Importance of Aquatic Exercises on the Adolescent Pravara public school Boys

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Abstract

These Aquatic exercise is a low-impact activity that takes the pressure off your bones, joints and muscles. Water also offers natural resistance, which can help strengthen your muscles. Aquatic exercise can also have several health benefits, such as improved heart health, reduced stress, and improved muscular endurance and strength. Exercising in the water can be a great way to include physical activity into your life. You can even do aquatic exercise if you don't know how to swim. You might start with water walking. In water that's about waist-high, walk across the pool swinging your arms as you do when walking on land. Avoid walking on your tiptoes, and keep your back straight. Tighten your abdominal muscles to avoid leaning too far forward or to the side. To increase resistance as your hands and arms move through the water, wear hand webs or other resistance devices. Water shoes can help you maintain traction on the bottom of the pool. Present study show that the aqua exercise training program module there was gradual and useful improvement in performance ability of 100 meter sprint of school going boys.

KEYWORDS: *AAHPERD,ADOLESCENT,AQUA EXERCISES, SIT UPS.*

I. Introduction

In the modern scientific age in every field of human endeavor systematic objectives and scientific procedures are followed in accordance with the principles based on experiences, understanding and application of knowledge of science. The field of games and sports is also no exception to this. Advanced countries like U.S.A., Germany, Russia, Australia, Britain and other have made rapid progression in games and sports like Athletics, Soccer, Hockey, Basketball etc. This progress and the international achievements have been possible due to the research experimentation and application of scientific knowledge. Sportsmen are trained scientifically with the latest training methods and sophisticated instruments for improvement in their performances in different sphere of sports.Sports science have enabled sportsman to develop physical capacities beyond anything imagined. Sports have become highly competitive and records are being broken at a greater speed. A sport is accepted as a cultural phenomenon. There is a constant endeavor to achieve higher standards of performance. As a result today, sport demands optimum physical fitness and highest degree of performance, many people take part in sports activities for the fun of it or for health and fitness. Sports have become profession to some with high skills and ample financial benefits linked with high degree of popularity. "Aqua exercises are the exercises that are performed in deep or shallow water." Water exercise is rapidly growing in popularity. Exercise enthusiasts, athletes, elderly and the physically challenged are discovering aquatic exercise programme that suit their fitness desires. An advantage of aquatic exercise is that it can involve the upper and lower extremities through optimal ranges of motion while minimizing joint stress. The aquatic medium is eight hundred times as dense as air. It is almost universally accepted that regular physical exercises enable one to stay physically fit and to sustain the average individual in his daily activity. But anybody who wishes to take part successfully in sports and games aspires to be a champion or to reach the top level, he must go beyond the simple rule of regular exercises. He must engage in intense and frequent physical drills geared towards developing those physical qualities most necessary for success in his particular sports endeavor. The performance level of sportsman in various games and sports is showing considerable improvement day by day. The main factor responsible for this improvement is the development of new training methods based on scientific principles derived from exercise physiology, which are incorporated in basic physical education and advanced sports training at the same time development of improved technique and tactics, new equipment and improved facilities, scientific understanding rendered by the sport scientist also responsible for improved performance. The physical capacities of strength, power and speed are important qualities for many sports. Maximum strength and/or power can clearly discriminate athletes of different performance levels in certain sports such as Basketball, Volleyball Swimming and sprint running. As such any sport involving jumping, throwing and striking depends much on the power of musculature. Consequently, the quest for the optimal power training method has led to the development of various training modes. Due to changed perception of the forces acting on the body, movement in water is something special. On the one hand, each movement require greater exertion because of the need to overcome water resistance , the movements are more difficult than on land (as you will quickly see if you try to jog through thigh deep water). On the other hand the buoyancy (lift) in water makes it possible for everyone, including heavy people to float or glide peacefully almost without effort. The benefits of exercising in water have been well known since Greek and Roman times. Examples are:

1) Exercising in water is easier: it supports body weight (up to 85% in water up to chest level). 2) Water acts as a shock absorb, reducing stress on joints. 3) Water allows a full range of movement without excessive strain. Less coordinated individuals can carry out movements in water without the embarrassment they may feel with exposed land-based classes. 4) The massaging effect of water increases circulation and promotes relaxation.
5) Aqua fitness is a novel and enjoyable way to become and stay fit.
6) For these reasons aquatic exercises is one of the most useful and recommendable form of training.

