

## **Abstract**

### **Title:**

The level of generic motor coordination with respect to game performance and biological maturation in junior categories of football players

### **Purpose:**

To determine the level of generic motor coordination with respect different game performance and different pace of biological maturation in junior categories U14 and U15 of football players. At the same time, the purpose is to identify possible differences in the level of generic motor coordination between the players of AC Sparta Prague (U14, U15) and the selection of players from the top Belgian football academies (U14, U15).

### **Methods:**

The research group consisted of 42 players from all game positions born in the years 2006 to 2008 from the football club AC Sparta Prague U14 and (U14 n = 16; age =  $13,63 \pm 0,6$ ; body height =  $165,44 \pm 7,99$  cm; body weight =  $50,72 \pm 8,49$  kg) a U15 n = 26; age =  $14,77 \pm 0,38$ ; body height =  $172,1 \pm 7,71$  cm; body weight =  $57,24 \pm 9,15$  kg). The level of generic motor coordination was assessed using a KTK motor test battery (Kiphard and Schilling, 2007). Game performance was evaluated using our own questionnaires for coaches. The pace of biological maturation was evaluated using the indirect method of Kamis Roche. Coefficient Hedges' g was used to evaluate the significance of the differences in group averages.

### **Results:**

With respect to different levels of game performance, was found no significant difference ( $g = 0,09$ ) in the level of generic motor coordination between players with the highest and lowest levels of game performance. Biologically retarded players achieved significantly better results in the generic motor coordination test compared with biologically accelerated players ( $g = 0,90$ ). AC Sparta Praha U14 players achieved significantly better results in KTK subtests: 1 – balancing backwards ( $g = 0,57$ ); 3 – jumping sideways ( $g = 1,23$ ) in comparison with the selection of players from the top Belgian academies BFA U14. The players of AC Sparta Praha U15 achieved a significantly better result in the KTK 3 subtest – jumping sideways ( $g = 0,91$ ) in comparison with the

selection of players from the top Belgian academies BFA U15. No significant differences were found between the teams in the other KTK subtests.

**Conclusion:**

Players with different levels of game performance (according to the coach's rating) do not differ in any way at the level of basic motor coordination. Biologically retarded players are characterized by a higher level of generic motor coordination compared with biologically accelerated players. The level of generic motor coordination of AC Sparta Praha players is at the same or even higher level compared with players from the top Belgian football academies.

**Key words:**

generic motor coordination, game performance, football, youth, talent