

## DOCTORAL THESIS

# Effects of a structured physical activity program on motor performance and psychosocial behaviors of primary school students with intellectual disability

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**Effects of a Structured Physical Activity Program on Motor Performance and  
Psychosocial Behaviors of Primary School Students with Intellectual Disability**

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**for the degree of**

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## ABSTRACT

The study aimed to investigate the impact of an 8-week structured physical activity program (PA-8) on selected motor performance and psychosocial behaviors of lower primary school students with ID and to estimate whether generalization of psychosocial behaviors occurred. This study took on a quasi-experimental pre-post test design with a training group (TG) and control group (CG) comparison. Thirty students with mild intellectual disability (ID) from a special school in Hong Kong took part in the study. For the motor performance data, the Movement ABC-2 (Age band 2) (Hederson, Sugden, & Barnett, 2007) was used to assess the balance and hand-eye coordination of the participants before and after the PA-8 program. Data on the psychosocial behaviors were collected from systematic observation with the Checklist for Pupil Evaluation (Wright & Sugden, 2002) during the training context and by the teacher's recall and rating in the classroom context. Qualitative findings were obtained from interviews with parents of the TG. The ANCOVA results suggested that there were significant differences in post-test mean balance scores ( $F(1, 25) = 9.63, p = .005$ ) and emotional self-control scores ( $F(1, 25) = 7.61, p = .011$ ) between the TG and the CG. The correlation coefficients of the gain scores [ $r = .41, n = 16, p = .12$ ] in emotional self-control of the TG in the training context and classroom context suggested that there was a possibility that the emotional gains in the training context

coincided with gains in the classroom context. Parents of the participants also reported that their child showed improvement in emotion, social and physical aspects after having participated in the PA-8. Although the results for social interaction were not statistically significant in both the training context and the regular classroom context, the TG participants appeared to have improved in this area in both settings (increased 20% in the training context; increased 16% in the regular classrooms) after participating in the PA-8, as compared to the CG (decreased 2% in the training context; decreased 5% in the regular classrooms). The findings of this study suggested that a structured PA program could have positive effects on motor performance and psychosocial behaviors among young students with ID.

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