

The effectiveness of Multimove: a fundamental motor skill intervention for typically developing young children

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Abstract

Objective: A decline in physical activity level and motor skills of pre-schoolers has been observed in recent studies. These findings underline the need for motor skill interventions in early childhood settings. This study examines the influence of the Multimove program (a theoretically underpinned fundamental motor skill programme) in 5- to 6-year-old children.

Methods: The intervention group (n = 321; 162 ♂ and 159 ♀; mean age = 5.93; SD = 0.58) received a weekly 45- to 75-min motor skill session over a period of 30 weeks, in addition to the regular physical education curriculum; the control group (n = 166; 83 ♂ and 83 ♀; mean age = 5.97; SD = 0.57) did not receive additional practice. Measures of the locomotor and object control skill, were assessed before and after the intervention using the Test of Gross Motor Development 2nd edition (TGMD-2). Likewise, measures of gross motor coordination were taken on both occasions using the Körperkoordinations Test für Kinder (KTK). This study also included a 4-month follow-up period. The retention-tests of both TGMD-2 and KTK have recently been administered and the data are now being analysed.

Results: Preliminary analysis yielded a significant Group x Time interaction for the locomotor ($F = 19.987$; $p < 0.001$) and object control ($F = 13.958$; $p < 0.001$) scales. The intervention group revealed significantly higher locomotor and object control scores at the post-test than at pre-test whereas the control group only improved in object control skill over time. However, no significant Group x Time interaction was found for gross motor coordination ($F = 2.318$; $p = 0.129$). Further analysis (age-groups, standard scores and retention-test data) will be presented at the conference.

Conclusion: Preliminary findings show that the Multimove program has a positive effect on the fundamental motor skills of typically developing children, but does not seem to improve the gross motor coordination in this age group.