

## Assessing the Level of Knowledge on Physical Fitness Procedures of Keep Fit Club Members in Cape Coast Metropolis of Ghana

Richmond Stephen Sorkpor  
Tutor, OLA College of Education, Cape Coast- Ghana

Julius Jerry Agortey  
Tutor, St. Francis College of Education, Hohoe-Ghana

Benjamin Doamekpor  
Tutor, Jasikan College of Education, Jasikan- Ghana

### Abstract

The purpose of this study was to conduct descriptive survey of knowledge and practices of physical fitness among keep fit club members in Cape Coast Metropolis of Ghana. The study sought to find out the related practice keep fit club members in question engage in to show the basic principles they need to keep fit, differences in the knowledge level between literate and illiterate members and the benefits participants derive from keeping fit. Data was collected from a sample size of 100 respondents. Data was analyzed using descriptive statistics. It was revealed that most of the physical exercises are not common to some instructors of keep fit clubs. Some members of keep fit clubs don't know the importance of some other practices like enough rest and regular check on their health. Also, members only treated minor injuries themselves. Most members think body composition is more important than cardiovascular development and are aware of health importance of keeping fit. It was recommended that they should find ways of helping their members to measure their improvement while keeping fit.

**Keywords:** Knowledge, Keep fit, Exercises, Aerobic activities,

### Introduction

The variety of approaches to the fitness unit reflects the differing views people have about fitness. In this regard, it may be useful to outline briefly the accepted understandings of the different forms of fitness. Thirty years ago, physical fitness was push-ups, straight-log sit-ups, pull-ups, sprinting a short distance and running a long distance, perhaps it should have been called military fitness, from which the tests originated.

Today, when discussing fitness, we need to distinguish its various forms, which include health fitness or health-related fitness, physical fitness or athletic fitness, and motor fitness or health fitness. It needs to be understood these three categories of fitness if there is the need to plan programs to achieve the fitness goals specified.

Most young children are naturally physically active; they are inclined, however, to become sedentary as society and the environment make it increasingly difficult for them to remain active during late childhood and adolescence. As a result of investigations detailing the possible pediatric nature of coronary heart disease, an enthusiastic emphasis has been given to the study of fitness in school-age children. This emphasis has, in part promulgated the health fitness concern evident in physical education. Fitness problems in youth are often manifested in adults as degenerative diseases and chronic ailments. These problems are displayed in poor cardiovascular endurance, high levels of body fat, abdominal bulge, poor lower-back strength, and deficient lower-back flexibility (Payne and Halm, 2002).

Fitness programs that demonstrate important outcomes are difficult to develop and maintain. First, physical education is not considered to be a vehicle purely for the development of fitness. Many other outcomes are important, and these too take time and programme resources to achieve. The second major constraint on achieving fitness goals is time. Improvement in cardiovascular fitness requires a minimum of 20 minutes of sustained aerobic exercise at 70 percent of maximum capacity at least three days per week. Strength and flexibility goals add to that time demand. Gaining adequate time for fitness and then using that time efficiently remains the most important ingredient in development and maintenance of good fitness programme.

Following a programme of regular aerobic exercise improves the efficiency of your cardiovascular and respiratory systems. Most specifically, regular aerobic exercise strengthens the muscles of the heart, enabling the heart to pump more blood with fewer strokes to meet the demand placed on it. As a result, the resting heart rate may become slower than in the past, indicating that you have become physically fit. All the same time, the respiratory system becomes stronger and more efficient in delivering oxygen to the tissues of the body. This Cardio respiratory fitness enables the body to deal with the routine and extraordinary demands of the daily life more easily. Cardio respiratory fitness is the foundation for whole-body fitness. This fitness increases the capacity to sustain a given level of energy for a prolonged period. Thus the body can work longer and at greater

levels of intensity. Cardio respiratory fitness has important benefits for everyone, including children, pregnant women and older adults. In addition, improving your Cardio respiratory (aerobic) fitness has a variety of benefits that can improve nearly all parts of life.

