

## **ORAL: PLAY AS A CONTEXT FOR MOTOR DEVELOPMENT IN PRESCHOOL CHILDREN: A COMPOSITIONAL ANALYSIS**

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**Objective:** Play is suggested as an important context for physical development in preschoolers. However, empirical studies examining associations between fundamental movement skills (FMS) and play behaviors are lacking. This study aimed to examine associations between play behaviours during recess and FMS in typically developing preschool children. **Method:** One hundred and thirty-three children (55% male; age mean  $4.7 \pm 0.5$  yrs) from twelve preschools completed assessments of six locomotor and six object-control skills, which were video recorded for later analysis (Champs Motor Skill Protocol). A modified version of the System for Observing Children's Activity and Relationships during Play (SOCARP) was used to record preschool children's play behaviors (including activity level, activity type, group size and social interaction). A compositional data analysis was undertaken to examine associations between these play behaviours and FMS. **Results:** For activity level, total skills score was negatively associated with very active only ( $\beta = -1.3080$ ,  $p = 0.0249$ ). For activity type, total skills score was positively associated with time spent in play without equipment ( $\beta = 1.1772$ ,  $p = 0.0021$ ), but negatively associated with locomotion activities ( $\beta = -1.1527$ ,  $p = 0.0202$ ). No associations were found between total skills score and group size or social interaction. **Implications:** The findings suggest that play behaviors during recess may not be associated with FMS development. Preschool children may need more structured play or a richer playground environment to foster the development of FMS (including a wider variety of fixed and mobile play equipment). However, future studies should consider more detailed systematic observation tools to assess play behaviors and observe children for a longer duration.