

## DEVELOPMENT OF ACHIEVEMENT AND TEST TAKING BEHAVIOR – A CLASS-CENTERED ANALYSIS

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In Finland, differences between schools were in the PISA 2000, 2003 and 2006 studies one of the lowest in the OECD, accounting for only about 5 to 8 percent of the variance (OECD, 2001; 2004; 2008). However, there is much less research on within-school effects in Finland, with only a few exceptions (Hotulainen, 2016; Thuneberg, Hautamäki & Hotulainen, 2015; Yang Hansen, Gustafsson & Rosén, 2014). These studies have shown that there are considerable class level differences in both school achievement and scientific reasoning ( $\approx 15\%$ ) already at the beginning of lower secondary education (7<sup>th</sup> grade) and such differences increase up to 18–19% by the end of the nine-graded comprehensive school (Hotulainen, 2016). The present study deepens this knowledge by providing detailed evidence on how classes differ from each other at the end of the ninth grade. Two theories provided ground for the chosen approach. First, the achievement goal orientation theory was used to detect if there was variation between classes regarding qualities of motivation that could be associated with test-taking behaviour. Goal orientation means here a student's tendency to favour and select certain types of goals (five different ones). Second, the theory of social capital was used to provide another explanation, which might be linked to achievement and test taking behaviour (e.g. Coleman 1988; 1990). Here, social capital comprises two different elements, namely perceived class social capital (four variables) and family social capital (three variables). The final study population filling out the questionnaires and achievement tests (math and reading) in 2011 (7<sup>th</sup> grade) and 2014 (9<sup>th</sup> grade) contained 5,219 students (51.3% girls) from 462 classrooms and 117 schools. Latent profile analysis and ANOVAs were executed with aggregated class level data. The results showed that based on repeated achievement measures, it was possible to find three class achievement profiles: P1: increasing (69%), P2: moderate (19%) and P3: decreasing (13%). Class profiles differed in goal orientations: P1 and P2 had higher learning orientation, and P1 higher achievement and lower ego-orientation than other class-profiles. Regarding class social capital, P1 had both higher acceptance and more academic peers, and P1 and P2 had higher academic motivation than other class-profiles. With respect to family social capital, P1 had higher parental expectations, more positive parental views concerning education and more positive student-parent relationship than other class-profiles. This study showed that the development of low-stake test achievement and behaviour is associated with class level goal orientations and social capital. The 'hidden tracking system' created by students' and parents' deliberate choices concerning school and study subjects creates class level quality differences in the pre-conditions for learning.

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