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ORIGINAL ARTICLE

Physical Activity and Fundamental Motor Skill Outcome: A Quasi-Experimental Study Among Rural Pre-schoolers in Kuching, Sarawak

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Abstract

Fundamental movement skills (FMS)-oriented school-based intervention allows children to be more competent and interested to participate in a wider range of physical activities. This study aimed to determine the physical activity and fundamental motor skills outcome from a school-based intervention programme among rural preschoolers in Kuching. It used a quasi-experimental non-randomised design with a total of 153 children from 9 government kindergartens. For physical activity level, there was a significant difference between the intervention and control group at the 3 months, F (1, 151) = 3.90, $p = 0.05$, with a $\eta^2 = 0.025$ and 6 months-time duration, F (1, 151) = 55.70, $p < 0.001$, with a $\eta^2 = 0.27$. The same pattern of interaction effect (time * group) was also found in gross motor skill, F (2, 150) = 80.9, $p < 0.001$, $\eta^2 = 0.52$, where the mean score in intervention group was greater than in control group. It is important to understand in depth each of the skills components involved in locomotor and object control and also its differences between the boys and girls, as it can help in planning of the module of an intervention programme. Object control skills have higher predictive value in engaging in wider range of PA which could be the possible reason why boys are more active than girls.

Keywords Physical activity · Motor skills · Preschool children · Rural area

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