Editorial

Recent contributions to sport research

Jimenez Díaz-Benito, Victor[1], Fernández Elías, Valentín E.[2], Bielsa Hierro, Rosa[1]

[1] Universidad Europea de Madrid. Faculty of Medicine, Health and Sports. Department of Sports Sciences.
[2] Research Centre in Sport Sciences, Rey Juan Carlos University

The new issue we present contains three original studies. The first study, by Niu, Ardá, Maneiro, and Iván-Baragaño, provides a significant contribution to the understanding of technical–tactical performance in professional football, addressing a specific gap in the analysis of set-piece actions within the Chinese Super League. Despite recent advances in research in this competitive context, the authors rightly highlight the limited attention given to corner kicks, actions that can be decisive in the game. Using a nomothetic, punctual, and multidimensional observational design, the analysis of 1,272 corner kicks during the 2020 season not only describes their characteristics but also identifies the criteria that significantly influence their success, defined as achieving a shot or a goal. The results show that variables such as the timing of the action, the corner kick position, the number of attacking players, their level of involvement, and the zones of delivery and finalization play a determining role in the outcome of these situations.

Particularly notable in this article is the use of decision tree models, which allow the authors to explore the interactions between variables and establish tactical patterns associated with a higher probability of success. In this regard, the coordinated involvement of three to four players and the use of aerial connections emerge as especially effective strategies in attacks originating from corner kicks. Their findings underscore the value of contextualized analysis of set-piece actions and provide clear practical implications for the design of specific training tasks, strongly linking scientific research with professional practice.

In the second study, Bermúdez Guzmán focuses on the analysis of the relationship between different physical capacities that determine performance in futsal, specifically explosive strength, flexibility, and agility, in players of the futsal team from the National Sports School of Cali. Using a descriptive–correlational approach, the author provides empirical evidence in a formative–competitive context that is little explored in the scientific literature. Based on a sample of 15 players and the application of several standardized physical tests, the study identifies significant correlations between abdominal strength and vertical jump (CMJ), as well as between flexibility and jump performance, suggesting a relevant interaction between neuromuscular and mobility capacities in explosive actions typical of futsal. In contrast, the results show the absence of significant correlations between agility and the other analyzed variables, highlighting the specific and independent nature of this physical capacity within the player's conditional profile.

These findings invite Kronos readers to a critical reflection on the design of training programs, emphasizing the need for more specific and differentiated interventions depending on the physical capacity to be developed. In this sense, Bermúdez Guzmán's study helps to nuance generalized

assumptions about the transfer between physical capacities and offers practical guidance for training planning in futsal, especially in formative and selection contexts.

The third study is authored by Peña Ardila, Rey Ariza, Luna Vargas, and Cárdenas Graciano. Here, the authors focus on analyzing the effects of inertial training on lower-limb neuromuscular fatigue in Sub-20 football players, a variable particularly relevant in a sport characterized by high-intensity intermittent efforts. Using an experimental design with a control group, the authors evaluate the impact of a 15-week inertial training protocol, integrated with regular training, on the fatigue index and power levels assessed through the RAST test. The results show that the experimental group experienced a significant improvement in minimum power, while maximum power and fatigue index remained stable, suggesting a greater capacity to sustain performance over repeated efforts. In contrast, the control group showed no significant changes in the analyzed variables. Overall, the findings of this contribution add to the growing body of applied evidence on the usefulness of inertial training as an effective strategy to optimize neuromuscular performance and manage fatigue in highly trained young football players, with direct implications for training planning in competitive development stages.