THE EFFICACY OF FITNESS EXERCISE OBJECTIVES ON QUALITY OF HUMAN LIFE

By

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Abstract
This paper looked at the efficacy of fitness exercise objectives on fitness quality of human lives. Fitness is a state of being fit, and to be fit demands vigorous participation in selected and prescribed physical activity. Good quality of life is not easily achieved without deliberate and conscious effort in maintaining one's life-style through a number of positive healthy living and practices. Fitness, if well practiced, has numerous benefits in quality of life, especially if done on regular basis. A fit individual will have improved cardiovascular' increased protective high – density lipoproteins, improved strength and muscular endurance, enhanced mental health and function, and improved wellness. Others are opportunity for successful experience and social interaction, improved appearance, greater lean body mass and less body fat, improved flexibility and bone development. The last four effects or benefit on quality of life are, reduction in cancer risk, reduced effect of acquired aging, resistance to fatigue as well as other health benefits.

Good quality of life for human beings, to a large extent depends on a combination of factors, ranging from good nutrition, enhanced financial benefits, quality education, adequate wellness status, as well as one's fitness status.

Quality of life according to Corbin, Welk, Corbin and Welk (2004) is a term used to describe wellness. An individual with good quality of life can enjoyably do the activities of life with little or no limitation and can function independently. Individual quality of life requires a pleasant and supportive community.

Fitness, as it relates to quality of human life is what the paper seeks to address with emphasis on physical fitness. Fitness encompasses physical fitness, mental fitness, metabolic fitness as well as emotional fitness. Physical fitness is a multidimensional state of being and is the body's ability to function efficiently and effectively. It is a state of being that consists of at least five health – related and six skill – related physical fitness components, fitness is associated with a person's ability to work effectively, enjoy leisure time, be healthy, resist hypokinetic diseases or conditions, and meet emergency situations (Corbin, 2004).

Mental fitness has to do with the mental acuity or individuals in terms of intelligence and mental balance. Metabolic fitness is a positive state of the physiological systems commonly associated with reduced risk for chronic diseases such as diabetes and heart disease. Metabolic fitness is evidenced by healthy blood fact

(Lipid) profiles, healthy blood pressure, healthy blood sugar and insulin levels, and other non-performance measures (Spain & Franks, 2001). Emotional fitness relates to emotional stability and state of the mind in positively addressing emotional problems.

In order to throw more light on the essence of this paper, the following subheadings were addressed; objectives for fitness, health – related components of physical fitness, the health benefits of fitness exercise, and effects of fitness exercise to quality of life.

Objectives of Fitness

The average individual lacks the knowledge of how to increase or maintain cardiovascular endurance, control body weight, develop an adequate amount of strength and flexibility, or write a relaxation programme. One can realize definite fitness objectives by utilizing a fitness for life programme. The following are the objectives for fitness according to Allsen, Harrison and Vance (1989):

1. Cardiovascular Endurance Objectives

a. You will be able to administer cardiovascular endurance tests correctly and interpret the result.
b. Given a person's age, weight, fitness category, and exercise preference, you will be able to write a personalized cardiovascular endurance programme.
c. As a result of engaging in a personalized programme, you will be able to increase and/or maintain your own cardiovascular endurance level.

2. Weight – Control Objectives

a. You will be able to administer and interpret tests correctly to determine proper body weight.
b. Given a person's current weight, desired target weight, and activity preference, you will be able to write a personalized weight control programme.
c. As a result of engaging in a personalized programme, you will be able to increase and/or maintain the preferred level (Allsen, 1989).

3. Strength Objectives

a. You will be able to administer a strength test correctly and interpret the results.
b. Given a person's choice of strength exercises, you will be able to write a personalized strength programme.
c. As a result of engaging in a personalized strength programme, you will be able to increase your own strength levels. (Allsen, 1989).

