

A STUDY ON HEALTH AND SKILL RELATED PHYSICAL FITNESS

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ABSTRACT

Basic health is a condition of overall wellbeing and prosperity, this study clearly explains that how importance is health and skill related physical fitness for a sports person's performance and what all are the steps to be taken towards improvement of those skill and setting a concentration of these fitness components to better level achievements in sports and different tests to measure those fitness components. Actual peak performance is foremost part where the coaches and trainers work on which is accomplished through appropriate nourishment moderate- complex planned training and adequate rest to achieve maximum.

Keywords: *Health Related Physical Fitness, Skill Related Physical Fitness*

INTRODUCTION:

Fitness is characterized as the quality or condition fit and sound Around 1950, Before the modernisation, wellness was characterized as the ability to do the day's exercises without excessive fatigue. maybe reliable with the Modern Unrest and the composition of The Second Great War, the expression "wellness" expanded in western vernacular by an element of ten the cutting edge meaning of wellness portrays either an individual or machine's capacity to carry out a particular role or an all-encompassing meaning of human versatility to adapt to different circumstances. This has prompted an interrelation of human wellness and appeal that has

assembled worldwide wellness and wellness gear enterprises. As to work, wellness is credited to people who have critical high-impact or anaerobic capacity, i.e., perseverance or strength. In any case, with robotization and changes in ways of life actual wellness is presently viewed as a proportion of the body's capacity to work productively and successfully in work and recreation exercises, to be sound, to oppose hypokinetic sicknesses, and to meet present circumstances.

A well-rounded fitness program improves a person in each and every aspects of fitness compared to practising only concentrated on one fitness component, such as only cardio-respiratory endurance or only weight training or flexibility. A comprehensive fitness program is to an individual typically focuses on one or more specific skills, and on age or health-related needs such as bone health, muscle, physical, mental, social, and emotional health as an important part of overall fitness and wellness of body's which represent physical, emotional, and mental fitness. Physical fitness can also prevent or treat many chronic health conditions brought on by unhealthy lifestyle or aging Working out can also help some people sleep better and possibly alleviate some mood disorders in certain individuals.

Meaning: Physical fitness is your ability to carry out tasks without undue fatigue. Learn about the components of physical fitness: cardiorespiratory endurance, muscle strength, muscle endurance, flexibility, and body composition and why they are important.

Definitions: According to "world health organisation "Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure. Popular ways to be active are through walking, cycling, sports and recreation, and can be done at any level of skill and for enjoyment. How to develop physical

Physical fitness is generally achieved through maintaining healthy lifestyle, proper nutrition, moderate-vigorous physical exercise, and sufficient rest. Before the industrial revolution, fitness

was defined as the capacity of a individual to carry out the whole day activities without undue fatigue.

Actual fitness has forever been a significant piece of life. It is guessed that when individuals left an agrarian way of life and framed fixed networks based around horticulture that actual wellness levels as been gradually declined. It is not necessarily the case that degrees of actual work diminished yet that the kind of work embraced was not as powerful to a general degree of wellness. Thusly, controlled wellness systems were either designed or turned out to be more normal. This was particularly the situation in traditional developments like Antiquated Greece and Rome. In Greece, actual wellness was a fundamental part of a sound life, and it was the standard for men to visit an exercise centre. Actual wellness systems were likewise viewed as of central significance in a country's capacity to prepare our troopers for a successful military power. Somewhat consequently, coordinated wellness systems have been in presence all through known history and proof of them can be tracked down in numerous nations. Gyms which would appear to be recognizable today started to turn out to be progressively normal in the nineteenth 100 years. The modern transformation had prompted a more stationary way of life for some individuals and there was an expanded mindfulness that this could be destructive to wellbeing. This was a super spurring factor for the framing of an actual culture development, particularly in Europe and the USA. This development upheld expanded degrees of actual readiness for everyone and looked to do as such through different types of indoor and outside movement and Instruction.

Why do we need physical fitness:

- To do daily activity
- Be energetic and enthusiastic

- protect ourselves from diseases (diabetes, cancer, obesity)
- To keep us confident
- To increase our healthy life span
- To overcome undue fatigue
- Maintain cardiovascular endurance
- Builds strong and flexible muscle and healthy bones
- To maintain healthy life According to me the only place where a man can live is his own body so that we all need to develop and maintain our physical fitness to lead a healthy and happy life and the only way to develop your physical fitness is proper nutrition, proper exercise, and proper rest.

Components of physical fitness

The components of physical fitness are mainly classified into two major groups.

