



Original Article

Effect of Functional Training of School children on their Health-Related Physical Fitness in Sangli District

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Abstract

Functional training for overweight students to understand its effects on body weight and other body variables (e.g., body fat percentage, lean weight, body mass index, fat, muscle, fat) in blood lipoproteins such as total cholesterol, protein content, blood triglycerides, etc. and some health factors, such as arm and shoulder muscle strength, abdominal muscle strength, flexibility, and muscle soreness. Functional training consists of four pillars: movement, rotation, transition, and push-and-pull. This study forms the basis of functional training and covers the importance of sports and physical fitness among school students. Health-related physical fitness (HRPF) is a key indicator of children's overall well-being and future health outcomes. This study investigates HRPF levels among school-aged children, analyzes the factors influencing physical fitness, and suggests strategies for improvement. Using a cross-sectional methodology, we evaluated components such as cardiovascular endurance, muscular strength, flexibility, and body composition among schoolchildren aged 6–14 years in Sangli District. The study showed significant disparities based on sex, age, and physical activity levels. These findings underscore the need for policy-level interventions and curriculum integration to promote physical activity and healthy habits in schools.

Keywords: Variables, Lipoprotein, Flexibility, Endurance, Locomotion, Movement, etc.

Introduction

The growing prevalence of sedentary behavior among children is a pressing public health concern. The World Health Organization recommends at least 60 minutes of moderate-to-vigorous daily physical activity for children aged 6–14 years. However, increased academic pressure and screen time have contributed to declining physical fitness levels. Health-related physical fitness, comprising cardiovascular endurance, muscular strength, flexibility, and body composition, plays a vital role in preventing lifestyle-related diseases, such as obesity and hypertension.

Functional training means training in a way that helps you stay healthy and move well in your daily life. This is a simple necessity for all the activities we do every day or every week, from dancing to house cleaning or shopping. With practical training, the application of movement patterns becomes easier and more successful; most people do not even realize it. This strengthens the bodymind connection and controls the body and body mechanisms so that everything happens naturally when necessary. Functional training not only improves our daily activities, but can also help reduce injuries while performing our activities. It also builds muscle mass, which many, if not all, of us need, while also improving our balance and mobility, which can be especially beneficial today.

Objectives of the study

1. Functional training concept
2. To study the functional training used in exercise for schoolchildren in Sangli District.
3. To study the role of functional training in schoolchildren in Sangli District.
4. To study the types of functional training for schoolchildren for physical fitness in the Sangli District.

Methodology of the Study

This study was descriptive; the data for this study were obtained from secondary data sources.

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The secondary data have been collected from various references that already existed in published form; part of the paper is based on a literature review that collects all the available papers relating to the theme and selects relevant papers/books for review purposes. This paper is selected based on its relevance and contribution to the body of knowledge. The author has attempted to perform a primary reading of the selected papers, which will constitute the core of this review study.

Concept of Functional Training

Functional training is a type of exercise that resembles movements you would do in daily life. It helps in sports, injury prevention and other daily activities. Exercising requires many muscles in the body to work together. These exercises are generally similar to movements you would do in daily life. Lifting weights, swinging a baseball, or carrying food are real-life activities that functional training can help improve.

Functional Training is used in Exercise for School children in Sangli District

Functional movements involve large groups of muscles that work together throughout the body. These exercises often look similar to movements performed in daily life. Picking up a heavy object, swinging a baseball bat, or carrying groceries are real-world situations in which functional training can help improve. Although many exercises fit the definition of “functional training,” others do not. Less functional strength training can have different characteristics and goals.

i. Workouts that target a specific body part.

Nonfunctional exercises work on only one muscle or muscle group in one part of the body. Think of “leg day” or “arm day” at the gym. Traditional strength training exercises, such as bicep curls, calf raises, and seated leg presses, are all less functional.

ii. Focusing on the appearance of certain muscles.

Many bodybuilders and nonfunctional exercises aim to increase the size of a specific muscle. Functional training prioritizes muscle movements over appearance.

Role of Functional Training to School Children

Functional exercises help the body to work as a whole rather than training particular parts. Strengthening the complete body in this manner has many health benefits.

i. Daily life

Functional training trains the same muscle movements that are used in daily life. For example, senior citizens might practice bodyweight squats to develop their ability to stand up from a chair. These daily activities can become easier during training.

ii. Balance and coordination.

Functional exercises can be useful for maintaining and preserving a sense of balance. Functional exercises allow various parts of the body to move smoothly together. This is useful for controlling falls and related injuries in older adults. People with injuries can also regain adjustments with functional training.

iii. Injury protection.

