

Organization LUND UNIVERSITY School of Education Malmö University S-205 06 Malmö, Sweden	Document name DOCTORAL DISSERTATION	
	Date of issue September 19 th , 2003	
	CODEN: LUSDAG/(SAPP-1095) 1-238 (2003)	
Author(s) Ingegerd Ericsson		
Title and subtitle Motorik, koncentrationsförmåga och skolprestationer - En interventionsstudie i skolår 1-3/ Motor skills, attention and academic achievements - An intervention study in school year 1-3		
Abstract The aim of this thesis is to study effects of an extension of physical education/activity and motor training on motor skills, attention and cognition during a period of three years. Another aim is to develop a test, MUGI observationschema, which could be useful in charting motor skills of school pupils. The study has two intervention groups (n=152) that have physical activity and motor training one lesson every school day and when required extra motor training one lesson per week. One control group at the same school (n=99) has the school's ordinary physical education two lessons per week. The method is hypothetic-deductive and the study has three hypotheses: 1. Children's motor skills will improve with extended physical activity and extra motor training in school. 2. Children's attention will improve by extended physical activity and extra motor training in school. 3. Children's academic achievements in Swedish and Mathematics will improve with extended physical activity and extra motor training in school. The results from motor skill observations confirm the first hypothesis. Already after one year there are rather large differences between intervention and control group (Cramér's index 0.24). In school year three the differences are large (Cramér's index 0.37) and largest in the variable balance/bilateral coordination. 68% of the pupils who have small or large difficulties in attention, according to teachers, also have small or large deficits in motor skills. The second hypothesis of the study, that children's attention will improve by extended physical activity and extra motor training in school, cannot be confirmed by results in this study. Although the pupils in intervention groups have better attention ability in school year two, in both variables attention/hyperactivity and impulse control as well as in attention totally, than the pupils in control group, the differences do not remain in school year three, which makes it hard to draw any conclusions about whether the pupils' attention has been affected by the intervention or not. The third hypothesis concerning academic achievements can be confirmed by several results in this study. The pupils in the intervention groups have better results than the pupils in the control group in the national tests of Swedish in school year two (Cramér's index 0.29), especially concerning writing and reading. They also have better results in the national tests of Mathematics (Cramér's index 0.21) than pupils in the control group, especially concerning room conception and number conception/thinking proficiency. More controlled studies are required in order to be able to make general conclusions about the effects of extended physical education /activity and extra motor training in school.		
Key words Academic achievements, attention, cognition, motor skill observations, motor training, physical education		
Classification system and/or index terms (if any) Eu, Doea, Dode, Vhb		
Supplementary bibliographical information		Language Swedish, with a summary in English.
ISSN 1651-4513 MALMÖ STUDIES IN EDUCATIONAL SCIENCES		ISBN 91-85042-03-X
		Price 250 SEK
		Number of pages 236
		Security classification

Distribution by (name and address)

I, the undersigned, being the copyright owner of the abstract of the above-mentioned dissertation, hereby grant to all reference sources permission to publish and disseminate the abstract of the above-mentioned dissertation.

Signature _____

Date: August 13th, 2003

MOTORIK,
KONCENTRATIONSFÖRMÅGA
OCH SKOLPRESTATIONER

En interventionsstudie i skolår 1-3

Av

INGEGERD ERICSSON

AKADEMISK AVHANDLING

som för avläggande av filosofie doktorsexamen vid samhällsvetenskapliga fakulteten, Lunds universitet, kommer att offentligens försvaras fredagen den 19 september 2003, kl. 13.15, i sal E 122 på Lärarutbildningen, Malmö högskola.