Nowadays, most Ghanaians have been educated enough to embrace the idea of keeping fit. Some do different types of activities to keep them going at times daily, every other day or weekly. Some do individual programs, others with their peers or families, some also have formed clubs and they do different types of activities with the view to keeping fit. Cape Coast, a regional capital of Central Region is noted to be the educational hub of the nation with trading and white collar job oriented community. It links people from the southern-east and west and the middle belt of Ghana. Aside this, there are keep fit clubs and other clubs which do keep fit alongside their main activities and those groups which were formed purposely to keep fit. Some of these have technical instructors, others have not but they do what they deem to be good enough for them. Whether right programs are followed, at correct periods at appropriate places and at regular times need to be investigated.

### **Statement of the Problem**

Fitness itself means many things to people in community. Some see it as a part of athletics and something that only gifted athletes should strive for. Others view fitness with fear and anxiety. For still others, it represents hard work to be avoided at all cost. However, given a health fitness orientation, it is possible that adolescents will come to understand the meaning and relevance of fitness to their lives.

According to Gleeson (2007), physical exercise helps in developing and maintaining physical fitness. It also improves alertness and overall health. It gives strength to the muscle, and helps in maintaining a healthy weight. Frequent and regular physical exercise boosts up the immune system and helps to prevent various diseases, such as, heart disease, diabetes, high blood pressure, bone diseases etc. Moreover, exercising prevents depression and improves mental health by relieving stress and anxiety. Exercise keeps the individual flexible and agile; it also increases strength and stamina. Sound sleep can be enjoyed by exercising regularly.

According to Williamson (1991), keep fit is a series or system of exercises intended to improve the circulation and respiratory system, suppleness and stamina, it is an exercise to promote physical fitness if performed regularly.

Recently, there are several groups springing up in all corners which are mostly seen on weekends on roads using different modes to exercise. The researcher upon careful studying the activities and practices of keep fit clubs in Cape Coast, interacting with some members realized the need to assess the level of knowledge of the members of keep fit Clubs.

### **Purpose of the Study**

The purpose of the study was to assess the level of knowledge of the members of keep fit clubs in the Cape Coast Metropolis. It was to identify whether keep fit clubs are aware of the appropriate fitness activities, the intensity of their training, frequency and duration of their activities.

### **Research Questions**

1. What is the knowledge level of keep fit club members in the Cape Coast Metropolis on physical fitness procedures?
2. What differences exist in the knowledge level between literates and illiterates members in the keep fit clubs in the Cape Coast Metropolis?

### **Methodology**

Descriptive survey design was employed. The target population of 500 was drawn from the members of the five registered keep fit clubs in the Metropolis (Regional Sports Authority, 2016). Convenience sampling technique was used to select 100 respondents, 60 males and 40 females with at least ten of them selected from each of the registered clubs, 6 males and 4 females. The instrument developed for the study was a questionnaire. Respondents were requested to respond to each item on a four-point Likert scale.

### **Results/Discussions**

#### **Research Question 1: What is the level of Knowledge of Keep fit Club Members in the Cape Coast Metropolis on Physical Fitness Procedure?**

Table 1 explains the knowledge level of keep fit club members in the Cape Coast Metropolis on physical fitness procedure. The knowledge level was measured on the duration to keep fit for positive effect, types of health component needed, types of activities and their effect on the physique, how to measure improvement in fitness and how to care for injured person.

**Table 1: Knowledge Level of Keep Fit Club Members**

Knowledge	Yes (%)	No (%)	Total (%)
Care to Injured Person			
First aid given	100 (100)	0 (0)	100 (100)
Victim sent to hospital	54 (54)	46 (46)	100 (100)
Victim treats him/herself	28 (28)	72 (72)	100 (100)
Duration for keep fit			
20-30 minutes	0 (0)	100 (100)	100 (100)
35-60 minutes	22 (22)	78 (78)	100 (100)
65-80 minutes	28 (28)	72 (72)	100 (100)
85-120 minutes	36 (36)	64 (64)	100 (100)
Over 120 minutes	14 (14)	86 (86)	100 (100)
Types of Health Component Needed			
Cardio respiratory Endurance	85 (85)	15 (15)	100 (100)
Muscular Strength	28 (28)	72 (72)	100 (100)
Muscular Endurance	58 (58)	42 (42)	100 (100)
Body Composition	100 (100)	0 (0)	100 (100)
Flexibility	40 (40)	60 (60)	100 (100)
Measurement of Improvement			
Excellent	06 (06)	94 (94)	100 (100)
Very Good	22 (22)	78 (78)	100 (100)
Good	66 (66)	34 (34)	100 (100)
Satisfactory	4 (4)	96 (96)	100 (100)
Quite Satisfactory	2 (2)	98 (98)	100 (100)
Not Yet Known	0 (0)	100 (100)	100 (100)

