

More physical activity in school – a winning concept

Results from a three-year intervention in Sweden

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Background

Physical activity in childhood has important influences on future health. Still children are more physically inactive today than some decades ago. The school provides an important setting in order to promote an active life. In a Swedish school project one intervention school has introduced increased physical activity, from 1–2 to 4–5 lessons a week, while another school has been used as a norm school.

Aim

Investigate the development of physical capacity and attitudes, and possible associations to the children's quality of life (QOL).

Methods

The analyses are based on eleven physical tests (aerobic fitness, muscular strength, flexibility, balance and motor skills), anthropometric measures – Body Mass Index – and data from repeated questionnaire surveys. A logistic regression model was used to analyse relations to QOL, including various aspects of health, attitudes, behaviours, relations and lifestyle factors. In keeping with the salutogenic perspective of the study, Positive Odds Ratio¹⁾ (POR) was used as a positive outcome of the analysis instead of odds ratio. The study groups consisted of around 200 children 8–12 years at baseline (year 2000) as well as at follow-up (year 2003). The participation rate was 99%.

Table 1. Predictors of good quality of life (p<0,05)

	POR
Good subjective health	3.0
Getting on well with teachers	2.7
Getting on well with classmates	4.4
Feeling appreciated by friends	2.2
High self-reported skills in physical education	3.1
Good self-reported condition	2.9
Exercise in a sport club	3.0

Conclusion

The prerequisites to increase physical activity in school have been shown to be very good, as ...

1. ...physical activity was shown to be an important component in children's QOL besides the previously well-known health and social network
2. ...increased physical activity gave positive effects in the children's physical capacity and overweight development
3. ...it was shown possible to increase the amount of physical activity in school considerably without the children becoming negative.

Table 2. Comparison²⁾ between baseline and follow-up, age-standardised

	Intervention school	Norm school	p-value	
Physical index ^{a)}	1,09	-1,19	0,003	=> better results in physical tests in intervention school
BMI-residual ^{b)}	-0,32	0,25	0,033	=> lower BMI increase in intervention school

a) Especially endurance performance and motor skills
b) According to Cole et al³⁾.

Table 3. Percentage of the pupils enjoying physical activity in school

		Change baseline – follow-up
Boys	Intervention school	72–86 % => +19%
	Norm school	81–87 % => +7%
Girls	Intervention school	64–72 % => +13%
	Norm school	63–72 % => +14%

References

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