

# Traditional or nature-based playgrounds for developing preschoolers' fundamental movement skills?

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# Introduction



As the allure of nature-based kindergartens grows, one important question arises: How do natural environments functioning as playgrounds impact the development of fundamental movement skills in children?

This brief provides insights from a pilot study conducted in a Danish kindergarten, led by Charlotte Skau Pawlowski and her team from the World Playground Research Institute.

This brief is particularly relevant for policy and decision makers involved in creating and maintaining playground environments for young children. It may also be of interest to researchers and professionals in the field of early childhood education and care, child development, and playground design.

Additionally, anyone interested in understanding the impact of different types of playgrounds on children's fundamental movement skills could also find value in this text.

## The study

In the pilot study, we compare fundamental movement skills among two kindergarten groups (3.5-5 year old):

### *Traditional Playground Group*

This group of children had access to a 2,700 m<sup>2</sup> traditional kindergarten environment with classic features like a climbing frame, slides, swings, a ball court, and more.

They had two hours of daily outdoor play, weekly outings, and an indoor space tailored for active play.



### *Nature-Based Playground Group*

Here, children had access to a 4,800 m<sup>2</sup> nature-based playground comprising hills, grass, and a forest section, adorned with a few play features like a playhouse, slide, soccer goals, boards, and wheels.

They had four hours of daily outdoor play, no weekly trips, and no indoor space equipped for active play.



## Results

A total of 28 children aged 3.5 to 5 years participated in the pilot study. We assessed the children's gross motor skills using relevant testing tools. Surprisingly, the study revealed no significant difference in fundamental movement scores between the two groups of children.

## Key take home message

Drawing from this pilot study, it appears that the importance of space and diversity may outweigh the influence of exposure to nature.

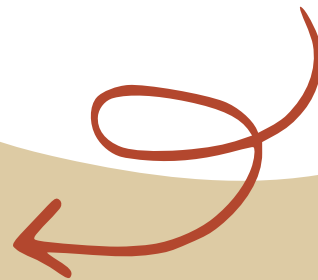
This suggests that if children in kindergartens with traditional playgrounds have access to expansive playgrounds offering a diverse range of play opportunities, along with indoor spaces for active play and frequent outdoor excursions, their fundamental motor skill development could be on par with that of children in nature-based kindergarten environments.

Looking ahead, there's a clear need for more extensive and long-term studies with larger sample sizes to explore the impact of diverse kindergarten designs and environmental features—ranging from nature-based to traditional settings—on children's motor skill development.



## The brief is based on

Pawłowski, C. S., Vibild Lammert, A., Schipperijn, J., & Toftager, M. (2024). Nature-Based or Traditional Kindergarten to Develop Fundamental Motor Skills? A Pilot Study. *Journal of Motor Learning and Development* (published online ahead of print 2024).



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All briefs focus on topics related to the development and design of playground as well as the impact of playgrounds on children's physical activity, mental and social health and motor skills.

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