



HEALTHY CHILDREN IN SOUND COMMUNITIES' – FOUR COHORTS OF LONGITUDINAL INTERVENTION PROJECT IN PRIMARY SCHOOLS

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INTRODUCTION

The aim of this intervention study is to implement a strategy to prevent and promote a healthy lifestyle in order to counteract current developments, which show an increase of motor deficits and obesity in elementary school children. A weekly schedule including curricular and non-curricular physical and health education lessons is established to target an age-appropriate BMI as well as the integration of daily physical activities (Naul et. al, 2012).

METHOD

In four cohorts 1212 German and 733 Dutch children participate in the project. Children take part annually in a motor test including measuring BMI and do surveys about life-quality, media consume, physical activity, physical self-concept and class-climate. Parents fill out a questionnaire about nutrition and physical activity twice (after two years and at the end of intervention).

RESULTS AND DISCUSSION

Instead of a control group, data about motor ability is compared with German national reference norms (quintiles). Hereby children of each cohort show a significant higher level of performance in five (cohorts one and three) and seven (cohort 2) of seven motor tests. Up to 30% of children that were obese starting the intervention leave highest BMI level during four year intervention (cohort 2), Significant changes for

media screen time, parents' behavior and attitudes, and physical activity (e.g. school way) can be shown. Intrapersonal evaluation of physical self-concept and group climate are stable on a high level and show significant correlations with BMI and motor abilities. Significant risk indicators for high BMI and physical inactivity on different levels (schools, parents, children) can be identified.

The results underline the impact of structured community-based intervention programs including quality physical education to support an active and healthy lifestyle of young children. Not only physical parameters like motor ability and BMI can be changed by the program. Also, social and intra-individual factors are influenced by the intervention outcome.

CONCLUSIONS

Community based intervention studies like HCSC that focus on a multi-dimensional approach including schools, parents, sport clubs and environment, are successful in fighting obesity and counteract physical inactivity in childhood. Further studies are needed to confirm the results.

REFERENCES

- Naul, R., Schmelt, D., Dreiskämper, D., Hoffmann, D. & L'Hoir, M. (2012). Healthy children in sound communities (HCSC/ gkgk) – a Dutch-German community-based network project to counteract obesity and physical inactivity. *Family Practice*, 29 (1), pp. 110-116.