EVALUATION OF INCIDENCE OF BALL HANDLING ON SWIMMING INTENSITY IN FEMALE WATER POLO

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Abstract
The purpose of the present study is to verify the incidence of ball handling in swimming intensity in water polo, in order to obtain useful indication in coaching. The research method is integrated and consists of action research for coach contribution by training and evaluation, and theoretical-argumentative to deduce a framework in which define the data processing. Eleven well-trained competitive athletes were recruited and asked to swim 5 x 20-m, one time with ball, and one time without ball. This test was repeated three times.

For each swimmer was calculated the mean and standard error of times per test, both with and without the ball. Analysis was conducted individually for each athlete, and in total for each test. The results, trough confrontation of means of times, reveals a high variability, and indicate a non mechanical incidence of ball handling on swimming intensity. Reading this results in correlation to athletes anamnesis reveals that incidence of ball-handling is significant only in athletes who have a swimming-oriented athletic history, but there are not significant differences in times for athletes who have a water polo oriented athletic history.

The results show as this study can help the coach to train the team for improving the analyzed skills in different mode, creating a methodological system training to enhance the performance.

Coaches are suggested to carefully monitor swimming rhythm during trials, and to increment ball-handling in every training condition.

Keywords: action research, theoretical-argumentative, performance analysis.

Introduction
Water polo is a collective sport and efforts of high intensity are made in less duration, where the players must swim, jump, and send the ball with moments of rest or low intensity; it is also a contact sport where the players conduct battles against their adversaries like blockades, beatings, contacts, and pushes (H. K. Smith, 1998; K. Van der Wende, 2005).

In water polo, the skill that is used for the majority of the game is swimming.


In this perspective, swim conditioning is obviously an important aspect of training for Water Polo.

In swimming, conditioning training assumes a consistent role to achieve the better goals (G. Raiola et al, 2011).

Aim of this pilot study was to establish the influence of ball handling in swimming intensity in water polo, in order to obtain useful indication in coaching.

Methods
The research method is integrated and consists of action research for coach contribution by training and evaluation and theoretical-argumentative to deduce a framework in which define the data processing.

Eleven well-trained competitive athletes were recruited and asked to swim 5 x 20-m, one time with ball, and one time without ball. This test was repeated three times.

For each swimmer was calculated the mean and standard error of times per test, both with and without the ball. Analysis was conducted individually for each athlete, and in total for each test.

Results. The following histograms show the mean of times for athlete for the three test.

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Figura 1 - first test, means with and without ball

Figura 2 - Second test, means with and without ball
Discussion

In table 1 is visible as mean of times without ball is not always smaller than mean of times with ball, which indicates a non mechanical incidence of ball handling on swimming intensity.

This results can be read in correlation to athletes anamnesis, revealing that incidence of ball-handling is significant only in athletes who have a swimming-oriented athletic history, but there are not significant differences in times for athletes who have a waterpolo-oriented athletic history.

Some athletes (indicated with a “<<” in table 1) realized systematically smaller times when they swam with ball.
The results show as this study can help the coach to train the team for improving the analyzed skills in different mode, creating a methodological system training to enhance the performance.

Coaches are suggested to carefully monitor swimming rhythm during trials, and to increment ball-handling in every training condition.

REFERENCES


