

Athletic progression table of the swimmers of the ESFA “Giraldo Córdova Cardín”

Tabla de progresión atlética de los nadadores de la ESFA “Giraldo Córdova Cardín”

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ABSTRACT

The purpose of this research is to propose a new table of athletic progression of ESFA swimmers “Giraldo Córdova Cardín”. An analysis of the results of the national competitions by categories was performed, as well as in the Central American and Caribbean Games of Barranquilla, Colombia 2018 and then updated this table. In this process, theoretical and empirical methods were used to determine the objectivity of the current progression table for the evaluation and permanence of swimmers in this center. The viability of the proposed table and its correspondence with the proposed objectives were determined.

Key words: Swimming; Athletic progression; Swimmers; Categories

RESUMEN

El propósito de esta investigación es proponer una nueva tabla de progresión atlética de los nadadores de la ESFA “Giraldo Córdova Cardín”. Se realizó un análisis de los resultados de las competencias nacionales por categorías, así como en los Juegos Centroamericanos y del Caribe de Barranquilla, Colombia 2018 y luego actualizar esta tabla. En este proceso se utilizaron métodos teóricos y empíricos que permitieron determinar la objetividad de la tabla de progresión vigente para la evaluación y permanencia de los nadadores en este centro. Se determinó la viabilidad de la tabla propuesta y su correspondencia con los objetivos propuestos.

Palabras clave: Natación; Progresión atlética; Nadadores; Categorías

INTRODUCCTION

In Cuba, the reference used to assess the permanence of swimmers in the “Marcelo Salado Lastra” High Performance Center currently ESFA “Giraldo Córdova Cardín” were the results of the Central American and Caribbean Swimming Championship (CCCCAN), which invalidated many athletes with certain possibilities of results in subsequent years to continue their active life in the center of highest level of training in the country. Subsequently, and considering the low international level of Cuban swimmers, Professor Guilbert Valdés Corría in 2003 developed a progression table by category and sex for the permanence of athletes in that center and looking for important results of swimmers internationally, which is done taking as a reference the second place of the Central American and Caribbean Games, where it states that the athletes that transit through those times will achieve an important international result, but neither does it conform to the true results obtained nationally by Cuban swimmers since It does not give us the real state of increase of Cuban swimmers taking into account our national competencies, which is supposed to be the one taken into account for the evolution of continuity in the High Performance Center. The lack of information causes us to lose perspectives since we lack a guide that guides us in results and pace of growth by different categories and ages.

Why are ages mentioned? It is well known in our environment what is related to the ages of maximum performance in the different genres. The female shows, with her exceptions, that from 18 to 22 years of age the highest yields are shown, the exceptions appear both before and after this time frame. In the case of the male, this period is between the ages of 20 and 24 equal to the female sector with its exceptions, both before the margin and after, moreover, there are certain trends, in both genders, to which athletes appear more and more frequently They continue to perform after these periods, but always after having achieved an important performance in this framework, which from the psychological point of view strengthens them to have the necessary conviction to face new training loads to achieve their greatest objectives.

On the other hand, Pérez (2014) makes an analysis of the behavior of the results in swimmers of the 15-17 years category of the “Marcelo Salado” ESFAR in the 2013-2014 period, from which important elements were taken for the realization of this research related to the performance of athletes in the different genders in this age range that are the previous step at the maximum performance ages.

Chronological age, biological age and rates of progression

It is known that among young swimmers of the same chronological age there is a great variability in biological age, which explains most of the differences in growth, development and the level of physical abilities and motor qualities. These differences in time and in the magnitude of maturation (height, weight, segmental proportionality, body composition, etc.) also lead to significant differences in sports performance. Therefore, knowledge of the relationship between chronological age and biological age is a fundamental aspect of training planning, since it allows programming the application of training and competition loads appropriate to the characteristics of the maturation stage of each athlete.

The evaluation of sexual maturation is another procedure used to know the relationship between biological age and chronological age. In this case, the sexual characteristics of both sexes and the appearance of menarche in women are used as maturational indicators. The determination of sexual age is carried out by comparing the degree of development of these indicators with the standards established by Tanner.

But this procedure imposes obvious ethical limitations, so it must necessarily be done with the authorization and collaboration of the parents, informing them of the importance that this type of evaluation can have for training planning. Even if they give their authorization, it is convenient to give them the necessary guidelines for a self-administered evaluation.

From the coach's perspective, the most useful procedure to study the relationship of biological age with chronological age is based on the evaluation of somatic maturation, which uses height and weight as maturation indicators.

The somatic age is determined by the evolution of the curves in which the annual increase in height and weight is reflected. Critical points of these curves are

generally considered the moments of rapid growth of height (stretch or peak of growth rate in height: PHV) and of weight (peak of growth rate of weight: PWV), which usually occurs after of the PHV.

