

Effect Of Bubbling Training On The Breath Holding Capacity Of Swimmers

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Abstract

Swimming is an individual or team racing sport that requires the use of one's entire body to move through water. The sport takes place in pools or open water. Bubbling training helps swimmers to develop their performance.

Introduction

Swimming emerged as a competitive recreational activity in the 1830s in England. In 1828, the first indoor swimming pool, St George's Baths was opened to the public. By 1837, the National Swimming Society was holding regular swimming competitions in six artificial swimming pools, built around London.

Swimming is for everyone no matter what age or level of fitness. Any age can learn to swim and there is no age limit on when you can no longer swim. Swimming is a life long skill that could save your or another's life. It is never too late to learn to swim. Swimming is an excellent way to keep fit and most swimming pools cater for all. Woman only, parent and toddler, senior classes amongst others.

A swimming costume is all you need to get started. You can also wear swimming tops or close fitting t-shirts until you feel more comfortable. We would also suggest goggles to protect eyes.

Swimming is a great recreational activity for people of all ages. Recreational swimming can provide you with a low-impact workout and it's also a good way to relax and feel good. Common swimming styles in recreational swimming are breaststroke, backstroke, side stroke and freestyle.

Competitive swimming

Some people who enjoy swimming want to take it to a competitive level. This can provide the health benefits of a vigorous workout as well as the fun and thrill of competition. The main strokes used in competitive swimming are breaststroke, freestyle, backstroke and butterfly. The distances swum in competition swimming can vary from 50 metres in a pool to much further distances in open water.

Health benefits of swimming

Swimming is a great workout because you need to move your whole body against the resistance of the water.

Swimming is a good all-round activity because it:

- keeps your heart rate up but takes some of the impact stress off your body
- builds endurance, muscle strength and cardiovascular fitness
- helps maintain a healthy weight, healthy heart and lungs
- tones muscles and builds strength
- provides an all-over body workout, as nearly all of your muscles are used during swimming.

Other benefits of swimming

Swimming has many other benefits including:

- being a relaxing and peaceful form of exercise
- alleviating stress
- improving coordination, balance and posture
- improving flexibility
- providing good low-impact therapy for some injuries and conditions
- providing a pleasant way to cool down on a hot day
- being available in many places – you can swim in swimming pools, beaches, lakes, dams and rivers. Make sure that the environment you choose to swim in is safe.

Techniques in Swimming

1. The technique of bubbling helps swimmers to breathe properly. When you swim, you inhale through your mouth when your face is above water and exhale through your mouth or nose when your face is underwater. By exhaling a steady stream of bubbles as you swim, you can avoid this type of tension and focus on performance.

2. Floating

Before you start kicking and stroking, first learn to float in the water. Floating helps you to get used to the habit of moving through water properly. Floating helps to keep your body on the surface of the water. Our body experiences a vertical buoyant force when immersed in water and floating helps to keep your body in a horizontal position. Floating is important because if you accidentally fall in the water you will be able to float on the surface till you are rescued.

3. Breathing

This is a frequently overlooked basic skill, but it is an important one. If are not comfortable breathing while swimming, you won't be able to enjoy it completely and learn new things. The basic idea is that you need to breathe out with both your nose and mouth when your head is underwater. Then when you lift your head to the side take a full breath before putting your face back down.

4. Kicking

Kicking is another important skill to learn if you want to master swimming. Kicking helps your body to move in the forward direction. Many swimming coaches use kickboards to support swimmer's body.

5. Strokes

Now that you know how to float and kick, it is time to learn some strokes. Strokes are the arm movements that help to pull the body through the water. The front crawl, sidestroke, backstroke, and butterfly are some of the common swimming strokes.

Breath Holding Capacity

Breath holding time is the time taken by the subject to hold his breath as long as he can. During voluntary breath holding, tissues continue to utilize oxygen and liberate carbon dioxide. Therefore during breath holding arterial pO₂ falls and pCO₂ rises. Since both these factors are powerful respiratory stimulants, a point is reached where the respiratory drive becomes so strong that the person cannot hold the breath any longer (1). The point at which breathing can no longer be voluntarily inhibited is called the breaking point. The breaking point is generally reached when alveolar pO₂ is 56 mm of Hg and alveolar pCO₂ is 49 mm of Hg. Either an increase in pCO₂ or a decrease in pO₂ stimulates central and peripheral chemoreceptors which in turn

stimulate respiration through respiratory centers, thus influencing breath holding time.