Concerning their knowledge level on keep fit, the response given on what happens when a member is injured during their activities, all the respondents agreed that, first aid treatment is given and slightly over half of respondents said that, victim is sent to hospital and few others also saying victim normally treat him/herself. On the duration of activity, about 22% agreed that they do their activities within 35 to 60 minutes. Twenty-eight saying they spend 65-80 minutes, 36 said they normally spend 85-120 minutes and 14 out of total respondents thought they spend more than 120 minutes for their activities. Information gathered on their knowledge level on the health components they need for keeping fit, all respondents mentioned the need for good body composition and only 15 respondents did not agree to develop the heart muscles. Only 28 out of the total respondents agreed to develop muscular strength and only 40 agreeing to develop their flexibility. More than half also agreed that they develop the endurance of their skeletal muscles. Finally on how to assess their improvement, 94 of them never agreed to have had excellent improvement. Only 2 respondents said quite satisfactory, 4 went for satisfactory, 66 of them said good and 22 of the respondents agreed to have attained very good improvement.

According to O'Connor, Crowe, Spinks (2005), when faced with an emergency and someone gets injured; ideally, you should call for a trained professional to assist you. In most cases, do not move the injured person because it may cause further serious harm or you may become injured yourself. However, there are times when it is necessary to carry and move an injured person to a safer location.

If possible, call for emergency assistance first. The dispatcher will be able to assess the situation and instruct you to provide first aid. Then you know that medical help is on the way, even as you try to assist the injured person yourself. However, if you are unable to call for assistance, the danger is still present or you are isolated in a place with no means of communication, you will need to remove yourselves from the situation as soon as possible.

If you are by yourself or no one else can physically assist you, you need to know what to do. There is a proper way of carrying or transporting an injured person by yourself that will protect both of you from further harm.

1. Disentangle the injured person from the environment. Clear the space surrounding the injured person. For example, if he is under heavy objects because something fell on him, remove anything weighing down on him and obstructing his breathing. Eliminate the cause of injury first. For example, if the person is on fire, smother the fire on his clothing before attempting transport. If the person got electrocuted, turn off the main switch.
2. Provide any immediate first aid before attempting to move the person. Make sure the person is breathing. If there is an open wound, apply pressure to it first by binding it if possible.
3. Assess if you have the strength to lift the person. If you can, here's how to carry the person so your own back is supported. If the injured person is lying down, bend his knees so that his feet are flat on the ground.

4. Stand in front of the person and place your feet a little over his feet to stabilize him as you lift.
5. Reach across and hold both arms of the injured person.
6. Pull the person towards you. As you do, turn your body at an angle or in a clockwise or counter clockwise direction. Do not let go of his arms. You should end up both facing the same direction, with his arms draped on your shoulders and his body on your back.
7. Secure your hold on his arms. It is as if you are carrying the person like a backpack.
8. You may now walk and drag the person to safety.
9. If you feel you cannot lift and carry the person this way, the other option you have is to drag the person. Hold the person's clothes by the shoulders. Your other option is to hold him by his ankles. Once your hold is secure, you can drag the person.

According to O'Connor, Crowe, Spinks (2005), as you are running for fitness, 30 minutes. Health and medical organizations use time as a reference because the body won't recognize how far you've gone but will recognize how long it has kept up a given activity. Physiologically and metabolically it takes a certain time for adaptations to occur. Consider two individuals running 3 miles; one does it in 15 the other in 60. The person running 15 minutes is not running long enough for the workout to benefit them health wise and the person running 60 minutes is probably running longer than they should for their physical conditioning.

Running performance can continue to improve beyond 50 miles a week, however, even though aerobic conditioning does not. The benefits of big mileage include improvements in the runner's ability to burn fat, increased muscular endurance and maintenance of body weight. The upper limit for physiologically useful increases in mileage appears to be around 80-100 miles a week; though many elite athletes run 100-120 miles a week. Most amateur runners don't run anything like this sort of distance each week.

