

DIFFERENCES IN MORPHOLOGICAL SPACE OF THROWERS FINALISTS OF THE BEIJING OLYMPICS

Abstract

Morphological space is very important and primary in the selection, targeting and achieving results in sport. This is particularly apparent in professional sport where remarkable results are achieved. Depending on the sport, sport discipline it depend also of the participation and influence of human space, or its segments to the total score. When describing and defining specific populations of athletes, their morphological status, the most common parameters that are taken are body height, body weight, body mass index, and very often the age of the respondents. These parameters are very reliable and give a true picture of the morphological area of the studied population. This paper analyzes the differences in the segments of human space of throwers, the finalists of the Beijing Olympics. The sample included 24 competitors in three disciplines (shot, discus, hammer). Differences in body height, body weight, BMI and age were analysed. For data processing t-test has been for small independent samples that confirmed the presence of statistically significant differences between throwers. Discus throwers and shot putters differ statistically significant in BMI values ($p < 0.05$), discus throwers and hammer throwers in body height ($p < 0.05$). The most statistically significant differences were recorded between the shot putters and hammer throwers in body weight ($p < 0,01$) and BMI values ($p < 0,05$).

Key words: *morphological status, throwing disciplines, differences, Olympic games*
