

Chapter 5

ANTHROPOMETRY AND SPORTS

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The impact of the human body structure on sports performance in terms of determining the characteristics of sports activities is one of the fundamental topics that is wondered and expected to be explained. In recent years, investigating the factors affecting performance in physical education and sports sciences and determining the impact rates of the parameters investigated has become increasingly important (Çınarlı, 2016).

In the study he conducted, Özer stated that “Sports performance is a whole of components. The direction and degree of the reciprocal interactions of various components within this whole determine the performance” (Özer, 1993).

According to another definition, sports performance is defined as the whole of the efforts made for success during the fulfillment of any athletic tasks. In a sense, performance must be seen and evaluated as a whole together with the factors affecting the result in a relatively short time during the competition or contest (Bayraktar & Kurtoglu, 2009).

Performance is defined as the physiological, biomechanical and psychological efficiency during the physical activity. It is thought that the efficiency to be revealed during the competition will give information about the level of performance. The generation of energy (aerobic-anaerobic), neuro-muscular (nerve-muscle) conduction and psychological factors (motivation) are of the main elements forming performance (Duyul, 2005).

There are three significant methods and approaches implemented to assess and increase sports performance. These are measurements, performance tests and sports motion analysis. The measurements implemented in terms of sports performance can basically be categorized under two headings as anthropometric measurements and physiological measurements. It is possible to make these measurements using different methods and various equipment (Bayraktar & Kurtoglu, 2009).

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in terms of sports sciences, it is important to know the morphological characteristics in order to be successful in any branch of sports. Examining the physical structures of different populations through anthropometric measurements provides great advantages. For example, the athletes and those who are not. Besides, by the evaluation of anthropometric and physical processes, by non-invasive methods and by using cheap equipment, large amounts of objective data can be collected rapidly that can be used in structured talent detection and identification programs. We can say that this study will provide additional information on the number and scope of the researches conducted on anthropometry, and that it will be beneficial for future researches to be conducted so as to compile anthropometric studies and examine the changes of various measurements in time.

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