MORPHOLOGICAL OPTIMISATION, OVERLAP ZONES AND SECULAR TREND IN SELECTION PRESSURES

Summary

The concept of morphological optimization tends to give a answers to the questions on what makes the elite sportsmen successful. This is the reason that all those who professionally perform selection in sport must know in detail conceptual and methodological problems associated with defining morphological taxons. For selective procedures, the zone from the population which encompasses selective quantitative procedure is called the "Zone of catchments area" for that sporting group and differs from sport to sport. Setting in correlation two distributions it is possible calculate overlap surface of both. These zones are named overlap zones. Intersection of those two curves is defined by iterative procedure. For purposes of this article, it was body height analyzed as anthropometrical variable which subsumes all measures of longitudinal dimensionality of the skeleton. Knowing the coefficients for years (% increase of final height) using the fore-mentioned formula it is possible to perform primary selection with minimized error. Based on testing of psychomotor abilities, which are dominated by the genetic code, later, a secondary selection can be performed.

Key words: morphology, optimisation, overlap zones, trends, waterpolo