

EUROPEAN COLLEGE OF SPORT SCIENCE

SPORTS SCIENCES: NEW HORIZONS FROM A WORLD HERITAGE CITY

16th annual Congress of the ECSS | 6th - 9th July 2011, Liverpool - UK Hosted by The Research Institute for Sport and Exercise Sciences

Liverpool John Moores University



LONG TERM PLANNING IN TRIATHLON: FROM THE **BEGINNING TO HIGH PERFORMANCE** Germán Ruiz german.ruiz@edu.ucm.es *Complutense University of Madrid (Spain)*

Introdution

Results:

In a controlled sports system it is necessary to set the stages for long term development. In this way, it would be possible an adequate progression to the highest achievements. Literature often reports different stages models with no empirical method. There are no models for triathlon, a special sport in which athletes come from other endurance disciplines related to triathlon (swimming, cycling and athletics) (1-2). As the triathletes' sport history might be influencing their performance, it is not clear what the best way toward success is, or if there are different ways for a same goal. The aim of this study is to establish the long term sports stages for triathlon from empirical data of

a high level triathletes' group.

Method: The present study follows a descriptive and quantitative design, based on a questionnaire as a measuring instrument. The questionnaire was designed for the purpose of this study, following previous socio-demographic models in high performance sport (3-4). It is mostly composed of closed questions and divided into two parts: personal data and sports itinerary data. The instrument was previously reviewed and improved by two experts in triathlon sport systems to consolidate its validity. SPSS version 19.0 was used for data analysis. Participants: A sample of 48 Spanish high level triathletes (19 females and 29 males; 25,48 ±4,92 years old) has been requested to complete a retrospective questionnaire about their sports career.



Achievement of success AGE 4 5 8 9 6 12 10 11 13 17 14 18 15 19 20 16 21 25

Spanish age categories

Prebenjamín Benjamín Alevín Infantil Cadete Under-23 Absoluta >>>> Junior



Achievement age of **local/regional** success in triathlon: 17,11 (± 4,17)

Achievement age of **national** success in triathlon: 18,85 (± 4,05)

Achievement age of international success in triathlon: 21,29 (± 4,26)



Starting age in previous discipline-swimming (n=27)

Starting age in previous discipline-cycling (n=5)

Starting age in previous discipline-athletics (n=6)

Starting age straightforward in triathlon (n=10) Starting age in tri. from other endurance discipline (n=38)

Starting age in triathlon competitions

Starting age in triathlon national competition

Starting age in triathlon international competition

Discussion and conclusions

Starting ages in triathlon (16 ±4,38) are higher than in other studies with other sports high level athletes: 10,26 years (5) or less than ten years old for 50% of the sample (6). It is necessary to know the real nature of triathlon to understand its evolutionary stages. The sports history and the continuous flow of athletes are determining these natural periods. Ericcson and Krampe (7) established less than 10 years from the beginning to the international achievement stage. Triathletes spend an average of 6,6 years, but it is necessary to sum up an average of 11 years in a previous endurance discipline. So we can conclude that development stages in triathlon are relative to the sports history or the sportsmen, and that there is not only one way to success but several.

References

1.Ruiz G, Salinero JJ, Sánchez F. Valoración del perfil sociodemográfico en el triatleta: el ejemplo de Castilla-La Mancha. Nivel de implicación y entorno. Apunts. 2008;92(2):5-14. 2. Federation Française de Triathlon. Approaches des Représentations Sociales en Triathlon: Analyse et Préconisations. Paris: http://www.fftri.com/espace/doc/etude_representations.pdf2003-04. **3.**Hill R, McConnell A, Forster T, Moore J. A comprehensive view of development of U.S. Olympians who competed from 1984-1998. Initial report: Results of the talent identification and development quiestionnaire to U.S. Olympians. : Athlete development and Coaching & Sport Sciences divisions 2002. 4. García-Ferrando M. Los deportistas olímpicos españoles: Un perfil sociológico. Madrid: Consejo Superior de Deportes1996. 5. Hill R, McConnell A, Tammie F, Moore J. The path to excellence: A comprehensive view of development of U.S. Olympians who competed from 1984-1998: U. S. Olympic Committee2002. 6.García Ferrando M. Los deportistas olímpicos españoles: Un perfil sociológico. Madrid: Consejo Superior de Deportes1996. 7. Ericsson K, Krampe R, Tesch-Römer C. The role of deliberate practice in the acquisition of expert performance. Phychological Review. 1993;100(3):363-406.