Perfecting movements in daily life can help control injuries. Functional training controls spinal movements that cause back pain. If the lift is a weighty object off the floor correctly while exercising, it can stop accidents involving picking up heavy objects at work.

iv. Athletic performance.

Athletes develop with functional exercises depend on the movements of their sport. A basketball player might practice leaping from side to side to develop agility and speed on the court. Rowers may follow squats to train the leg muscles used in the boat.

v. Time-efficient.

Functional exercises can be more time efficient for fitness and weight loss than concentrating on one muscle at a time. Adding a few shorter, more concentrated, full-body exercise sessions to regular boosts the calorie burn.

vi. Improved physical fitness

Junior functional training focuses on age-appropriate exercises that include functional movement. These exercises impersonate everyday activities such as running, jumping, crawling, and lifting, building them for children. Regular involvement in these classes helps to improve cardiovascular survival, strength, flexibility, and coordination.

vii. Boosted confidence and self-esteem

As children grow through functional training and develop their own physical development, their confidence and self-esteem are boosted. Learning new movements and overcoming problems will encourage a sense of pride and a positive self-image.

viii. Fun and engaging workouts

One of the major draws of junior functional training is that it is fun and pleasurable, which in turn makes students more likely to stay connected and enthusiastic about staying active. This sets the foundation for lifelong love for physical movements and a healthier lifestyle.

ix. Cognitive benefits

Functional training workouts not only help the body but also the mind. Studies have shown that daily physical activity can improve cognitive function, memory, and the focus span in children. By connecting these classes, students may experience improved focus and concentration.

x. Social development

Junior functional training is often organized in a group setting, presenting social interactions and teamwork to the participants. Students learn to communicate, cooperate, and support each other, building the needed social skills that will benefit them in different aspects of life.

Types of Functional Training Adopted in School Children in Sangli District for Physical fitness

i. Squat

We were all born knowing how to squat, just looking at babies, and their perfect squat form. Regularly, we all end up doing some sort of squat change, whether train or not. This is why squats are often measured as the most functional movement. At its most basic level, a squat involves lowering the body from a standing to seated-like (or lower) position. When mastering the squat, prepare the body to be capable of comfortably picking things up off the floor and standing up from being sat on the sofa after seeing the favorite show.

ii. Hip Hinge

A hip hinge involves bending forward from the hips (not knees) while using the posterior chain (muscles in the back part of the body). The most common hip-hinge exercise that every person knows is a dead lift, which is ready for things such as picking up a child out of their cot or lifting a big box up off the ground.

iii. Lunge

A lunge is a single-leg exercise that helps to develop strength and balance in each leg equally. By practicing lunges on both sides, strengthening the legs and core for any type of moment where weight is one-sided or where there may be a risk of losing balance. Practical implementation can be as simple as going up stairs or hopping over a puddle.

iv. Push

A push is any exercise that involves pulling or pressing a weight up or down, such as a push-up, shoulder press, or the very common bench press. The upper body pushes the train chest, core, arms, and shoulders for movements such as placing heavy bags on a shelving compartment on public transport or even lifting the body up off the ground if it falls.

v. Pull

A pull is the against motion of a push: an exercise that has pulled either an object towards the body toward a goal, such as a pull-up or row. Upper-body pulls (like pushes, there are lower-body ones too) train back and arms for various activities such as rock climbing, playing a tug of war with a dog, or even just pulling that chair out from under the table.

vi. Carry

A carry is exactly what it says on the tin, carrying a weight on one or both sides of the body. It could be something from a dumbbell or kettlebell to shopping bags as a head to the house from a weekly shop. It trains the center and arms to move with weight efficiently, without hurting the neck or back.

vii. Rotation

These are things like woodchoppers or bicycle crunches, which are useful train cores to handle movement in all directions, so rotational movement will be a great addition to safeguard the spine. This means that when they may need to immediately move unexpectedly, they are less likely to get hurt.

Conclusion

Health-related physical fitness is a crucial determinant of the long-term health of children. Schools, parents, and policymakers must act collectively to reverse the decline in children's fitness levels. Integrating fitness assessments and activities into everyday school life can lay the foundation for a healthy generation. Functional fitness training is a type of strength training that prepares the body for regular activity. These exercises are the most important part of physical fitness, the kind that preps for real-life daily living, such as bending, twisting, lifting, loading, pushing, pulling, squatting, and hauling. Most functional fitness includes multi-joint movement patterns that include the knees, hips, spine, elbows, wrists, and shoulders, all of which build strength and develop a range of motion. It all comes down to being practical, but it does not mistake it for tedious.

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Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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