RELATIONS BETWEEN THE BODY MASS INDEX AND THE ANTHROPOMETRIC DIMENSIONS AND THE RESULTS ACHIEVED IN SHOT PUT

Abstract

The training process in shot put throwing is based on the development of general and specific preparations. Most of the time is spent on the development of motoric abilities of absolute strength, explosive strength, movement speed, and coordination. Research has shown that apart from the correct throwing technique and the angle that the ball is thrown from, the performance is also influenced by the morphology features of the thrower. It is obvious that top throwers differ in their bodily features. Some are more corpulent, some athletically built with emphasized musculature, some are extremely high, and some short. This research included a sample of 112 secondary school pupils, males, of 15 ± 6 moths age difference with an aim to explore the relation between the body mass index and the anthropometric dimensions and the achieved shot put throwing result. The results obtained, showed that there is a statistically important influence by the body mass index on the results achieved in shot put, and that the anthropometric length of the arm, the arm range and body mass can influence the achievement of results in shot put, while the length of the legs plays no statistically important role in the achievement of results.

Key words: body mass index, anthropometric dimensions, shot put, relations