance of physical exercise is that it enhances or maintains physical fitness and overall health and wellness. It is performed for various reasons, these include strengthening muscles and the cardiovascular system, gaining athletic skills, weight loss or maintenance and for enjoyment. Frequent and regular physical exercise improves reproductive health status of both male and female; it boosts the immune system, and helps prevent the "diseases of affluence" such as heart disease, cardiovascular disease, Type-2 diabetes and obesity. Therefore, it recommended that every individual should engage themselves in physical activities for healthy living.

All human that wants to stay healthy at all time is advised to engage in physical and recreational activities. Increased physical activity is associated with longer life, and in old age it can improve quality of life and the ability to continue enjoying work and recreation.

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