According to Payne and Hahn (2002), you should not increase your weekly mileage too rapidly if you want to avoid injury or illness. A good rule of thumb is that below 20 miles a week you should not increase your weekly mileage by more than 2 miles a week; above 20 miles a week, you should not increase your weekly mileage by more than 10% a week. So if you are currently running 10 miles a week, you should not increase to more than 12 miles next week; and if you are running 35 miles a week, you should not increase to more than 38½ miles the next week.

This is a very important guideline. All experience shows that excessively rapid build-up in training mileage is one of the most common causes of injuries. Many new runners think that they can be the exception to the rule, because they feel they can go further than this. Sadly, this enthusiasm often ends in tears.

If running is your main exercise, you should aim to run 3-4 times a week, in order to reap the full health benefits. But runners who set themselves more demanding performance goals will need to run 5-6 days a week, giving themselves one or two rest days a week.

Elite runners will often run twice a day on at least some days of the week. For example, they may do a track session in the morning, and a recovery run in the evening. These runners may therefore run 10-12 times a week. Even elite runners generally take one day a week off completely, but some only rest on one day a fortnight.

Running twice a day can have advantages if you are trying to do a big weekly mileage, since it seems to be less draining to run two six mile runs than one twelve mile run in a day. But remember that there are time overheads, such as the time it takes to change, shower and recover, which you will have to accommodate twice. It is physically demanding to run twice a day, and you should not contemplate it until you have been running for a few years.

A cornerstone of the running week for many runners is the long run, especially for runners focusing on distances more than 1500m. The length will vary according to the distance you want to race. Endurance runners will typically do one long run a week; shorter distance runners may do one long run a fortnight. The long run should be between one quarter and one third (certainly less than half) of your weekly mileage. So if you are running 10 miles a week, your long run should be around 3-4 miles.

#### **Research Question 2: What Differences Exist in the Knowledge level between Literate and Illiterate Members in the Keep Fit Clubs in the Cape Coast Metropolis?**

Table 2 talks about the differences that exist in the knowledge level between literates and illiterates member in the keep fit clubs in the Metropolis. In this situation the knowledge level of the members were compared that of the illiterate and literates among the respondents. The knowledge level that were put under review on the components of health related fitness the duration for keeping fit, how to measure improvement in fitness and reason of joining the club whether there were misconceptions or not. After computing, the researcher compared the literatures and that of the illiterates. The numbers of illiterates sampled as defined in the study were 22 and literates were 78.

**Table 2: Differences in Knowledge Level between Literates and Illiterates**

Knowledge	Literate (%)	Illiterate (%)
Care to Injured Person		
First Aid Given	78/78 (100)	22/22 (100)
Victim Sent to Hospital	34/78 (44)	20/22 (91)
Victim Treat him/herself	8/78 (10)	20/22 (91)
Duration for Keep Fit		
20-30 minutes	0/78 (0)	0/22 (0)
35-60 minutes	18/78 (23)	4/22 (18)
65-80 minutes	18/78 (23)	10/22 (46)
85-120 minutes	31/78 (40)	5/22 (23)
Over 120 minutes	12/78 (15)	2/22 (9)
Types of Health Component Needed		
Cardiorespiratory Endurance	78/78 (100)	7/22 (32)
Muscular Strength	28/78 (36)	0/22 (0)
Muscular Endurance	58/78 (74)	0/22 (0)
Body Composition	78/78 (100)	22/22 (100)
Flexibility	36/78 (46)	4/22 (18)
Measurement of Improvement		
Excellent	6/78 (8)	0/22 (0)
Very Good	17/78 (22)	5/22 (23)
Good	50/78 (64)	16/22 (73)
Satisfactory	3/78 (4)	1/22 (5)
Quite Satisfactory	2/78 (3)	0/22 (0)
Not Yet Known	0/78 (0)	0/22 (0)

