

KINESIOLOGICAL, ANTHROPOLOGICAL, AND METHODOLOGICAL ASPECTS OF EFFICACY EQUATION IN TEAM SPORTS GAMES

Abstract

Redefining the equation forming approach for specification of efficacy factors in polystructured and complex sports, and defining model features for athletes of different age provides us with important sources of information for applied diagnostics and selection of future top-level athletes, as well as rational management of the sports preparation process. The scientific and expert approach to forming models of efficacy in polystructured and complex sports activities must encompass both the external and internal determinants of athlete's performance and competition efficacy. We proposed a dynamic efficacy model that explicitly shows the influence of the external and internal variables on the concepts of the dynamic systems theory. A hypothetical model of the efficacy factors shows that sports performance and sports accomplishment under the influence of the external and internal variables are in accordance with the concept of reciprocal determinism. By introducing a larger number of relevant sport-specific variables and external factors, we would probably increase prediction value and the validity of the efficacy model for athletes and teams. Further more, it is necessary to create a sport efficacy factor model that would encompass all basic and specific anthropological features that in a greater part determine actual athlete quality. It is assumed that the cooperation of scientists and expert coaches could generate feedback that would enable further development of expert systems and a proposal of nonlinear models of efficacy factors in sport.

Key words: *models, athletes, team sports, efficacy, system theory, scientific methodology*
