

Importance and value of motor domain learning in secondary schools: German pupils' assessment in comparison with other domains in their PE curriculum

Roland Naul, Stefanie Dahl, Nils Neuber, Michael Fahlenbock & Daniel Möllenbeck

Background

- Up to five different domains in teaching PE at school with different components and domains (e.g. reviews on state of the art of PE on international level [1, 2, 3] or international monitoring projects from ICSSPE 'World-wide-Reviews', UNESCO 'QPE', European Council 'PE Development at Schools in Europe')
- Three essential domains: physical-motor domain, psycho-social domain, mental-cognitive domain
- Aim of this pilot study as part of the European project 'EuPEO': to address a new instrument of measurement assessment of components in domains of teaching PE by pupils of secondary schools: **'European Pupil Questionnaire' (EPQ)**



Sample

- N = 388 PE students
- N = 11 schools
- Age = 15.21 ± 1.25 years
- Female = 59.4 %

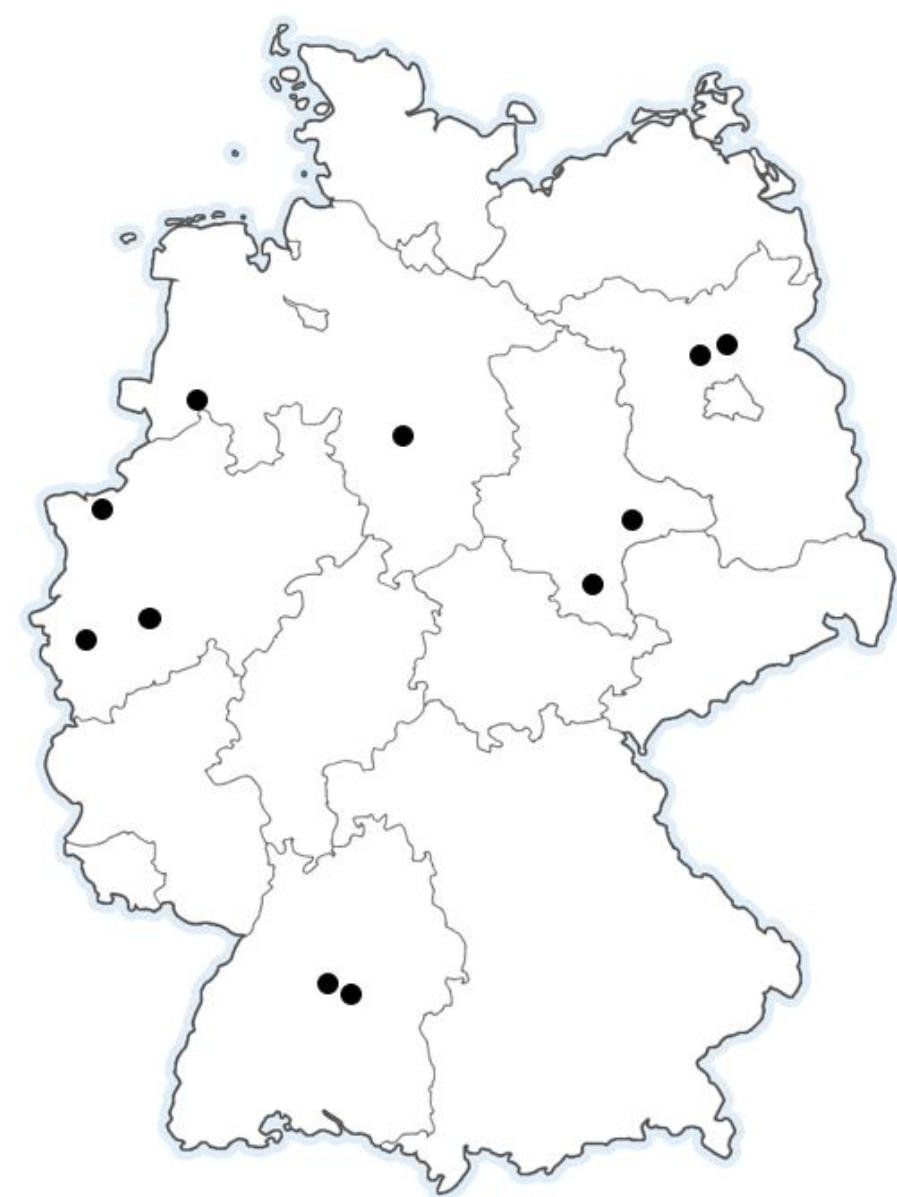
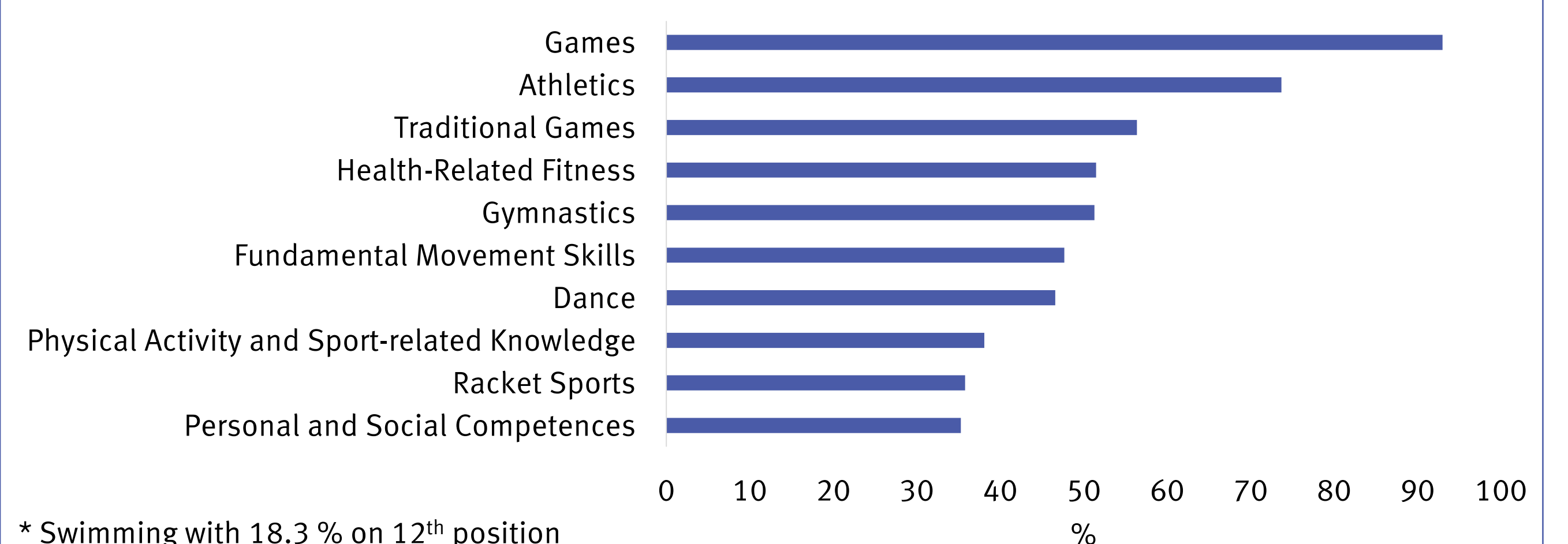