Finding out the differences in knowledge level of literate and illiterate members under care to injured person, all literate respondents and illiterate respondents said injured person is given first aid but 34 out of 78 literates said victims are sent to hospital and out of 22 illiterate respondents, 20 said victims are sent to hospital. Whether a victim treats himself or herself, 8 literate respondents agreed to this and 20 illiterate also agreed to this. About the duration for keeping fit, both literates and illiterates did not agree to exercising for 20-30 minutes but while only 23% literates agreed to have been exercising for 35-60 minutes, 18% illiterates agreed to it. Also, 23% of literates as against 46% of illiterates agreed to the 65-80 minutes duration and 40% literates as against 23% illiterates agreed to 85-120 minutes duration and over 120 minutes duration, 15% of literates and 9% of illiterates agreed to it. When types of health component needed was tested, whilst all the literates agreed that they need Cardio respiratory endurance and body composition and about 74% agreeing to muscular endurance, only 32% of illiterates agreed to have needed Cardio respiratory endurance and none of them said they need muscular endurance but all accepted the need for good body composition. No illiterate accepted the need for muscular strength but 36% of literate accepted the need for muscular strength and 46% and 18% of both illiterates and literates respectively agreed to the need for flexibility. Concerning the measurement of improvement in fitness when joining the club, only 8% literate as against 0% of illiterate rated excellent, 22% of literate went for very good and 23% illiterates went for that. Most illiterates rated their illiterate who rated their improvement satisfactory, through quite satisfactory and not yet known as 4, 3 and 0 and 5, 0 and 0.

According to Wilmore and Knuttgen (2003), the beneficial effect of exercise on the cardiovascular system is well documented. There is a direct relation between physical inactivity and cardiovascular mortality, and physical inactivity is an independent risk factor for the development of coronary artery disease. There is a dose-response relation between the amount of exercise performed from approximately 700 to 2000 kcal of energy expenditure per week and all-cause mortality and cardiovascular disease mortality in middle-aged and elderly populations. The greatest potential for reduced mortality is in the sedentary who become moderately active. Most beneficial effects of physical activity on cardiovascular disease mortality can be attained through moderate-intensity activity (40% to 60% of maximal oxygen uptake, depending on age). Persons who modify their behavior after myocardial infarction to include regular exercise have improved rates of survival. Persons who remain sedentary have the highest risk for all-cause and cardiovascular disease mortality.

Although there have been hundreds of studies on exercise and the immune system, there is little direct evidence on its connection to illness. Epidemiological evidence suggests that moderate exercise has a beneficial effect on the human immune system ; an effect which is modeled in a J curve . Moderate exercise has been associated with a 29% decreased incidence of upper respiratory tract infections (URTI), but studies of marathon runners found that their prolonged high-intensity exercise was associated with an increased risk of infection occurrence. However, another study did not find the effect. Immune cell functions are impaired following acute sessions of prolonged, high-intensity exercise, and some studies have found that athletes are at a higher risk for

infections. The immune systems of athletes and non-athletes are generally similar. Athletes may have slightly elevated natural killer cell count and cytolytic action, but these are unlikely to be clinically significant. Vitamin C supplementation has been associated with lower incidence of URTIs in marathon runners. Biomarkers of inflammation such as C-reactive protein, which are associated with chronic diseases, are reduced in active individuals relative to sedentary individuals, and the positive effects of exercise may be due to its anti-inflammatory effects. The depression in the immune system following acute bouts of exercise may be one of the mechanisms for this anti-inflammatory effect.

**It enhances brain function:** A 2008 review of cognitive enrichment therapies (strategies to slow or reverse cognitive decline) concluded that "physical activity and aerobic exercise in particular, enhances older adults' cognitive function." In mice, exercise improves cognitive functioning via improvement of hippocampus - dependent spatial learning, and enhancement of synaptic plasticity and neurogenesis. In addition, physical activity has been shown to be neuroprotective in many neurodegenerative and neuromuscular diseases. For instance, it reduces the risk of developing dementia. Furthermore, anecdotal evidence suggests that frequent exercise may reverse alcohol-induced brain damage. There are several possibilities for why exercise is beneficial for the brain. Examples are as follows: increasing the blood and oxygen flow to the brain, increasing growth factors that help create new nerve cells, <http://en.wikipedia.org/wiki/Exercise> - cite\_note-pmid10195220-34 promote synaptic plasticity and increasing chemicals in the brain that help cognition, such as dopamine, glutamate, norepinephrine and serotonin. Physical activity is thought to have other beneficial effects related to cognition as it increases levels of nerve growth factors, which support the survival and growth of a number of neuronal cells.

