

Socio-Economic Analysis Of Familial Influence On Sport Motor Performance Of Preschool Children

Schlesinger, Torsten; Schulz, Henry

Chemnitz University of Technology, Germany

E-mail: torsten.schlesinger@hsw.tu-chemnitz.de

Aim of the research/project

The development motor performance of children has been an important issue attracting public and scientific attention over the last decades. Many concerns about declining motor performance in the past few generations of youth are evident in the literature. This is sometimes interpreted as an indicator of a general decline in children's physical fitness, and therefore, of a health-protecting resource (e.g., Bryant, Duncan, & Birch, 2014). Besides the question of secular trends, potential structural variables influencing motor performance of children are of interest, as well. Mainstream explanations on differences in the motor performance of children generally refer to social disparities and resulting disadvantages of lower social status groups (Pampel, Krueger, & Denney, 2010). The socio-economic status (SES) of a family is seen as a key parameter and current findings reveal that children from families with higher SES exhibit a higher motor performance compared with those of lower SES (e.g., Klein, Fröhlich, Pieter, & Emrich, 2016). This study examines more thoroughly to what extent preschool children differ in terms of their motor performance depending on relevant family factors that are considered simultaneously: available parental resources and activity-related socialization efforts and their relationship.

Theoretical background or literature review

The study based on Bourdieu's theory (1986) of mutual transformation of economic, cultural and social capital. Thus, available family resources also determine investments in physical or sporting activities to promote children's health, fitness or motor skills. Extending the resource investment model, the (variable) transformation of available resources into activity-related socialization practices within the family seems also to be crucial for motor performance of children. This socialisation practices occurs through a combination of direct and indirect practices used by parents to influence a children's sporting and physical activity. Accordingly it should be noted that "status-specific habits" exist (Bourdieu, 1986) that includes socialization into predispositions to behave in particular ways among varied SES.

Methodology, research design, and data analysis

The data of this study are from the project 'Complex general school examinations' (KOMPASS) of children in the city of Chemnitz (in the state of Saxony, Germany). In a period from 2011 to 2013, all preschool children participated in a school entrance examination. This study comprises data of $n = 2.484$ preschool children (50.3% female; age: $M = 6.6$ years) tested for their motor performance in a period from 2011 to 2013. For analysing the motor performance of children, the German Motor Test (DMT; Bös et al., 2009) as a valid measurement with seven different tasks was used. Family resources, children's sport and physical activities, parental attitudes on sporting and physical activity were recorded through the parents' questionnaire. Statements on school and professional education, job position and household income were applied. Based on these indicators the socio-economic status was calculated as an index and categorized into three status groups (low, middle, high). Behind descriptive and bivariate statistics, influencing factors on motor performance of preschool children was analysed by estimating linear regression models (assumptions for linear regression models are met) both 'within' and 'between' the different SES groups.

Results, discussion, and implications/conclusions

Descriptive findings showed that families with higher SES show a higher degrees of psychical activity and participation in sports that explains the better motor performance of preschool children of the higher SES group ($F = 30.56$; $p \leq .0005$; $n^2 = .03$). Looking at the influences *within* the different status groups, the linear regression show that families with lower social status have a higher variability with regard to sport and activity-related practices as influencing factors. The explained variance of the same model differ for the three status groups (low: $R^2 = .19$, middle: $R^2 = .07$, high: $R^2 = .10$). Furthermore, regression analyses between the different status groups reveal that the 'pure' effect of the social status hardly contribute to the differentiation of children's motor performance if other variables such as parents' attitude to physical activity are controlled.

These results are relevant when considering specific prevention efforts concerning the motor performance of children. In particular, institutions and schools should be focused in those catchment areas that include a high share of socially disadvantaged population groups.

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