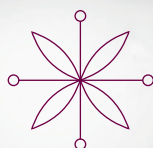


The Abstract Book of the 22nd European Conference on Developmental Psychology



August 25-29, 2025
Vilnius, Lithuania

<https://doi.org/10.15388/ECDP.2025>

The Abstract Book of the 22nd European Conference on Development Psychology

August 25–29, 2025

Vilnius, Lithuania



VILNIAUS
UNIVERSITETO
LEIDYKLA

2026

Scientific committee:

- Vilmantė Pakalniškienė (chair)
- Rima Breidokienė
- Lysanne Te Brinke
- Simona Caravita
- Goda Gegieckaitė
- Neringa Grigutytė
- Jessie Hillekens
- Willem Koops
- Beata Krzywosz-Rynkiewicz
- Francesca Lionetti
- Saulė Raižienė
- Lauryna Rakickienė
- Maja Schachner
- Dagmar Strohmeier
- Spyridon Tantaros
- Peter Titzmann

Local organizing committee:

- Vilmantė Pakalniškienė (chair)
- Roma Jusienė (co-chair)
- Rasa Barkauskienė
- Rima Breidokienė
- Goda Gegieckaitė
- Neringa Grigutytė
- Antanas Kairys
- Vita Mikuličiūtė
- Dalia Nasvytienė
- Saulė Raižienė
- Lauryna Rakickienė
- Monika Skerytė-Kazlauskienė
- Olga Zamalijeva
- Arūnas Žiedelis

Organisers:



Faculty of
Philosophy



Partners & Sponsors:



THE
WEMP
FOUNDATION
愛望基金



LMT

Lietuvos mokslo taryba

Konferenciją, kurios santraukos publikuojamos šiame leidinyje, iš dalies finansavo Lietuvos mokslo taryba (LMTLT), sut. Nr. S-MOR-25-11.

The authors are responsible for the content of their abstracts. The organizers assume no responsibility for the quality of the abstracts or the accuracy of the information.

Copyright © 2026 [Vilmantė Pakalniškienė, Roma Jusienė, Olga Zamalijeva]. Published by Vilnius University Press This is an Open Access article distributed under the terms of the Creative Commons Attribution Licence, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. <https://doi.org/10.15388/ECDP.2025>
ISBN 978-609-07-1244-3 (skaitmeninis PDF)

CAN SPECIALIZED PHYSICAL EXERCISE INTERVENTIONS IMPROVE PRESCHOOLERS' EXECUTIVE FUNCTIONS AND BEHAVIOR REGULATION? RESULTS FROM A LITHUANIAN KINDERGARTEN STUDY

**Ramune Dirvanskiene, Roma Jusiene, Rima Breidokiene,
Albertas Skurvydas, Daiva Majauskiene**

Institute of Psychology, Faculty of Philosophy, Vilnius University, Lithuania
ramune.dirvanskiene@fsf.vu.lt

Children who move less and have more screen time are more likely to experience problems with health, behavior, and response inhibition. It challenges the educational process, family relationships, and the children's emotional well-being. But can this be reversed with specialized interventions of physical activity?

This study aimed to investigate the effects of physical exercise programs on the executive functions of 4-6-year-olds. We administered cognitive tests to evaluate the children's working memory, switching, and inhibition skills, and the parents filled out the Strengths and Difficulties Questionnaire (SDQ), before and after the intervention. During the 10-week program, preschoolers were assigned into three groups: (1) experimental (E), who performed specialized exercises daily, incorporating aerobic activity and cognitive elements; (2) active control (AC), who performed simple aerobic exercises daily; and (3) passive control (PC), who did not do additional exercises.

101 preschoolers participated in our study (E N=35, AC N=32, PC N=34). The E and AC groups showed larger improvements on tests that measure inhibition, shifting attention, and cognitive control. The effect sizes for changes in the Head-legs test performance were medium ($d=0.503$ (E), $d=0.520$ (AC), and $d=0.313$ (PC)), and for the changes in the level reached on the Figure School test the effect sizes were medium to high ($d=0.509$ (E), $d=0.868$ (AC), and $d=0.271$ (PC)). Moderate decreases in scores on the SDQ's Social and Behavioral subscales were observed in the AC group ($d=0.355$ and $d=0.332$), however, non-significant.

Our sample was limited to urban children who regularly engage in extracurricular activities, thus such interventions could yield larger effects in preschoolers from lower socioeconomic backgrounds.

We conclude that daily physical activity improves some aspects of preschooler's executive functions, but no differences were observed between specialized exercises and general aerobic activity. The results of this study can be used to formulate recommendations for educational institutions.