
An overview of performance-related research in sports biomechanics is presented describing the relevant techniques of data analysis and data processing together with the methods used in experimental and theoretical studies. Advances in data collection and processing techniques which are necessary for the future development of sports biomechanics research are identified. The difficulties associated with experimental studies in sports biomechanics are described with examples of the different approaches that have been used. The strengths and weaknesses of theoretical studies are discussed with examples drawn from a number of sports. It is concluded that progress in performance-related research will result from the application of a suitable combination of theoretical and experimental approaches to those sports in which technique is the primary requirement for success.