

Dance pad exercise for a healthy weight in childhood

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Video games are significant to the increase in childhood obesity. They may also prove to be part of the solution as making exercise fun is a key to motivating children to participate in energy expending activities. This pilot study tested the effect of a daily 20 minute dance pad exercise on Body Mass Index (BMI), waist circumference, and quality of life of 7-11 year old children who were above the 94th percentile for BMI for age and gender. Thirty-five African American children participated with control (n=12) and intervention (n=23) groups in 2 urban public schools for an academic year. Energy balance theory was the framework. Control group children had no extra exercise. The hypotheses were children who perform dance pad exercise for two semesters will have a greater decrease in BMI than children who do not perform the exercise, and children who perform dance pad exercise for two semesters will report higher quality of life (PedsQL™) than children who did not perform the exercise. Changes in waist sizes were tracked. Statistical analysis with repeated measures multiple regression did not support the hypotheses. Waist circumference changes for the group were not significant, however, subgroup analysis (n = 9) found a trend toward decreasing BMI and waist circumference in those subjects who participated in more than 100 days of exercise. Small sample sizes preclude further statistical analysis; however, positive results in children who participated frequently in the study indicate clinical significance. In addition, 3 children with asthma demonstrated no exacerbations of asthma during or after the morning exercise sessions. A focus group with 7 school teachers in the intervention group school identified 5 themes among the children who exercised: improvements in attention to task, behavior, alertness, self esteem, and social skills. Children also improved in coordination and aerobic endurance. Dance exercise in schools needs to be explored for health benefits. This study was funded by the Midwest Nursing Research Society.

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