Motor competence and motivation of children aged 4-6 years: a cross-sectional study

Pim Koolwijk 1,2, Remo Mombarg 3, Geert Savelsbergh 4, Sanne de Vries 2
1 Haagse Academie voor Lichamelijk Opvoeding, Faculteit Gezondheid, Voeding & Sport, De Haagse Hogeschool, Den Haag, Nederland
2 Lectoraat Gezonde Leefstijl in een Stimulerende Omgeving, Kenniscentrum Health Innovation, De Haagse Hogeschool, Den Haag, Nederland
3 Instituut voor sportstudies, Hanzehogeschool Groningen, Groningen, Nederland
4 Faculteit Gedrag- en Bewegingswetenschappen, Vrije Universiteit Amsterdam, Amsterdam, Nederland

Emailadressen:
p.koolwijk@hhs.nl
S.I.deVries@hhs.nl
R.mombarg@pl.hanze.nl
g.j.p.savelsbergh@vu.nl

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Introduction
To increase the chances for children to be physically active for life they must develop physical literacy (PL) at an early age. Within the concept of PL, motor competence is of great importance. Several studies showed a positive relationship between physical activity and motor competence, regardless of gender and skill level. Physical activity is also related to perceived motor competence and motivation of children. Whether these relationships are already present at young age is unknown.

Aim
Gaining insight in multiple dimensions of PL in young children would enable us to develop targeted interventions and better support the reciprocal relationship between motor competence and physical activity (Figueroa & An, 2017). Therefore the purpose of this study is to describe the actual motor competence, perceived motor competence and motivation of children aged 4 to 6-years.

Method
Actual motor competence, perceived motor competence and motivation were measured among 1500 young children (mean age 5,28, SD 0,67 years) from 37
primary schools in three regions of the Netherlands. Actual motor competence was measured by using the Athletic Skills Track (AST-1). Time (in seconds) to complete the track were converted into Motor Quotient (MQ) scores. The Pictorial Scale of Perceived Movement Skill Competence for Young Children (PMSC) was used for determining motor confidence and a Visual Analogue Scale (VAS) for motivation ranging from 1-5. In addition, gender, age and Body Mass Index (BMI) were measured. Descriptive statistics were used to describe the data. Next, differences by age, gender and BMI category will be tested and correlations between the three dimensions of physical literacy will be calculated.

**Preliminary results**

In general boys had higher MQ scores than girls (boys: 102 (4 year), 103 (5 year) and 100 (6 year); girls: 98 (4 year), 100 (5 year) and 98 (6 year)). No such differences were found for perceived motor competence (boys: 3.23, 3.38 and 3.40 for 4-, 5- and 6-year olds respectively; girls: 3.28, 3.29 and 3.36, respectively) and motivation (boys: 4.37, 4.31 and 4.31 for 4-, 5- and 6-year olds; girls: 4.35, 4.44 and 4.47, respectively). At the conference the complete data set and other analyses will be presented.

**Conclusions & Implications**

The results show that levels of actual motor competence for both boys and girls can be categorized as ‘average’ with boys scoring slightly higher compared with girls. Both levels of perceived motor competence and motivation were high for boys and girls.

**References**