Figure 1. Location of Schools

Results

- Data collection between January and April 2019
- Data analysis with SPSS 24



* Swimming with 18.3 % on 12th position

Figure 2. Top Ten Contents taught in PE in the last compulsory school year

Instrument

European Pupil Questionnaire (EPQ)

Dimensions

- Curriculum Flexibility
- Facilities, Equipment, Resources
- Community Partnership

Whole Active School Approach

- Curricular: **Physical Education** & Active Learning in other subjects
- Extra-Curricular: School Sports & PA in Recess
- Co-Curricular: After School PA & Active Commuting

Domains of PE

- Social (e.g. teamwork, respect)
- Psychological (e.g. self-esteem, body image)
- Behavioural (e.g. punctuality, effort)
- Motor (e.g. skills, sports techniques)
- Health-Related Fitness (e.g. strength, stamina)
- Cognitive (e.g. understanding, memory)

✓ Please rate using the **3-point** Likert scale the extent to which you **see** the following learning outcomes in your Physical Education experiences.

✓ Please rate using the **5-point** Likert scale the extent to which you **value** the following learning outcomes in your Physical Education experiences.

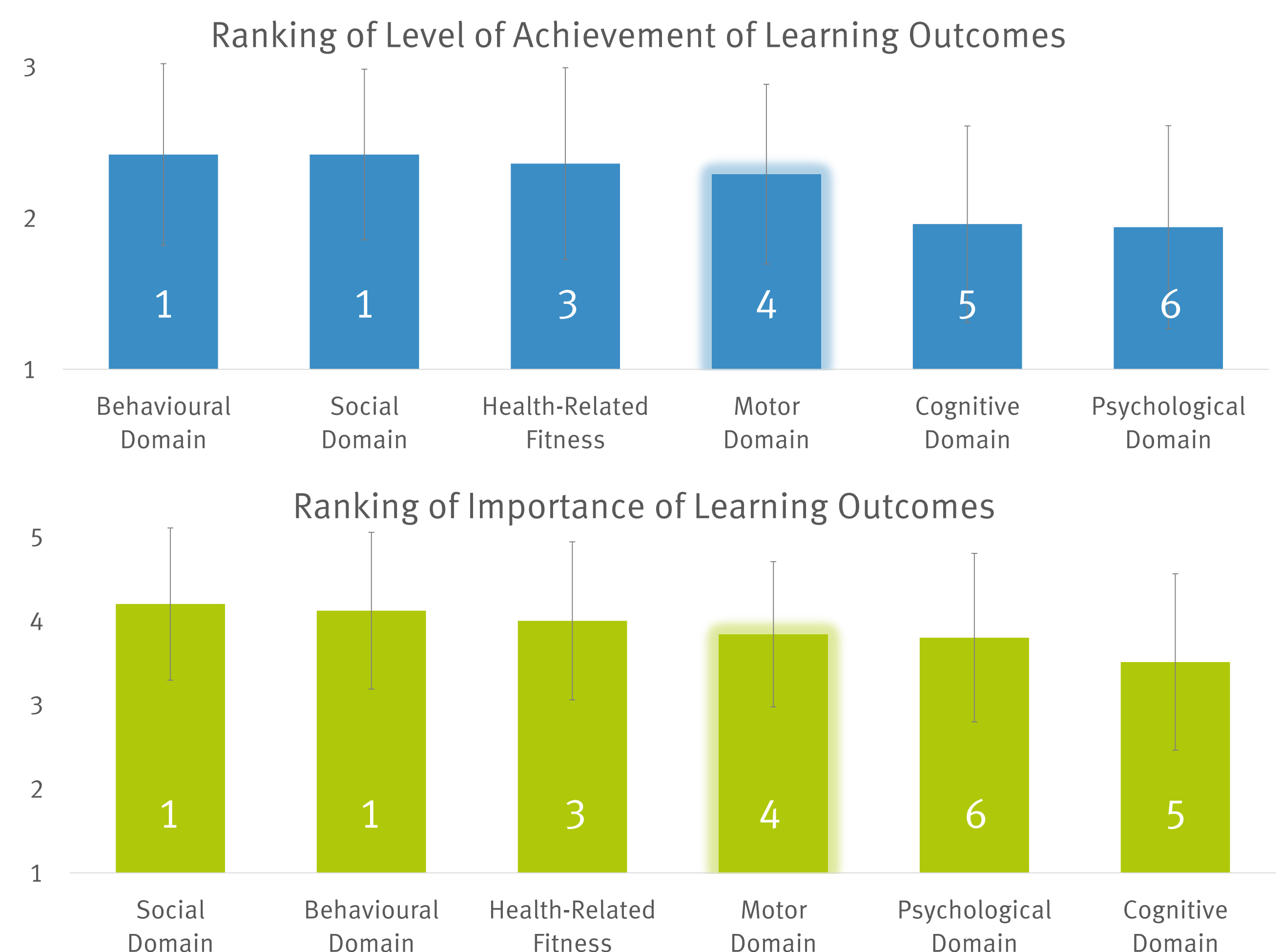


Figure 3. Ranking of level of achievement (3-point Likert scale; upper part) and importance (5-point Likert scale; lower part) of learning outcomes in different domains in PE (Mean ± SD)

- Reach of ranking of achievement between 2.42 (rank 1) and 1.94 (rank 6)
- Reach of ranking of importance between 4.2 (rank 1) and 3.51 (rank 6)

Conclusion

- The more complex **motor domain** ranks only on fourth position, both, as an learning outcome of achievement and importance in PE.
- Instead, the special item of **physical fitness** ranks on third position in both items.
- The most important learning outcomes in PE are the **behavioural** and **social domain** in the perspective of German pupils in this study.
- Compared to the pupils' findings in the federal SPRINT-study of 2006, the current importance level of learning assessment in the EuPEO pilot study is quite different: health and fitness ranked on first position, behavioural domain on fourth position [4].
- Pupils in the current pilot study now seem to have a ranking profile of learning outcome assessment which is more parallel to the former PE teachers assessment profile in the SPRINT-study [4, p. 121].

References

- [1] Bailey, R. (2006). Physical Education and Sport in Schools: A Review of Benefits and Outcomes. *Journal of School Health*, 76 (8), 397-401.
- [2] Pühse, U. & Gerber, M. (Eds.) (2005). *International comparison of Physical Education*. Aachen: Meyer & Meyer.
- [3] Onofre, M. et al. (2012). Physical education and sport in Europe: From individual reality to collective desirability. *International Journal of Physical Education*, 49 (2), 31-35.
- [4] Deutscher Sportbund (Ed.) (2006). *Die DSB-SPRINT-Studie*. Aachen: Meyer & Meyer.

