

MASTER'S THESIS

Physical activity in school environment for students with mental retardation

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Physical Activity in School Environment
for Students with Mental Retardation

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for the degree of
Master of Philosophy

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ABSTRACT

The purpose of this study was to investigate the amount of physical activity for primary 4 to 6 students with mental retardation (MR) in special education school environment. Eighty-seven children (55 children with mild MR and 32 children with moderate MR) were randomly selected from 3 schools with different open-space physical sizes. The TriTrac-RT3 accelerometers were utilized to collect activity data of the subjects on 5 consecutive school days from 9:00 a.m. to 3:30 p.m. A 2 (mild, moderate of MR) X 3 (3 schools environment) ANOVA on the mean amount of activity for five school days without structural physical activity setting indicated that there was no interaction effect in physical activity between the types of MR and three school environments. However, there was significant main effect on three different school environments but there was no main effect on the types of MR. Results showed that the amount of students' physical activity was highest with the school with larger open space area and more fitness facilities offered for students under unstructured setting. Moreover, the school days with structural physical activity setting (PE lessons and extra curricula activity) had higher mean amount of physical activity than those without structured physical activity setting. Lastly, System for Observing Fitness Instruction Time (SOFIT) was used to categorize the physical behavior of the students for 30 physical education (PE) lessons and to validate observation data with the criterion variable of Tritrac activity counts. SOFIT scores correlated positively and significantly (r ranged from 0.42 to 0.75) with the Tritrac activity counts, which suggested that the SOFIT was a valid tool to measure the amount of physical activity during PE lessons of students with mild and moderate MR. The results by SOFIT revealed that students' physical activity time on moderate to vigorous physical activity (MVPA) at the PE lessons was relatively short. Suggestions were made on ways to increase the time on MVPA during PE lesson and recess as well as ways to increase physical activity opportunity in schools.

Keywords: physical activity, students, mental retardation

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