When the need for oxygen increases, our lungs let us breathe in more air and therefore more oxygen. The same phenomenon takes place when we breathe out to release a greater amount of carbon dioxide into the air. Breathing exercises help you understand how to breathe better while swimming.

Purpose of study

The main purpose of the study was to find out the effect of bubbling training on breath holding capacity of swimmer.

Objectives

1. To find out the effect of bubble training on breath holding capacity of swimmers.
2. To know the performance level of swimmers.

Review of Literature

Middle books, studied the effects of general swimming training and systematic swimming training performance and found that a brief formal warm up had no effect on the performance of experienced college varsity swimmers swimming 100 and 500 yards Hough, studied the effect of swimming training up an physical performance in selected activities and found no improvement from informal warm up immediately preceding testing in swimming, typing and strength. Formal warm up did improve group performance typists after parties patting in a formal warm up prior to the testing.

Methodology

For every study the researcher needs the data and proper direction to complete the study. The study consisted the 20 (male) subjects of various age groups 22 to 28 which were selected randomly of the Physical college.

Researcher divide 20 subjects into two homogeneous groups. 10 in group A as Experimental and 10 in group B as Control group. The data pertaining to this study was collected by administrating the test items on the selected subjects in premises of the college.

Pre-Training Test

It was conducted on the both groups ie. Experimental and Control Group. Training program was done in 6 weeks, it was done only on Experimental group.

Post Training Test

After six weeks of Training program, the post test was taken on both groups.

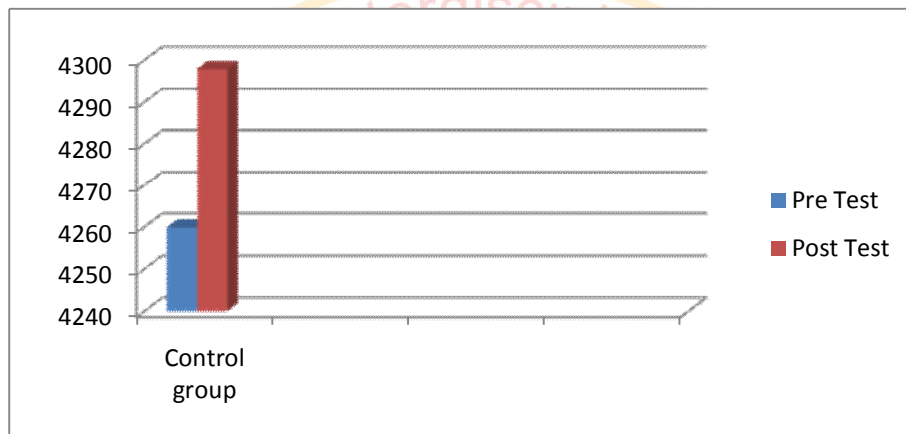
Breath holding capacity between Pre and Post-Test of Control group of age group 22-28 years

Analysis

The purpose of the study was to find out the 6 weeks Bubbling Training on the breath holding capacity of swimmers.

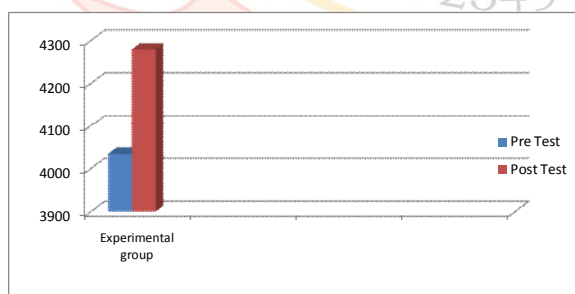
Control Group	Mean	S.D.	Comb.S.E.	M.D.	D.F.	C.T.	T.T
Pre Test	4260	259.76	110.50	38	18	0.34	2.101
Post Test	4298	233.74					

Graphical Representation



Breath holding capacity between Pre and Post- Test of Experimental group of age group of 22-28 years.

Control Group	Mean	S.D.	Comb. S.E.	M.D.	D.F.	C.T.	T.T
Pre Test	4035	162.86	78.93	245	18	3.10	2.101
Post Test	4280	189.16					



It has been observed that there was significant improvement was found in breath holding capacity of difference of Experimental group after the swimmers. administration of training program and good

Conclusion

After 6 weeks training the results were statistically analyzed and conclusion was drawn as;

The study revealed that Bubbling Training have a considerable effect on breath holding capacity. However there was a significant effect on breath holding capacity of swimmers after 6 weeks bubbling training program.

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