

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

Author(s)

den Uil, A.R.; Busch, V. ; Janssen, M.; Scholte, R.H.J.

Publication date

2024

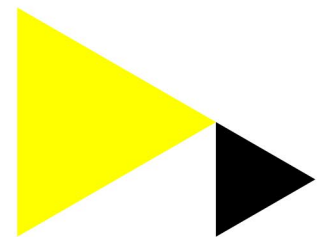
Document Version

Final published version

[Link to publication](#)

Citation for published version (APA):

den Uil, A. R., Busch, V., Janssen, M., & Scholte, R. H. J. (2024). *Healthy development of children: a spiral of (dis)engagement?*. 145-145. Abstract from DCD15-IMDRC6, Ghent, Belgium.

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please contact the library: <https://www.amsterdamuas.com/library/contact/questions>, or send a letter to: University Library (Library of the University of Amsterdam and Amsterdam University of Applied Sciences), Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

**International Society of Research and Advocacy for Developmental
Coordination Disorder (ISRA-DCD) – 15th biannual conference**

**International Motor Development Research Consortium (I-MDRC) – 6th
assembly**

DCD15 – IMDRC6

Ghent, Belgium

June 5-8, 2024

Contents

Conference Chairs and Committees

Keynotes

Symposia

Free Communications: Verbal and Poster

Index

Conference Chairs and Committees

Organisation Committee

Chairs:

Prof. Lynn Bar-On, Ghent University, Belgium

Prof. Frederik Deconinck, Ghent University, Belgium

Prof. Matthieu Lenoir, Ghent University, Belgium

International members:

Prof. Nancy Getchell, University of Delaware, USA

Prof. Boris Jidovtseff, University of Liège, Belgium

Dr. Dorine Van Dyck, Université Libre de Bruxelles, Belgium

Prof. Jill Zwicker, University of British Columbia, Canada

Local members:

Dr. Mireille Augustijn, Ghent University, Belgium

Dr. Eline Coppens, Ghent University, Belgium

Drs. Amy De Roubaix, Ghent University, Belgium

Grietje De Witte, Centre for Developmental Disorders, Belgium

Drs. Elly Van Hyfte, Ghent University, Belgium

Drs. Michelle Verhoeven, Ghent University, Belgium

Drs. Griet Warlop, Ghent University, Belgium

Scientific Committee

Prof. Lisa Barnett, Deakin University, Australia

Prof. Lynn Bar-On, Ghent University, Belgium

Prof. Frederik Deconinck, Ghent University, Belgium

Prof. Ann Halleman, University of Antwerp, Belgium

Prof. Boris Jidovtseff, University of Liège, Belgium

Prof. Katrijn Klingels, University of Hasselt, Belgium

Prof. Matthieu Lenoir, Ghent University, Belgium

Prof. David Stodden, University of South Carolina, USA

Prof. Hilde Van Waelvelde, Ghent University, Belgium

Prof. Fotini Venetsanou, National and Kapodistrian University of Athens, Greece

Prof. Jill Zwicker, University of British Columbia, Canada

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

A.R. den Uil, Amsterdam University of Applied Sciences, Radboud University; V. Busch, Public Health Service (GGD) Amsterdam; M. Janssen, Amsterdam University of Applied Sciences; R.H.J. Scholte, Radboud University

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