ABSTRACT

Title: Measuring Socioeconomic Status and its Effects at Individual and Collective Levels: A Cross-Country Comparison

Language: English

Keywords: Socio-economic Status (SES); SES Measurement; SES Effects; Cross-country Comparison; IEA Studies; Centralization vs. Decentralization Educational Policies; Two-level Structural Equation Modeling; Latent Variable; Multistage Cluster Sampling Design.

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The main purpose of the thesis is to examine socio-economic status (SES) effects on academic achievement at individual level and school level across countries. A basic assumption is that SES is multi-dimensional and that it should be studied at multiple levels.

The data analyzed in the empirical studies were taken from the IEA (International Association for the Evaluation of Educational Achievement) Reading Literacy Study (RLS, 1990-91) and the Third International Mathematics and Science Study (TIMSS, 1994-95). Reading achievement of both 9-year-olds and 14-year-olds in RLS and Math-Science achievement of 13/14-year-olds in TIMSS were used as measures of academic achievement. A set of household items from the Student Questionnaire in the two IEA Studies was used as indicators of SES. The empirical studies comprised of data from over 20 countries. Two-level Structural Equation Modeling was used at school and student levels to investigate measurement models of reading achievement and SES, and the relationships between academic achievement and SES dimensions.

The four empirical studies have found both similarities and differences in the SES factor structure between levels of observation and across countries. At individual level, an economic capital factor and a cultural capital factor were identified in most of the countries. In some countries, however, only a single general capital factor could be identified. At school level, a general capital factor was identified in a majority of the countries. In a few countries, a narrow cultural capital factor was found as well. The different factor structures of SES in different countries may be a reflection of the country-specific social, cultural, and economic situation. It may also be due to the differences in availability of SES data.

The relationship between SES factors and academic achievement at the student level showed that the cultural capital factor is the single most powerful predictor of children's achievement, whilst the economic capital factor has no or negative effects on students' school performance. At school level, the general capital factor explains a great deal of the differences in school average achievement. However, great variations were also observed in the SES effects between students as well as between schools in different countries. Most interestingly, the school SES effect varied greatly across educational systems.

Attempts are made to account for the country variability in the school level SES effect on achievement. Factors such as centralized vs. decentralized educational finance, tracking of students, and degree of social stratification are explored as determinants of between-country differences in the strength of the SES effect. There is a tendency towards a high SES effect in countries where there is high degree of decentralization in educational finance, large social stratification, and tracking. However, due to the limited number of countries and insufficient variation in the variables, no strong conclusion may be drawn about the effects of these variables. Further research is needed to determine how educational policies may affect the degree of influence of SES on achievement.