



Improving young children's physical activity: What works in Early Childhood Education & Care?



KEY MESSAGES:

- Physical activity strategies delivered in early childhood education and care (ECEC) settings are generally effective in improving children's physical activity levels.
- There is credible systematic review evidence to support some recommended strategies, such as providing regular physical activity opportunities, creating active environments, and training educators.
- There are opportunities to strengthen evidence for many physical activity strategies recommended in current ECEC guidelines – this could involve updating systematic reviews and conducting new research studies.

What is this review about?

Strategies delivered in Early childhood education and care (ECEC) settings have the potential to increase young children's physical activity levels.

We wanted to find out:

- which strategies are effective at improving the physical activity levels of children under 6 years
- whether strategies recommended in guidelines for ECEC settings have been shown to be effective at improving physical activity.

Background

Children's physical activity habits continue into adulthood and can help to prevent obesity, heart disease, diabetes and some cancers. Physical activity can also refine children's motor skills, enhance their concentration, and improve their mood and behaviour. ECECs (including pre-schools, long-day care centres, nurseries, kindergartens and family day care) are an ideal setting to promote physical activity for young children.

The World Health Organization recommends at least three hours per day of physical activity for children aged 1 to 4 years, including at least one hour of moderate to vigorous activity for 3 to 4-year-olds. However, studies show that many young children are not this physically active. In Australia, this includes 39% of 2 to 5-year-olds, and 90% of 5-year-olds.





How did we carry out the review?

We conducted an umbrella review, also known as an “overview of reviews” or “review of reviews”. We systematically searched for credible systematic reviews of studies assessing the impact of different ECEC based strategies on children’s physical activity. ECEC strategies could include those targeting service regulations, policies, environments, education or communication about physical activity. We then compiled the results into one summary.

What did we find?

We found 10 reviews including 56 relevant studies.

Overall, most of the systematic reviews we looked at found that programs in ECECs were effective in improving children’s physical activity levels. This could be through an increase in the total amount of physical activity; an increase in the amount of moderate to vigorous physical activity; or a decrease in the amount of time spent sitting still.

We found credible review evidence to support some of the physical activity strategies recommended in current sector guidelines such as: providing opportunities for children to be more physically active; training ECEC educators around child physical activity; educators instructing, encouraging and actively participating in physical activity; and creating a physical environment that promotes activity.

However, for most of the recommended strategies, we found no systematic review evidence of effectiveness. We also found that providing educational materials to parents is an effective strategy to increase child physical activity but is not included in guidelines for the setting.

About us

This research was conducted by researchers at the University of Newcastle, Hunter New England Population Health and the National Centre of Implementation Science (NCOIS). NCOIS is an NHMRC funded Centre for Research Excellence associated with the University of Newcastle. The research is led by Associate Professor Serene Yoong and will form part of a PhD thesis by Melanie Lum.

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Full article

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