

Healthy development of children: a spiral of (dis)engagement?

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assembly**

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178 - Healthy development of children: a spiral of (dis)engagement?

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Background: Healthy development of children is under pressure. While governments, schools and organizations are trying to stimulate physical activity in children, reduce overweight and improve motor skills, they are facing challenges in finding effective strategies. The model proposed by Stodden et al. (2008) is an interesting framework for studying healthy development of children, as it encompasses the physical aspect (motor skill competence, physical fitness, weight status), the mental aspect (perceived competence) and a behavioral component (physical activity). Importantly, it acknowledges the developmental stages of children by including age. Therefore, this model serves as the basis for this study in which we are looking for insights to effectively influence healthy development of children. **Methods and Results:** We measured these five variables in a large sample ($N > 1000$) of children in the Netherlands (age: 4-12, 50% girls). Through structural equation modeling we searched for cross-sectional as well as 1-year longitudinal relationships. Our results showed concurrent relationships between all variables and a tipping point at which relationships emerged or strengthened. The results indicated that targeting motor competence at a young age might be a feasible way to ensure continued participation in physical activities. However, longitudinal analyses revealed no effect of motor skill competence (T1) on physical activity (T2). Physical fitness appeared to be more important as a potential mediator than perceived motor competence. As a follow-up study, the five variables will be analyzed via a person-centered approach (latent profile analyses). This will guide us towards tailoring future interventions to the specific needs of subgroups of children. Analyses of this study are ongoing and will be presented at the conference. **Conclusions:** Our multiple analyses have shed additional light on the complexity of healthy development of children. In the upcoming presentation we will unite our study findings and delineate implications for developing effective strategies.

Relevance

Children are showing delays in motor development and decreased physical activity participation. Better understanding of how relevant factors interact towards (un)healthy development of children, will provide us with tools to developing effective strategies to stimulate healthy development.

References

Stodden, D. F., Goodway, J. D., Langendorfer, S. J., Roberton, M. A., Rudisill, M. E., Garcia, C., & Garcia, L. E. (2008). A Developmental Perspective on the Role of Motor Skill Competence in Physical Activity: An Emergent Relationship. *Quest*, 60(2), 290–306