4. Flexibility Objectives

a. You will be able to administer flexibility tests correctly and interpret the results.
b. Given a person's choice of flexibility exercises, you will be able to write a personalized flexibility programme.
c. As a result of engaging in a personalized flexibility programme, you will be able to increase your own flexibility levels (Allsen et al, 1989).

5. Relaxation Objectives

a. You will be able to evaluate your life-style to determine how vulnerable you are to stress and tension.
b. You will be able to write a personalized relaxation programme.
c. As a result of engaging in a personalized relaxation programme, you will be able to apply relaxation techniques to combat stress and tension (Allsen, 1989).

Components of Physical Fitness

Health – related components of physical fitness are directly associated with good health and hence quality of life. The following are the health – related components of physical fitness.

- **Body Composition:** This refers to the fat and non fat components of the human body. The relative percentage of muscles, fat, bone, and other tissues that comprise the body. A fit person has a relatively low, but not too low, percentage of body fat (body fatness) (Bair, 2001). Body composition is classified as a component of physical conditioning because it directly influences the individual's involvement in the conditioning programme. (Gladwin, 2001). Oriabure (2009) cited Amusa, Igbanugo and Toriola (1998), who reported that the common method with almost everybody is the use of age – height – weight table as reference standards. Various techniques have been developed to determine bones and body diameter, girths, circumference and skinfold thickness and the results of these measurements are used to evaluate an individual's level of fitness.

Roberg and Keteyian (2003) opined that the assessment of body composition is often performed to determine and monitor one's health or fitness status, and to aid in planning training programmes for athletes. According to the above authors, a high percentage of body fat (low lean body mass) is associated with a higher risk of heart disease, diabetes, hypertension, cancer, hyperliopidemia, and a variety of other health problems. On the other hand, a high percentage of lean body mass and low-fat mass is associated with athletic prowess and health (Wilmore & Bergfeld, 1979, Wilmore & Haskell, 1986).

- **Cardiovascular Fitness:** The ability of the heart, blood vessels, blood, and respiratory system to supply fuel and oxygen to the muscle and the ability of the muscles to utilize fuel to allow sustainable exercise. A fit person can persist in physical activity for relatively long periods without undue stress (Payn & Haln, 2002).

- **Flexibility:** Flexibility is the ability to maximize joint range of motion (Buskirk, 1992). Hockey (1993) sees flexibility as a functional capacity of the joints to move through a full range of motion. Hoeger and Hoeger (1994) submit that flexibility is affected by muscle length, joint structure, and other factors. A fit person can move the body joints through a full range of motion in work and in play.

- **Muscular Endurance:** Muscular endurance is the ability of the muscles to exert themselves repeatedly (Corbin, Pangranzi & Frank, 2002). Hockey (1993) defined muscular endurance as the ability of a muscle or group of muscles to perform repeated or sustained contractions for an extended period of time. The longer a muscle can contract without fatigue, the greater the number of repetitions that can be performed before fatigue.

- **Muscular Strength:** Is the ability of the human muscles to exert an external force or to lift a heavy weight (Corbin, 2004). Strength is an important factor in health and sports and the amount of strength possessed by an individual is contingent on the composition of muscle fibers that can be voluntarily innervated (O'Shea, 2000). The most noticeable change that takes place in the muscles as a result of regular and proper exercise is the increase in girth (Adenisi, 2003). A muscle would grow in size and strength only when a workload over and above any previous demand is place on it. The principle of overload according to him is one of the basic premises of strength training. According to Gleim, Nicholas and Webb (1988), health care professionals now use muscular strength profiles to identify and to provide guidelines during rehabilitation following injury.

