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► To cite this version:

Dimitri Acoumambo, Bachir Zoudji. Size of use of knowledge of tactical actions in elite youth footballers: U-13, U-15 and U-18. Mardi des chercheurs 2024, Mar 2024, Mons- campus de l'Université de Mons (Présentiel), Belgium. hal-04551511

HAL Id: hal-04551511

<https://uphf.hal.science/hal-04551511v1>

Submitted on 18 Apr 2024

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Size of use of knowledge of tactical actions in elite youth footballers: U-13, U-15 and U-18

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Introduction

The performance of a football team is strongly influenced by the breadth of tactical action knowledge (e.g., Praça, Pérez morales, Bredt & al., 2017)¹. Possessing a significant knowledge base helps players memorize game plans and systems for on-field application. It also contributes to analyzing and anticipating the opposing team's moves during different phases of play: structured attacks, zone defense, counter attacks, defensive drops, and transitions (e.g., Zoudji, Thon & Debû, 2010)². However, to date, no studies have addressed the question of the breadth of tactical action knowledge that players use during training stages. **This study aims to assess the breadth of tactical action knowledge that elite young footballers use during different training stages: U-15 and U-18 categories. A question guides this work: (1) What is the breadth of tactical actions used by each age category?**

Method

Participant

	U-13	U-15	U-18
Number of players	82	82	82
Age (sd)	12 ans (± 9)	14 ans (± 7)	17 ans (± 8)
Experience (sd)	6 ans (± 1 an)	9 ans (± 1 an)	11 ans (± 1 an)
Practices (sd)	7 h (± 1 h 30)	10 h 30 (± 1 h 30)	10 h 30 (± 1 h 30)
Match/year	20 matchs (± 6)	30 matchs (± 6)	32 matchs (± 6)

Procedures

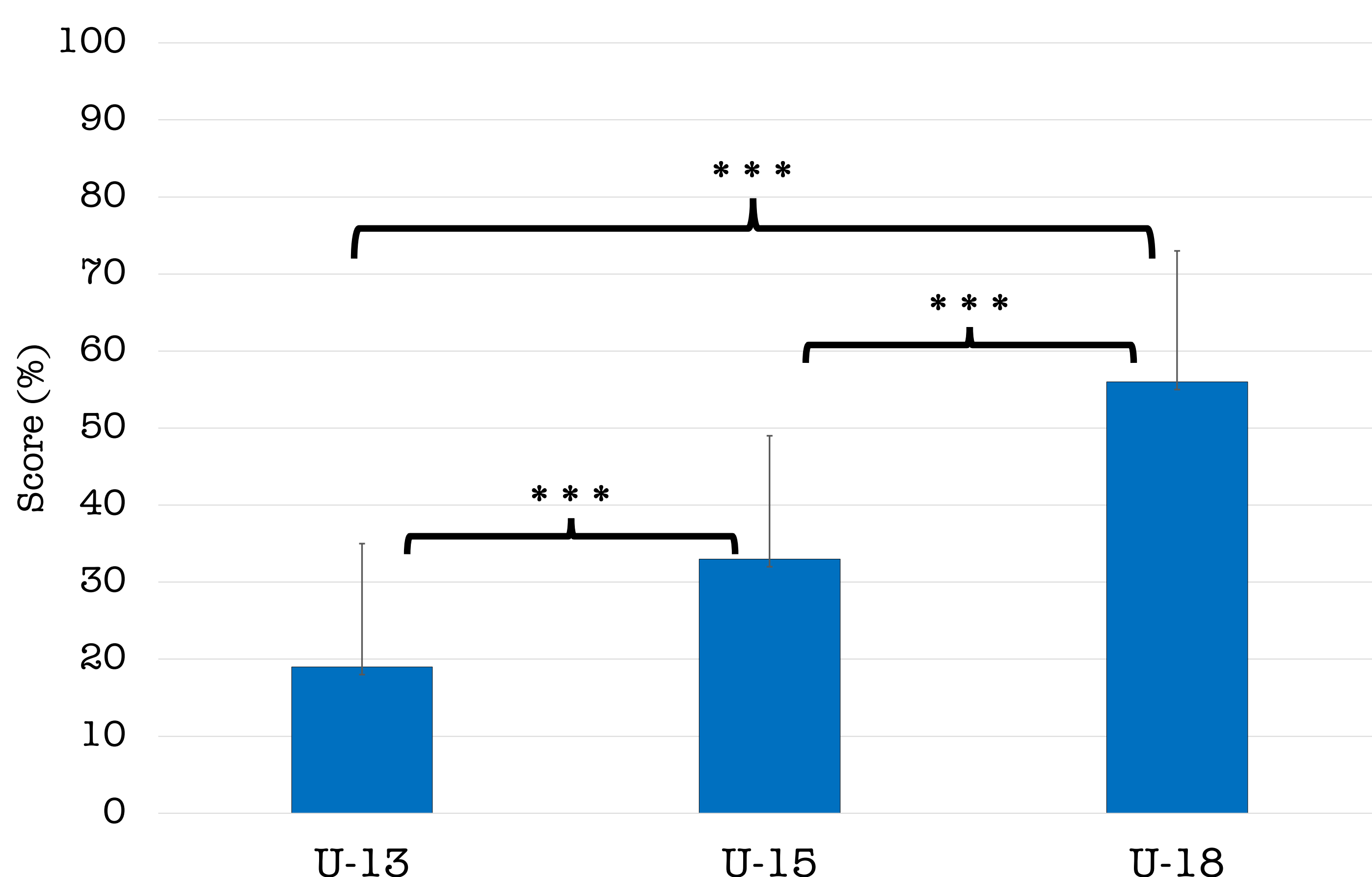
❖ **40 tactical football actions** have been selected by consulting several sources

❖ **Knowledge Judgment Test on Five Level**



Results & Discussion

The Tukey test showed a **significant difference** between the three age categories: U-13 and U-15 ($p = .002$); U-13 and U-18 ($p = .001$); U-15 and U-18 ($p = .001$).



1. The classic and logical result confirms the effect of age on the acquisition of tactical action knowledge.

2. The most important and original result shows that no age category achieves the use of all 40 tactical actions during training. U-18 players only use 56% of tactical actions.

3. We can put forward two non-contradictory hypotheses:

(i) It is possible that the limited number and duration of training sessions do not allow for the coverage of all 40 necessary tactical actions.

(ii) It is possible that not all coaches master the full set of 40 tactical actions.

¹ Praça, G., Pérez morales, J., Bredt, S., Brito, R., Andrade, A., & Greco, P., (2017). The Development of Tactical Skills in U-14 and U-15 Soccer Players Throughout a Season: A Comparative Analysis. Human Movement. 18.



² Zoudji B, Thon B, Debû B. Efficiency of the mnemonic system of expert soccer players under overload of the working memory in a simulated decision-making task. Psychol Sport Exerc. 2010;11(1):18-26.