Objective of the Study

To determine the effect of aqua exercise on Bent Knee Sit ups test performance of a school going girls.

Assumptions

1) Tones up blood circulation
2) Improves cardiac health
3) Keeps body joint lubricated
4) Maintains lean body mass and arrests osteoporosis
5) Improves muscle mass and muscle tone
6)Lowers the villains of circulating blood like sugar, cholesterol.
7) Improves the capacity of coronary arteries of the heart
8) It also suppress the blood clotting process and work as a protective guard against strokes
9) Moderate but regular exercise decrease the chances of having heart diseases
10) It improves the balance of the body
and boosts immunity.

II. Materials and Methods

The methodology of this study consisted of one experiment
using one experimental and one control group for testing the effects of selected aqua exercises on the AAHPERD physical fitness test. The purpose of the present study to gather scientific evidence in connection with the utility of aqua exercises in the promotion of Physical Fitness.

Running and Walking:

Position your body with your head, shoulders, hips, and feet vertically aligned. Using a modified running/marching motion, coordinate your leg and arm movements as in running.

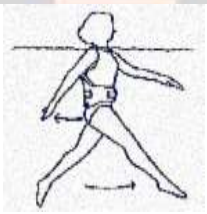

Fig 1. Running and Walking

Cross Country Ski:

Body is vertically aligned and legs and arms are straight. Scissor legs forward and backward from the hip, leading with your toes. Coordinate the arms and legs as in Cross Country Skiing.

Fig 2. Cross Country Ski

Sit Kicks:

Sit as if in a straight back chair with your thighs stabilized. Alternating legs, kick out from the knee, then pull your heel back as if trying to kick your buttocks. Try to make the water boil in front of you.

Fig 3. Sit Kicks

Straight Leg Toe Touch:

Body is in a vertical position. Keeping legs straight, bring each leg near the surface and return it to the starting position. Alternating left and right, reach for toes with your opposite arm and bring the other arm behind you. This is a strong movement and is not recommended for people with back pain.

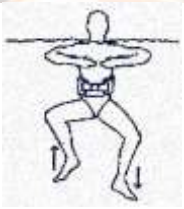

Fig 4. Straight Leg Toe Touch

This move is similar to the football drill of running through two parallel lines of tires. The body is open and vertical. Have your legs turned out and feet flexed as you alternate pushing down with each leg.

Open and Close:

Begin with vertical posture, arms and legs straight and toes pointed down toward the bottom of the pool. Open and close arms and legs by extending straight limbs out to the sides of your body and returning to the starting position.

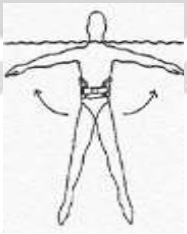

Fig 5. Open and Close

Rock Climb:

A full-body exercise similar to running except the movement is like climbing a ladder diagonally. Reach forward with one arm into the water and then pull it through past your hip. Bring your opposite knee toward your chest and, at the same time, push the other leg straight back until it is fully extended.

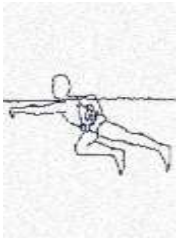

Fig 6. Rock Climb

III. Analysis and Interpretation of Results

After the data collection was over, the data were analyzed by using Independent 't' Test the results have been narrated, interpreted and discussed logically with scientific reasoning to arrive to conclusion.

Table 1. Group wise Speed Performance

Group	Test	Mean	Std. Error
Experimental	1	19.497	.290
	2	18.644	.265
	3	17.964	.250
	4	17.268	.293
	5	16.885	.277
	6	16.375	.294
	7	16.071	.314
Control	1	19.461	.290
	2	18.986	.265
	3	18.769	.250
	4	18.543	.293
	5	18.357	.277
	6	18.053	.294
	7	18.371	.314

Fig 7: Graphical representation of test wise Speed Performance

IV. Conclusion

The observation of the experimental data, within limitations, help to conclude that through the aqua exercise training program module there was gradual and useful improvement in performance ability of 100 meter sprint of school going boys.

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