



INFOGRAPHIC: Relationship between Fundamental Movement Skills and Sports Skills

FERNANDO GARBELOTO¹ | SARA PEREIRA²

¹ Laboratório de Comportamento Motor (LACOM), School of Physical Education and Sport, University of São Paulo, São Paulo, SP, Brazil

² Faculdade de Desporto (FADEUP), Universidade do Porto, Porto, Portugal

Correspondence to: School of Physical Education and Sport, University of São Paulo, São Paulo 05508-030, Brazil

email: fegarbeloto@usp.br

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HIGHLIGHTS

- Positive association between fundamental movement skills (FMS) and sports skills (SS) performance in children and adolescents aged 9 to 15 years.
- Low FMS performance is linked to difficulties in mastering specific sports skills, particularly when movement patterns are similar.
- Mastery of fundamental movement components is crucial for the development of advanced sports skills, such as speed dribbling in basketball.

ABBREVIATIONS

FMS Fundamental movement skills
SS Sports skills

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INTRODUCTION

In recent years, various motor development models have highlighted the interdependent relationship between performance in fundamental movement skills (FMS) – such as running and kicking – and sports skills (SS) – such as speed dribbling in basketball. According to these models, children with low FMS performance face a proficiency barrier, which may hinder the development of SS. A total of five studies have investigated the relationship between FMS and SS performance in children and adolescents, with an average age range of 8 to 15 years. The results indicate a positive association between performance in various FMS (such as running, stationary dribbling, throwing, volleying, countermovement jump, and standing long jump) and SS (such as speed dribbling in basketball, badminton overhead clear, javelin throw, volleyball serve, high jump, and long jump)^{1,2,3,4,5}.

Four of these studies showed that children with low FMS performance experience difficulties in mastering SS^{2,3,4,5}. Mastery of certain components of FMS (e.g., arm movement while running) appears to be essential for the development of specific SS (such as speed dribbling in basketball)^{3,4,5}. Moreover, the relationship between FMS and SS performance seems to be stronger when FMS and SS share similar movement patterns^{3,4,5}. Overall, the studies indicate a positive association between FMS and SS performance, particularly when the movement patterns are similar.

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