**It reduces Depression:** A number of factors may contribute to depression including being overweight, low self esteem, stress, and anxiety. Endorphins act as a natural pain reliever and antidepressant in the body. Endorphins have long been regarded as responsible for what is known as "runner's high", a euphoric feeling a person receives from intense physical exertion. However, recent research indicates that anandamide may possibly play a greater role than endorphins in "runner's high". When a person exercises, levels of both circulating serotonin and endorphins are increased. These levels are known to stay elevated even several days after exercise is discontinued, possibly contributing to improvement in mood, increased self-esteem, and weight management. Exercise alone is a potential prevention method and/or treatment for mild forms of depression. Research has also shown that when exercise is done in the presence of other people (familiar or not), it can be more effective in reducing stress than simply exercising alone.

## Conclusions

Some keep fit club members perhaps may not know the importance of some other practices like enough rest and regular check on their check. Even though it was noticed that some injured persons treat themselves, this may be that, their injury may be minor and may not make it known and some victims are not sent to the hospital because of less severity of the injury. Ideally, keeping fit for 20-30 minutes may be appropriate but respondents considered the total time spend during their keep fit activities. Some respondents agreed to improve the Cardio respiratory as a result of ignorance since this should be one of the most important component that is needed by all in addition to body composition but the later attracted attention more than the former.

It was also realized that, people know the importance of other health-related component when keeping fit. Even though most people did not rate their improvement excellent or very good as a result of not joining the club early or may not know how to identify changes in health. The differences existing between literates and illiterates as far as care to the injured person was not significant. That of the duration for keeping fit was also the same but knowledge level of type of health related component needed was very low for the illiterate as well as muscular strength and muscular endurance which revealed that they had no knowledge about them at all. All of them seemed to cherish body composition. The rating to their improvement produced insignificant differences. This may be that, most of the illiterates have been learning fast from their literate counterpart.

Finally, most people are not aware that, when you cater for body composition and do some stretching activities to improve flexibility, your chance of reducing your risk of injury is highly reduced looking at their response on health related component needed and benefit derive from keeping fit. Reduction of smoking and alcohol was low and this may be that, only few respondents' smoke or drink alcohol.

## Recommendations

The study revealed that keep fit must travel beyond 30 minutes before it can be effective so education must be done on the duration, while highlight on regularity be given so that it within 30 minutes but regular exercise is done, it will yield a fruitful result. People are not aware of other health related components apart from cardiovascular and body composition so organizers of keep fit clubs must educate and emphasize activities that will build other components.

Organizers of keep fit should find ways of helping their members to measure their improvement while

keeping fit. Also, organizers should try and learn other exercises so as to vary their exercises in order not to bore their members who may think that almost all the exercises are known by them and that may affect their turn-up.

The issue of diet control must also be emphasized as well as resting. Education on whatever necessary for one to be physically fit should be very paramount for all members irrespective of your academic level most especially on the benefits of joining the club in terms of health rather than social benefits.

### References

- Archives of Internal Medicine (2005). *Outcomes of quality physical education*. Reston, VA: AAHPERD.
- Gleeson, P. (2007). *Special physical education: Physical activity, sport and recreation*. Englewood Cliffs, NJ: Prentice Hall.
- Issue of Preventing Obesity and Chronic Diseases (2009). Community asset. *Athletic Business*, 18(3), 20.
- O'Connor, M., Crowe, N. T., Spinks, J. (2005). Citrus county fitness break: Funding and developing fitness videotapes. In R. Pate & R. Hohn (Eds.), *Health and Fitness through physical education* (pp. 205-209). Champaign, IL: Human Kinetics.
- Payne, W. A., Hahn, D. D. (2002). *Understanding your health*. New York, McGraw-Hill Companies Inc.
- Regional Sports Authority (2011). Yearly reports presented to National Sports Council. Accra.
- University of Cambridge. (1996). *Cambridge International Dictionary of English*. London, Cambridge University Press.
- WHO (2004). Guidelines for school and community programme to promote lifelong physical activity among young people. *Morbidity and Mortality Weekly Report*. 46(RR-6), 1-36.
- Williamson, C. (1991). The effects of a token economy programme on appropriate behaviour and motor task performance of educable mentally retarded children in adapted physical education. Unpublished doctoral dissertation, Ohio State University, Columbus.
- Wilmore, V., Knuttgen, Y. (2003). *Analyzing physical education and sport instruction (2<sup>nd</sup> ed.)*. Champaign, IL: Human Kinetics.