

Exploring the interplay between motor competence and physical fitness over time: A developmental perspective on physical health in children

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Abstract

Motor competence and physical fitness play an important role in children's physical health and growth. In 2008, Stodden and colleagues put forth a conceptual model describing the role of motor competence in physical activity, physical fitness and weight status. Furthermore, the authors hypothesized that the relationships among these health outcomes are reciprocal in nature and over time (Stodden et al., 2008). Over the past decade, numerous cross-sectional studies have explored these relationships and have generally found positive associations between motor competence and other aspects of health. However, as noted by Robinson et al. (2015), there is limited longitudinal evidence on the dynamics among motor competence, physical activity, physical fitness and weight status over time as proposed by Stodden and colleagues (2008). As such, this symposium will explore developmental trajectories of physical health in children with a focus on motor competence and physical fitness. The first presentation examines the relationship between motor competence and physical fitness from early childhood to early adulthood using meta-analysis. The second presentation investigates (in)consistencies between developmental pathways of physical fitness and norm scores derived from cross-sectional data. The third presentation explores the dynamics between motor competence, physical fitness and weight status over time to gain insights into the mechanisms underlying changes in these health outcomes. The final presentation focuses on the developmental pathways of weight status and the role of motor competence and physical fitness therein.