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# 6周每天进行运动电子游戏课程对四年级学生平衡能力的影响

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# The effects of a daily, 6-week exergaming curriculum on balance in fourth grade children

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摘要 平衡性是运动的基本条件，对参加体力活动的能力至关重要。学校开展运动电子游戏课程可能有助于提高儿童的平衡性或稳定性。在进行本研究过程中，研究人员在某小学专门建造了一个运动电子游戏中心，采用特别设计用于提高稳定性的运动电子游戏课程对四年级学生进行测试。该课程共持续6周，每周5天，每天进行34 min。该研究还设有两个对照组：第一组的体育课注重提高学生的灵敏性、平衡性和协调性；另一组则是常规的体育课。与上常规体育课的学生相比，参加运动电子游戏课程的学生6周后稳定性明显提高，第一对照组学生的稳定性也明显提高。在干预性测试前后，女生的稳定性均优于男生。本研究表明：运动电子游戏是体育课上提高学生稳定性的一种非常实用的方法。

关键词： 平衡性 儿童 小学 运动电子游戏 基本运动技巧

Abstract: Balance is an essential component of movement and is critical in the ability to participate in physical activity. Developing an exergaming curriculum for schools has the potential to improve balance or postural stability in children. In this study, a purposely-built exergaming center in an elementary school was used to test fourth grade students with a specially designed exergaming curriculum oriented toward improving postural stability. The program was implemented over a 6-week period, 34 min per day, 4e5 days per week. Two control groups were used: (1) a physical education (PE) class geared toward agility, balance, and coordination (ABC) improvement, and (2) a typical PE curriculum class. Exergaming students improved their postural stability significantly over a 6-week period compared to those in the typical PE class. Improvements in postural stability were also evident in the ABC class. Postural stability in the girls was better than the boys in all pre- and post-intervention tests. This study demonstrates that exergaming is a practical resource in the PE class to improve postural stability.

Significant points: This study was conducted at the Canadian Exergaming Research Centre (www.ucalgary.ca/exergaming) and was designed to explore the school-based application of exergaming technology as it relates to balance. Based on the results of this original research, the use of exergaming is a viable option to improve postural stability in children.

Key words: Balance Children Elementary school Exergaming Fundamental movement skills

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