Health Benefits of Fitness Exercise

Fitness exercise can be termed to be physical exercise that may be rigorous in nature. Physical exercise are generally considered to be a broad term used to describe all forms of large muscle movements, including sports, dance, games work, lifestyle activities, and exercise for fitness (Ainsworth, 2003). The following are some of the health benefits of fitness exercise:

- **Promotes Optimal Health and Wellness:** There are three major ways in which fitness exercise promote optimal health and wellness, first it can aid in disease/illness prevention. According to Corbin (2004), there is considerable evidence that the risk of hypokinetic diseases or conditions can greatly reduce among people who do regular physical exercise and achieve physical fitness. Fitness exercise also stimulates positive changes with respect to other risk factors and may produce a shortcut for the control of chronic diseases, much as immunization controls infectious diseases. Second, fitness exercise can be significant contributors to disease/illness treatment. Even with the best disease prevention practices, some people become ill. Regular exercise and good fitness have been shown to be effective in alleviating symptoms and aiding rehabilitation after illness for such hypokinetic conditions as diabetes, heart diseases, and back pain (Corbin, 2004). Finally, fitness exercises are methods of health and wellness promotion, it contributes to quality living associated with wellness, the positive component of good health.

- **Overcome the Effects of Inherited Risk:** Some people with a family history of disease may conclude that they can do nothing because their heredity works against them. There is no doubt that heredity significantly affects risk for early death from hypokinetic diseases. New studies of twins, however, suggest that active people are less

likely to die early than inactive people with similar genes. This suggest that long-term adherence to fitness exercise can overcome other risk factors, such as heredity (American College of Sports Medicine, 2000).

- **Assist to Prevent and Reduce Hypokinetic Diseases:** Regular fitness exercise assists to prevent and reduce hypokinetic diseases and conditions. Hypokinetic disease or condition is associated with lack of physical activity or too little regular exercise, and examples include heart disease, low back pain, and adult-onsets diabetes. Studies show that the symptoms of hypokinetic conditions begin in youth (American College of Sports Medicine, 2000).

- **Increase the Ability of the Heart to Pump Blood and Oxygen:** Fitness exercise performed on regular basis will increase the ability of the heart to pump blood as well as oxygen to other parts of the body. Through regular fitness exercise, the heart muscles get stronger, contract more forcefully, and therefore pump more blood with each beat. Individuals who do fitness exercise typically possess lower resting heart rates than those who are sedentary. Some endurance athletes have heart rates in the 30 and 40 bpm range, which is considered normal (Ainstwort, 2003).

- **Treatment and Rehabilitation of Diseases and Illness:** Diseases like diabetes and some kind of cancer and cardiovascular diseases can be treated and rehabilitated with regular fitness exercise. It is also important for maintaining body density and decreasing risk for osteoporosis (Ainswort, 2003).

- **Possess Positive Effects on Some Non-hypokinetic Conditions:** Some non-hypokinetic conditions that can benefit from fitness exercise such as arthritis, asthma and premenstrual syndrome (PMS). The device now modified in view of the findings that carefully prescribed exercise can improve general fitness and, in some cases, reduce the symptoms of the disease. New evidence suggests that, with proper management, activity can be part of daily life, and activity can reduce airway reactivity and medications use. Asthmatics should avoid cold weather exercise (Corbin, Masurier & Franks, 2002). Premenstrual syndrome (PMS), a mixture of physical and emotional symptoms that occur prior to menstrual period, have many causes. However, current evidence suggests that changes in lifestyle, including regular exercise maybe effective in relieving PMS symptoms.

- **Improving Functioning Among Older Adults:** According to US Department of Health and Human Services (2000), approximately 30 percent of adult aged seventy and over have difficulty with one or more activities of daily living. The inability to function effectively as one grows older is associated with lack of fitness and inactive lifestyles. This loss of function is sometimes referred to as “acquired aging”.

