

THE INFLUENCE OF TECHNIQUE ON THE PERFORMANCE IN THE SWIMMING EVENTS

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Abstract

The present study aims the theoretical and experimental research regarding the major part of the technical component among junior swimmers. Increasing the efficiency of the educational process requires the establishment of specific aims, of a well objectified and optimized operating plan as well as the selection of the most effective methods and means of operation.

The establishment of some training norms as well as the judicious use of the most effective ways and means particular or not for swimming should lead to:

- The appropriate acquiring from the point of view of the technique of the four swimming procedures*
- The development of driving skills*
- The demonstration of the validity of the methods used and the applicability of some tests in order to follow the qualitative development of driving skills.*

Implementing systematically a model of professional algorithms for learning, consolidation and improvement from a technical point of view, during an educational year, the sportsmen will obtain superior results.

Keywords: *Model, algorithms, driving skills, methods, means, efficiency*

The organization of the research

The experiment regarding the certification of the efficiency of the means used in the swimmers training process was developed during a period of six months, considering this way that the gathered results can lead to decisive conclusions.

The experiment consists in implementing a system of means, in order to learn, correct, consolidate and improve the crawl swimming technique, leading to the improvement of the swimming performance in the speed test among juniors. For the efficiency of the experiment we implemented three types of testing: initial, intermediate and final.

Between June — November the technique exercises were allocated in the following way: on Monday (crawl and breaststroke), on Tuesday (butterfly and backstroke), on Wednesday (crawl and breaststroke), on Thursday (butterfly and backstroke) and on Friday crawl and breaststroke.

The development of the experiment

During the period between the 1st of November and the 28th of November 2013 suitable for the uploading period, according to the technical training plan, 3 times a week, emphasizing on the training volume which was of 3600 — 3800 m/ training.

During the period between the 29th of November and the 4th of December 2013, suitable for the straitened period, according to the training plan, the technical training was pursued. These exercises were performed intensely on the grounds of diminishing workload. There were effected starts, back tracks and arrivals.

The reiterations were performed on distances of 12,5 m, 25m, in numbers of max. 8 recurrences.

During the period between the 1st of March and the 15th of March 2014 followed the activating period of the workload, diminishing the effort and the numbers of training emphasizing on the technique.

During the period between the 11th of March and the 22nd of March, suitable for the straitened period, the workload diminished

and the intensity increased, there were performed recurrences of 12,5m and 25m. The measurements effected on the occasion of the initial and final tests at technical and performance challenges using the following current statistic indicators: arithmetic mean, amplitude, standard deviation, the irregularity factor.

Interpretation of results

The experimental results were systematized in tables, statistically elaborated and interpreted according to the methodology of the research of physical activity science. In view of validating the research supposition, the data are analyzed from a statistic point of view and from the point of view of the domains’ professional literature.

Tabel.1. Diferences between statistical parameters calculated.

Statistical parameters	Initial test	Intermediate test	Final test	The difference Initial test- Final test
X	40,47	39,96	37,82	2,65
W	18,90	13,27	8,18	10,27
Am	3,54	2,93	2,00	1,54
S	4,38	3,48	2,38	2,00
Cv	10,82	8,70	6,29	4,53

Conclusions

According to the statistically elaborated and registered data we can synthesize the following:

- The results obtained at the performed tests improved continuously, finally the progress being obvious. The other statistic indicators taken into account had values characteristic for well established and trained communities.
- The appraisal of the technique, although more difficult to realize but in this case based on a strict algorithm, proved an improvement of the technical skills, due to the judicious election of the independent variables.

We esteem that focusing on the technical component of the sport training, especially at this age, when the psycho- physiolog-

ical characteristics of the subjects allow great driving acquisitions: large receptivity, plasticity of the nervous system, a wish for emulation etc. is very important and this thing is obvious in the progress registered in the challenge taken into consideration.

It is certain that the strict quantification of the technical influence and the procurement of the sport performances are difficult to realize but referring to the specialty literature we consider that at this age the technical component must come before the physical, tactical and psychological ones.

The obtained results, both on the driving plan and on the one of the technical accuracy, confirm the experimental conjecture statistically.

Finally, I consider that the selected means regarding the technical preparation reached their aim and I recommend to other field experts and use them and adjust them to the subjects' particularities they develop their activity with.

Referencics

1. Bitang V. (2001) - Curs de înot; Ed. "Vasile Goldiș" University Press, Arad
2. Cirla L. (1999) - Inot. Aptitudinile psihomotrice și pregătirea tehnică; Printech Publishing House, Bucharest.
3. Counsilman J. (1977) - Competitiv Swimming; Counsilman Co. Inc. Publishing House, Indiana
4. Crețulescu Gh., Marinescu Gh. (1995) - Inot, curs pentru specializare A.N.E.F.S. (internal use), Bucharest
5. Crețulescu Gh., Jivan I. S., Carla L. (1992) - Inot-curs de bază; A.N.E.F.S. Publishing House, Bucharest
6. Dragnea A. (1992) - Teoria și metodică antrenamentului sportiv; M.T.S., Bucharest
7. Epuran M. (1982) - Metodica cercetării activităților corporale, vol 1-2; I.E.F.S. Publishing House, Bucharest
8. Jivan I., Cirla L. (1994) - Natație, culegere de texte pentru specializare, A.N.E.F.S. (internal use), volume 1, Bucharest
9. Jivan I. (1999) - Inot-tratat metodic; Printech Publishing House, Bucharest
10. Maglisho E. (1990), Swimming faster; California State College Bakersfield, M.T.S., Bucharest