

Abstract Information

The influence of exergaming on the functional fitness in overweight and obese children : physical activity, health and wellness

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- **Abstract:** The rapidly growing rate of childhood obesity makes it imperative to develop an effective intervention programme for obese children. This study was designed to improve overweight and obese children's functional fitness through exergaming. The study consisted of a 6-week intervention on the Nintendo Wii. Participants were aged between 9-12 years old. Subjects were assigned to three groups according to location: experimental group (n=11), control group A (n=10) and control group B (n=10). The experimental group participated in the exergaming intervention programme, control group A had access to traditional video games and control group B continued with their everyday life activities with no intervention. Bruininks-Oseretsky protocols were used to assess the functional fitness of the subjects. Statistical calculations revealed that the experimental group showed significant improvement in their level of functional fitness ($p<0.05$). Coordination, reaction time, speed and agility increased by magnitudes of 28%, 94% and 37% respectively. Both the control groups displayed marginal increases in their functional fitness that were not significant. These results support the concept that exergaming can be used as an alternative means to improve the level of functional fitness as well as promoting physical activity in children.