To detect these events, height and weight growth are monitored in different types of curves that show the annual rate of increase (Figure 5.17) and the variations in this rate over the years. The main advantages of this procedure to evaluate biological maturation are:

- ✓ The ease with which the measurement, recording and valuation of the data is carried out, without the need to use sophisticated technological means and without requiring the judgment of a specialist.
- ✓ The close relationship of the two somatic indicators (mainly size) with most of the maturational events related to the development of physical abilities and motor qualities.

Another determining aspect of the progression of sports performance and of the different load parameters in long-term planning is related to the starting level of the swimmer's abilities and their rhythms of progression. Swimmers with a high initial level of capacity development and a medium or rapid rate of progression can achieve significant results at a relatively early age and assimilate greater training loads than swimmers with a medium or low initial level and a slow pace of progression.

Ages of beginning, specialization and achievement of the best brands

According to Platonov, the long-term adaptation of the organism to training and competition loads also depends on the age of beginning of the sports practice and the years of training necessary to achieve the best sports results.

The vast majority of international elite swimmers begin their training at the optimum age according to the opinion of the specialists, however, the range of starting ages is quite wide and mainly due to sociocultural factors, not the training laws of sports mastery in swimming.

Although the age of swimmers to achieve the best marks varies significantly according to sex and specialty, the duration of the preparation is around 10 years

less in female swimming. This fact should form the basis of the planning of the long-term training process.

However, important oscillations are also possible that are mainly due to the individual particularities of the swimmer, to the laws of formation of sports mastery in the different tests and in some ways to the dynamics of training loads, so that the structure General long-term preparation can present several alternative variants.

METHODS

To solve the proposed tasks and solve the problem, this research was carried out under a general methodological dialectical approach, and theoretical and empirical research methods were used that, properly combined, made it possible to establish criteria, judgments and assessments that allowed us to arrive at conclusions that derive the fulfillment of the objective.

In the research, theoretical level methods were used such as the analysis-synthesis that allowed the collection of data from the investigated authors, their theoretical knowledge, and then analyzed and provided an opinion through a synthesis of the most important for this work. Inductive-deductive that allowed the analysis and deduction of possible conclusions on the subject under investigation. From the empirical level were used the documentary analysis for the bibliographic review, allowing information to be obtained for the research in question, reinforcing the truthfulness and relevance in the information for the development of this work. And from the statistical mathematician simple percentage analysis that was used to analyze the results of the methods and techniques applied in the investigation.

It was also used the interview technique that was applied to the ESFA coaches "Giraldo Córdova Cardín" to verify the degree of objectivity presented by the current progression table for the evaluation and permanence of the swimmers object of our research.

RESULTS

With the data collected during the investigation, its mathematical processing and the preparation of the graphics we arrive at the following results:

Countries	11Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years
Australia		1%	4%	2%	1%	2%	0%
Puerto Rico	7%	4%	2%	2%	0%	2%	2%
Peru	0%	7%	3%	5%	0%	1%	
Cuba		6%	4%	2%	2%	2%	

The above table shows the percentages of progression by age (Men) from one year to another from different countries including Cuba as a form of comparison with those countries.

Countries	11 Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years
Australia		1%	2%	1%	1%	0%	0%
Puerto Rico	3%	5%	-2%	2%	1%	-1%	0%
Peru	3%	5%	2%	2%	1%	0%	
Cuba		5%	4%	2%	1%	1%	

The above table shows the percentages of progression by age (Women) from one year to another from different countries including Cuba as a way of comparison with those countries.

Men	50m	100m	200m	400m	800m	Average
Medals	Age	Age	Age	Age	Age	
Gold	23	22	21	22	21	22
Silver	22	20	23	21	22	22
Bronze	18	21	20	20	20	20
Average	21	21	21	21	21	

The previous table shows the ages of the swimmers (Men) who were medalists in the different events (Freestyle) at the Barranquilla Central American and Caribbean Games 2018. Subsequently, the average age was calculated by event and by medals.

Women	50m	100m	200m	400m	800m	Average
Medals	Age	Age	Age	Age	Age	
Gold	24	24	21	21	21	22
Silver	27	21	21	21	21	22
Bronze	30	27	27	17	17	24
Average	27	24	23	20	20	

The previous table shows the ages of the swimmers (Women) who were medalists in the different events (Freestyle) in the Barranquilla Central American and Caribbean Games 2018. Subsequently, the average age was calculated by event and by medals.

Analysis of the results of the interviews with the coaches

Regarding the results of the interview, we can express that, of the 6 coaches interviewed, everyone answered affirmatively about the knowledge of the existence of the progression table and that they do work with it, but that they also know that it has never been updated since its creation, raising 3 of them the need and importance that this progression table has to be updated, since it would contribute to making the evaluation of swimmers more objective.

CONCLUSIONS

The theoretical foundations studied served as a basis to determine the main characteristics that support the development of swimmers according to the category. The interview with the coaches allowed us to know the degree of objectivity presented by the update of the progression table and its importance for the permanence and evaluation of the ESFA swimmers "Giraldo Córdova Cardín". Based on the results obtained, it is proposed to modify the table of athletic progression of ESFA swimmers "Giraldo Córdova Cardín" to prolong the average age in achieving maximum sports results in Cuban swimming.

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