Effects of Fitness Exercise Objectives on Quality of Human Life

The following are the effects or benefits of fitness exercises on quality of human life according to Corbin (2004), Franks, Howley and Iyribor (1999), Ainswort (2003) and American College of Sports Medicine (2000):

1. **Improved cardiovascular Health**
   - Stronger heart muscle fitness and health
   - Lower heart rate
   - Better electric stability of heart
   - Decreased sympathetic control of heart
   - Increased O_2 to brain
   - Reduced blood fat, including low density lipoproteins (LDLs)
   - Increased protective high – density lipoproteins (HLDs)
   - Delayed development of atheroscleroisis
   - Increased work capacity
   - Improved peripheral circulation
   - Improved coronary circulation
   - Resistance to "emotional storm"
   - Reduced risk for heart attack
   - Reduced risk for stroke
   - Reduced risk for hypertension
   - Greater chance of surviving a heart attack
   - Increased oxygen – carrying capacity of the blood
   - Greater work efficiency
   - Less chance for muscle injury
   - Reduced risk for low back problems
   - Improved performance in sports
   - Quicker recovery after hard work
   - Improved ability to meet some stressors

2. **Enhanced Mental Health and Function**
   - Relief of depression
   - Improved sleep habits
   - Fewer stress symptoms
   - Ability to enjoy leisure and work
   - Improved brain function

3. **Improved Wellness**
   - Improved quality of life
   - Leisure – time enjoyment
   - Improved work capacity
   - Ability to meet emergencies
   - Improved creative capacity

4. Opportunity for Successful Experience and Social Interactions

- Improved self-concept
- Opportunity to recognize and accept personal limitations
- Improved sense of well-being
- Enjoyment of life and fun
- Improved quality of life

5. Improved Appearance

- Better figure/physique
- Better posture
- Fat control

6. Greater Lean Body Mass and Less Body Fat

- Greater work efficiency
- Less susceptibility to disease
- Improved appearance
- Less incidence of self-concept problems related to obesity.

7. Improved Flexibility

- Greater work efficiency
- Less chance of muscle injury
- Less chance of joint injury
- Decreased chance of developing low back problems
- Improved sports performance

8. Bone Development

- Greater peak bone density
- Less chance of developing osteoporosis

9 Reduced Cancer Risk

- Reduced risk for colon and breast cancer
- Possible reduced risk for rectal, testicular, prostate, and pancreatic cancers.

10. Reduced Effect of Acquired Aging

- Improved ability to function in daily life
- Better short – term memory
- Fewer illnesses
- Greater mobility
- Greater independence
- Greater ability to operate an automobile
- Lower risk for dementia

11. Resistance to Fatigue

- Ability to enjoy leisure
- Improved quality of life
- Improved ability to meet some stressors

12. Other Health Benefits

- Decreased diabetes risk
- Quality of life for diabetes
- Improved metabolic fitness
- Extended life
- Decrease in dysfunctional years
- Aids for some people who have arthritis, PMS, asthma, chronic pain, fibromyalgia, or impotence.
- Improved immune system.

Summary and Conclusion

The need for participating in fitness exercise is not out of place for everybody based on its numerous benefits and advantages. Fitness exercise and physical activity can be used interchangeably, and for an individual to be fit, there has to be rigorous participation in prescribed exercises. Fitness is described as a state of being fit and to clearly elaborate on it, physical fitness should be taken into consideration, for it encompassed fitness as it relates to the effects and benefits of fitness exercise on quality of objective human life, hence everybody should be involved in fitness programmes for optimal health and quality life.

Recommendation

The following recommendations were proffered for the paper:

1) A comprehensive medical check-up should be carried out before commencing rigorous physical fitness exercise programme by adults
2) Fitness exercise in form of physical activity should be engaged in for about thirty minutes three times weekly.
3) Fitness exercise assist greatly in patients with type 2 diabetes.
4) Recreational parks should be visited regularly for recreational activities.
5) It is advisable to visit fitness centers for fitness workout.
6) Exercise machines like the treadmill and bicycle ergometer should be procured for house fitness.
7) Fitness enthusiasts should visit qualified exercise physiological coaches, and trainers for a dose of recommended exercise.

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