

## **ORAL: TRANSITIONAL MOVEMENT SKILLS DEPENDENCE ON FUNDAMENTAL MOVEMENT SKILLS: TESTING SEEFELDT'S PROFICIENCY BARRIER**

\*Matheus M. Pacheco 1 , Fernando G. Santos 1 , Maria T. S. P. Marques 1 , José A. R. Maia 2 , Go Tani 1

1 School of Physical Education and Sport – University of São Paulo, Brazil

2 CIFI 2 D, Faculty of Sport – University of Porto, Portugal

**Objective:** In 1979 Vern Seefeldt postulated that individuals that did not achieve a given level of proficiency in the fundamental movement skills (FMS) would be limited in performance on new and more complex skills during development. This hypothesis, the proficiency barrier, inspired research in motor development but, to the best of our knowledge, was never empirically tested. The present article tested three potential mathematical functions (linear, sigmoidal and piecewise) describing the proficiency barrier relating FMS with a transitional movement skill (TMS, a more complex movement skill). **Method:** 87 children aged 7 to 10 years were tested on six skills of the TGMD-2 test battery (running, hopping, leaping, kicking, catching and stationary bouncing) and dribbling (a combination of running and stationary bouncing). **Results:** The results showed evidence for the proficiency barrier based on a specific sigmoidal relation. We also identified critical movement aspects from FMS that seem to induce this relation. **Implications:** There is a specific relation between FMS and TMS that should be considered in PE curriculum and sport initiation programs.