Abstract

Background: Physical inactivity has been identified as an important public health concern for children. An increasing sedentary way of life is directly related to obesity; hence, prevention and management of childhood obesity are commonly based on lifestyle interventions wherein increasing physical activity is one of the main targets. The use of exergames can be useful in promoting physical activity, but it is necessary more research. This study analyzes the effects of an exergaming platform that involves brisk walking, on perceived exertion, self-efficacy, positive expectations and satisfaction in a sample of clinically obese children, as compared with normal weight children. Physiological variables like heart rate, oxygen consumption and energy expenditure were also measured. Method: A total sample of 42 children was recruited. Children were randomized into those walking on a treadmill and those using a treadmill with the support of the exergaming platform (Wii-Fit). Results: The obese children scored significantly higher in expectations and satisfaction in the exergame condition but not in self-efficacy, perceived exertion or physiological measures. Conclusions: These results suggest that this exergaming platform could be a tool to assist obese children in the practice of brisk walking as part of a programme designed to treat obesity.

Keywords
Physical activity, Video games, Paediatric obesity, Acceptability.