1.HEALTH RELATED PHYSICAL FITNESS

- Cardiovascular endurance
- muscular strength
- muscular endurance
- flexibility
- body composition

2. SKILL RELATED PHYSICAL FITNESS COMPONENT

- Agility
- Balance
- Coordination
- Power
- Reaction
- Strength

HEALTH RELATED PHYSICAL FITNESS COMPONENTS.

1:CardiovascularEndurance

Cardiorespiratory endurance is the level at which your heart works during exercise for an extended period of time without undue fatigue. cardiorespiratory system functions and is an indicator of your physical fitness level and defines how healthy you are. Aerobic exercise of low to high intensity that depends primarily on the aerobic capacity that your body generates in a process. "Aerobic" means "relating to, involvement or requirement of oxygen" during physical activity, and refers to the use of oxygen to adequately while doing the exercise or any physical activity like

- Running.
- Brisk Walking.
- Swimming.
- Dancing.
- Skipping

- High-Intensity Sports, Such as Basketball And Soccer

Test to measure cardiovascular endurance:

- VO2 max (maximum oxygen intake) VO2 determines the maximum amount of oxygen that the body can use during high-intensity activities. Both heart rate and oxygen consumption are measured in the test of VO2.
- MET (metabolic equivalent: (METs) are used to measure your intensity of exercise and uptake of oxygen. They measure energy expenditure at rest.
- Cooper run test The Cooper 12-minute run is a popular maximal running test of aerobic fitness, in which participants try and cover as much distance as they can in 12 minutes. purpose: to test aerobic fitness (the ability of the body to use oxygen to power it while running)

2. MUSCULAR STRENGTH:

Muscular strength is the amount of force you can put out or the amount of weight you can lift. Muscular endurance is how many times you can move that weight without getting exhausted (very tired).

Exercise to develop Muscular Strength:

- lifting weights.
- working with resistance bands.
- heavy gardening, such as digging and shovelling.
- climbing stairs.
- hill walking.
- cycling.
- dance.

- push-ups, sit-ups, and squats.

Test to Measure Muscular Strength:

- 1RM Tests. 1-RM Bench Press. 1-RM Squat Test. Deadlift Repetition Max. Lat Pull Down Test.
- Muscle Fibre RM Test.
- Isokinetic Strength Tests.
- Handgrip Strength Test.
- Finger Pinch Grip Test.
- Abdominal Strength Test (7 Stage)
- Abdominal Strength Test (4 Level)
- Dynamic Sit-Up Test.

3. MUSCULAR ENDURANCE

Endurance is the ability of an muscle itself and remain active for a long period of time, as well as its ability to resist, withstand, recover quickly It is usually used in aerobic exercise done with oxygen .

Exercise to develop Muscular Endurance:

- Plank.
- Body weight squats.
- Walking lunges.
- Pushups.
- Sit-ups.

Test to Measure Endurance

Submaximal exercise tests are used to measure your cardiorespiratory endurance. If you're physically fit or an athlete, you can measure your cardiorespiratory fitness using: the A strand treadmill test. the 2.4 km run test.

- Dead Hang. Physical Ability: Support Grip Strength.
- Maximum Burpees in 5 Minutes. Physical Ability: Aerobic Capacity, Functional Strength.
- 300 Yard Shuttle. Physical Ability: Anaerobic Capacity.
- Broad Jump. Physical Ability: Muscular Power.
- Bodyweight Conditioning.

4.FLEXIBILITY

Flexibility is the range of motion in a joint or group of joints or the ability to move joints effectively through a complete range of motion.

Benefits:

- Reduces chance of injuries. Once you develop strength and flexibility in your body, you'll be able to withstand more physical stress.
- Minimise pain and strains in the muscles.
- Improved posture and balance.
- A positive state of mind.
- Greater strength with maximum range of motion.
- Improves Balance and coordination.

Exercises to Improve Flexibility:

Many methods of flexibility training is utilized to increase the range of motion of various muscles such as passive stretching, ballistic (dynamic) stretching, static stretching, PNF (proprioceptive neuromuscular facilitation) stretching, few exercises are

- Standing Quad Stretch.
- Standing Side Stretch.
- Seated Hamstring Stretch.
- Standing Calf Stretch.
- Shoulder Stretch.
- The Forward Hang.
- Back stretch.

Tests to Measure Flexibility:

- The sit and reach test is the most common flexibility test. It measures the flexibility of the lower back and hamstrings. It requires a box about 30cm (12 inches) high and a meter rule: Sit on the floor with your back and head against a wall. They are different kind of flexibility test to measure different kind body part.

