OPTIMIZATION OF SHOOTERS' INDIVIDUAL TRAINING (DOMINANT GENERAL TRAINING)

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The Meta models are prepared for the representatives of sports performance of which is conditioned by the functional potential of a human body calculated by the quantitative indices (Houmard, Johns, 1994; Kubukeli et al., 2002; Mujika et al., 2002). However there are no publications about the interrelation of training and sport performance models to the shooters. The aim of the one alternative experiment was to determine the efficiency of expert shooter V. M. (3rd place – European junior championship 1997, the best Lithuanian shooter) individual training and sport performance model. The modeling method was applied for composing the dominant general training 44 weeks model. Sport performance was tested by Rika Home Trainer computer program. Mathematical statistics: mean $\pm$ SD, Pearson's correlation, regression were used to analyze the interaction of training program and sport performance.

Preparing for 2001 (September) – 2002 (July) competition period top results were achieved at the most important competitions. The trend line of the training results was polynomial (y = 0,0431x2 – 0,8794x + 378,81; R2 = 0,4175). The correlation between the shooting results and the adequate training time (weeks) has allowed to estimate the delay of the adaptation to the training loads and the training influence on the sport performance: the first eight weeks were dominant general training (r = -0,417 – 0,352), on the 9 – 12th weeks the training volume was decreased, late on the 13 – 15th weeks period were applied refreshing loads (r = 0,683 – 0,771), on 16th week – rest and the last five weeks was used incresed training volume (r = 0,599 – 0,733).

The determined expert shooter V. M. individualy optimal 21 weeks training model allowed her to reach the best sport performance during the last three training model week.

References

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Keywords: Sport Performance, Modeling, Shooting