

OPTIMIZING THE FITNESS OF SWIMMERS BY USING PILATES APPARATUS

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Abstract

Background: The paper wants to continue the research undertaken in this field by which we try to propose a set of specific exercises on Pilates Apparatus as an alternative method of physical training of the swimmers.

Objectives. The objective of the paper is to select and propose some physical training exercises on the Pilates Apparatus in the training of swimmers.

The aim of the paper is to highlight the impact of programs on the Pilates Apparatus on the fitness and performance of swimmers. For this, we propose a set of exercises on Pilates, which can be applied by swimmers in physical training in the gym.

Methods. It was used a set of physical exercises on Pilates Apparatus, which contribute to: technique correction, muscle toning, breath control, optimization of posture, body and mental balance, as well as joint mobility.

Keywords: fitness, Pilates Apparatus, Reformer, swimming.

Introduction

Until now, our research has been geared towards the Pilates exercises on a mat, being accessible to everyone, both physically and financially, this time we've been working to improve physical fitness with the specific exercises on specially designed equipment.

As it is known, the method of Pilates Apparatus has an impressive age, although in our country it appeared somewhat shy in several studios, relatively recently.

We note that over time there have been several studies of the Pilates Method, described as a method used in physical activity of leisure time, in performance sports, in neuromotor recovery and re-education, even during pregnancy. However, more extensive research into the application of Pilates with specific equipment in the physical training of performance athletes is not very well known, so this research can theoretically, practically and methodically substantiate a new type of fitness training.

Health related physical fitness consists of the following elements: cardio strength, muscle strength, mobility and body composition. These structural components are basic elements for many sports and, implicitly, for swimming, customizing according to the degree or the level of development each component acquires (Kartz, J., 1988).

We talk about Reformer, a machine invented by Joseph Pilates in the 1950s to help dancers get stronger. He called it the Universal Reformer and it was part of the apparatus system he used in his studio (other pieces included the Cadillac, the Wunda Chair, the Ladder, Barrel). Its unique system uses a moving platform with springs inside a frame. It looks like a bed which the athlete moves pushing or pulling springs, from different positions: lying down, kneeling, sitting, even standing on it (***).

Reformer Pilates is a form of exercise that shares the principles of centring, concentration, control, precision, breath, and flow with traditional mat classes, but is done on a reformer machine which involves a system of springs, ropes, pulleys and a carriage.

In this paper we propose a set of specific exercises on Reformer Pilates, that help to develop the muscles and joints involved in the technique of swimming styles: freestyle, backstroke, butterfly, breaststroke (St. John, N., 2007).

I. FREESTYLE

1. EXERCISE FOR ARMS



Fig.1.

Sit facing the footbar with strap in each hand.

Time 1 – rotate the torso and push one strap forward.

Time 2 – rotate to the other side and push the other strap forward in the same time with the return back of first arm through resistance. Alternate arms focusing on the rotation of the torso 20-30x.

2. EXERCISES FOR FREESTYLE AND BACKSTROKE KICK LEGS

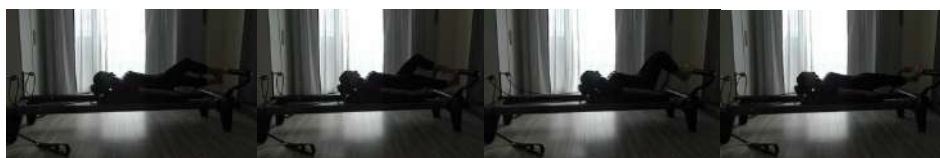


Fig.2.

Place the tips of the feet on the footbar with the legs parallel. Running in Place.

Push the carriage back by straightening the knees, dorsiflex and drop one heel under the bar while bending the other knee. Straighten both legs before switching. Alternate legs 40-50x.

Time 1 – flex the right heel under the bar, bend the left knee.

Time 2 – flex the left heel under the bar, bend the right knee.

Time 1 - bend the knees keeping the heels slightly raised.

Time 2 – straighten legs and push back – 20-30x.

II. BACKSTROKE

1. EXERCISES FOR ARMS



Fig.3.

The knees at 90 degrees, elbows bent, pull the straps down toward the hips and return.

Time 1 - Hollow the abdominals as the arms move down toward the hips.

Time 2 – Pull straps toward the hips by straightening arms – 20-30x.

With the elbows straight and the arms abducted to slightly less than 90 degrees, pull the straps down toward the hips and return.

Time 1 – arms to sides, elbows straight, knees over hips.

Time 2 – pull straps toward the hips and return – 20-30x.

III. BUTTERFLY

1. EXERCISE FOR ARMS WITH BENT ELBOWS



Fig.4.

Lying down to the box facing the straps with the chest at the edge of the box. Pull the straps along the edge of the carriage as the abdominals engage, the shoulder blades slide down the back and upper body extends of the box.

Time 1 – starting position: pulling straps, hands in front of shoulders.

Time 2 – pull with elbows bent, arms parallel to the floor.

Time 3 – straighten the elbows to pull the straps to the hips.

Time 4 – engage abdominals, slide shoulder blades down the back and lift the spine into back extension – 20-30x.

2. EXERCISE FOR ARMS WITH STRAIGHT ELBOWS



Fig.5.

Lying down to the box facing the straps with the chest at the edge of the box. Pull the straps along the edge of the carriage as the abdominals engage, the shoulder blades slide down the back and upper body extends of the box.

Time 1 – starting position: pulling down, hold straps with the hands below the box.

Time 2 – pull with elbows straight, hold straps with the arms out to the sides.

Time 3 – straighten the elbows to pull the straps to the hips.

Time 4 – engage abdominals, slide shoulder blades down the back and lift the spine into back extension – 20-30x.

3. EXERCISE FOR LEGS



Fig.6.

Lying down with the knees at 90 degrees with the straps at the feet. push the straps until the knees are stretched and return – 20-30x.

Engage the abdominals and roll the pelvis up of the carriage, straighten the legs to press the carriage back and keep the pelvis at the same height throughout the exercises. Roll the spin back down to the starting position without moving the carriage – 20-30x.

IV. BREASTSTROKE

1. EXERCISE FOR ARMS



Fig.7.

Keeping the back rounded, roll down to begin.

Time 1 – open the arms out to the side and press back the straps.

Time 2 - cross the straps and bend and straighten the elbows to go behind the torso – 20-30x.

2. EXERCISE FOR LEGS



Fig.8.

The balls of the feet on the footbar with the legs close. Keeping the knees straight.

Time 1 – the heels will be placed at the ends of the footbar, bend the knees and leg turn out.

Time 2 – straighten the legs and push back – 20-30x.

Conclusions

Performing exercises on the Reformer Pilates offers a wide variety and provides some good action on the parameters of movement (precision, direction, amplitude, degree of tension and relaxation), but at the same time, developing motor skills, preventing physical deficiencies and inducing a physical and mental well-being.

The breathing is very important during training, and precise coordination between breathing and movement is required. That for, with a consistent breathing pattern, it is easier to keep the movements in sync.

We consider that for swimmers, this type of physical activity completes the specific training in water, contributing not only to the muscular development but also to the improvement of the swimming technique and breathing.

References

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