5.BODY COMPOSITION:

In physical fitness, body composition is used to describe the percentages of fat, bone, water, and muscle in human bodies. Because muscular tissue takes up less space in the body than fat tissue, body composition, as well as weight, determines leanness.

Modern way to measure body composition:

- Callipers.

- Circumference Method
- Hydrostatic Weighing.
- Bioelectrical Impedance Analysis (BIA)

SKILL RELATED PHYSICAL FITNESS COMPONENTS.

1.AGILITY:

It is a ability of a person's body or part of body to move or change in differentdirection.

Exercises Or Training to Improve Agility:

- Lateral Plyometric Jumps. Lateral plyometric jumps help build explosive power, balance, and coordination by using our natural body weight.
- Forward Running and High-Knee Drills.
- Lateral Running and Side-to-Side Drills.
- Jump Box Drills.
- L and V Drills.
- Plyometric Agility and speed Drill.
- Shuttle Runs.

Tests to Measure Agility:

- Agility measures the ability to make quick changes of direction while moving at speed, such as you might do in soccer, tennis, or basketball, to name but a few. Tests include the
- Lateral Change of Direction test,
- Quick Feet Test

- Shuttle Run Test
- T- TEST.

2.BALANCE:

It is a ability of a person to distribute his body weight and remain upright and steady in any passive or dynamic movement Or Balance is defined as graceful movement or a state of equality this in helpful during all the basic movements of the human being

Exercise to Improve Balance:

- Standing with your weight on one leg and raising the other leg while closing eyes
- Standing up and sitting down from a chair without using hands and do the same while closing the eyes.
- Walking on a beam or a narrow board.
- practicing different postures in yoga.

Tests to measure Balance:

- Flamingo Balance - stand with one leg while balancing on a beam.
- Stork Stand Test - stand on the toes of one leg for as long as possible with the free leg resting on the inside of the opposite knee.
- Standing Balance Test - stand on one leg for as long as possible.

3.CO-ORDINATION:

the ability to use different parts of the body together smoothly and efficiently.

Exercises to Improve Co-Ordination.

- Juggling

- Jump Rope Drills.
- Target Practice.
- Ball Toss in Different Positions.
- Dribbling.
- Throwing and catching

Test To Measure Co-Ordination: •

- Romberg test
- Dribbling test

4.POWER:

Power comes from the Latin word *potere*, which means "to be able." It is a ability of a person to overcome resistant in a short duration, power is a combination of strength and speed

Exercises To Improve Power Ability:

- Add balance exercises.
- Leg Press.
- Medicine Ball Squat Throws.
- Squat Jump.
- Barbell Curl.

Tests to measure power:

Muscle strength can be measured by estimating a person's one repetition maximum (1RM)

5.SPEED:

The rate at which someone or something moves or shift or operate, Speed ability helps players to move into a particular position or get away from defence quickly. Speed ability is considered as how fast you can move your body over a fixed distance.

Exercise or training methods to develop speed:

- Continuous training develops cardiovascular endurance.
- Fartlek (speed play) training
- Interval training develops strength, speed, muscular endurance.
- Weight explosive strength training develops strength and speed.
- Plyometric training develops power and speed.
- Flexibility training develops flexibility.
- 50 Meters dash
- 30 Metres fly

6. RE- ACTION ABILITY

Reaction ability is the ability to react quickly and effectively to a signal or stimuli. Reaction abilities play an important role in several games and sports but it is very difficult to find out, in which sports, which type of ability is required. Or it is ability to respond to a stimulus in a minimum time.

Exercise to develop Re- action ability:

- Reactive Gear Drill. This drill develops first-step quickness and improves the ability to accelerate and decelerate.
- Reactive Sprint and Backpedal Drill.

- Wave Drill.
- Shuffle Reaction Ball Drill.
- Ball Drops Drill. Level 3.

Tests to measure Reaction ability:

- The button pushes reaction time test measures how quickly a participant may click (push) a button.
- the fingertip visuomotor test is a procedure for conducting a reaction time test using a ruler.

CONCLUSION

In this modern world the whole environment of living being has been changed by human being by his advancement in technology and modernization here major human being's amount of physical activity as reduced gradually day by day, which lead to enormous change in human health condition leads to accompanying many diseases, hence I conclude that improving skill and health related physical fitness component by engaging in physical activity and maintaining physical fitness is the only way to lead a healthy, happy and peaceful life .

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