

Credit: Fotoplattform

Research Insight

2025/26

Socioeconomic Inequality in School Children's Achievement Development in Europe: A Systematic Literature Review

Research on how socioeconomic status shapes children's academic development across European primary and secondary schools is methodologically robust but geographically narrow, and it confirms that family background continues to predict achievement long after children enter the classroom.

Compiled by Chzhen, Symonds, Fedeli et al.

Funding Acknowledgement

This Policy Brief was supported by the European Commission action HORIZON-CL2-2023-TRANSFORMATIONS-01 for the project LEARN (Longitudinal Educational Achievements: Reducing iNequalities), Grant Agreement 101132531.

Funded by the European Union's Horizon Europe Programme HORIZON-CL2-2023-TRANSFORMATIONS-01 Grant Agreement 101132531 and co-funded by UK Research and Innovation (UKRI) grant agreement numbers [10107302, 10092247]; and the Swiss State Secretariat for Education, Research and Innovation (SERI)

LONGITUDINAL EDUCATIONAL ACHIEVEMENTS: REDUCING INEQUALITIES

LEARN

The Question: Does Schooling Close or Widen the Socioeconomic Gap Over Time?

A child's family background is one of the strongest predictors of how well they will do in school. This is a well-established fact in educational research. But a deeper and more contested question remains: what happens to these inequalities as children move through school? Does schooling help level the playing field, giving children from disadvantaged backgrounds a fair chance to catch up or does it instead disproportionately reward those who already begin with an advantage?
These questions matter enormously for policy and practice. If schools reduce socioeconomic inequalities over time, then investing in quality universal education is one of the most powerful tools available for promoting equality. If gaps widen, then targeted intervention and structural reform become urgent priorities. Yet despite decades of research, no clear answer has emerged, in part because the studies conducted across Europe vary so widely in how they measure both socioeconomic status and achievement, and in how they track children over time. This calls for a comprehensive and systematic mapping of the existing evidence.

A Systematic Scoping Review of European Longitudinal Research

As part of the Horizon Europe project LEARN, a team of researchers from across Europe conducted a systematic scoping review of longitudinal European studies on socioeconomic status (SES) and academic achievement published between 2020 and 2025. Seven major academic databases were searched in February 2025, yielding 15,319 records and 8,641 unique studies after deduplication. Following rigorous PRISMA-informed screening and eligibility assessment, 70 studies met the inclusion criteria.

To be included, studies needed to use longitudinal quantitative data from European samples, include at least two measurement points of educational achievement, and examine how SES related to achievement development over time. SES was measured as parental education, occupation, income, neighbourhood deprivation, or related indicators. Achievement outcomes ranged from standardised test scores in numeracy and literacy to school grades, qualifications, and broader cognitive assessments. Data were extracted on study design, geographic and educational context, measurement approaches, modelling strategies, and substantive findings.

Main result: Family Background Consistently Predicts Achievement Development

The most striking finding from the review is the consistency of the core result across the evidence base. In 78% of the 70 included studies, a statistically significant association was found between socioeconomic background and later academic achievement, even after accounting for children's prior performance. This means that, across the majority of the research, knowing a child's family background helps predict how well they will do in school beyond what their earlier test scores alone would suggest. In other words, children from higher SES backgrounds tend to see greater achievement growth.
This finding held across primary and secondary schooling, as the review was almost evenly split between studies at the two levels (48.6% primary, 51.4% secondary), and across different operationalisations of both SES and achievement. This strengthens confidence that socioeconomic disparities are not only present when children begin school but continue to shape their learning outcomes throughout compulsory education. Early disadvantage tends to accumulate over time rather than fade away.

Secondary Results: Uneven Geography and Methodological Homogeneity

Beyond its substantive findings, the review highlights important limitations of the evidence base itself. Research activity is sharply concentrated: over 73% of the 70 included studies were conducted in just three countries: Germany (37%), the United Kingdom (31%), and Italy (5%). Countries in Eastern, Southern, and Central Europe are either minimally represented or absent entirely. This limits the generalisability of the findings. European education systems vary enormously in how they are structured, including when and how students are tracked into different academic streams. These institutional differences may shape the magnitude of socioeconomic achievement gaps and the extent to which they widen or narrow over time.

Measurement choices also show strong homogeneity. Parental education dominates as the measure of SES, appearing in 77.8% of studies. Standardised cognitive test scores, especially in numeracy and literacy, are by far the most common achievement measure. While these choices offer comparability across studies, they limit what aspects of disadvantage and academic development are being measured. Dimensions such as income instability, housing conditions, cultural capital, and a wider range of learning outcomes remain underexamined. Methodologically, OLS regression, structural equation modelling, and multilevel modelling account for over three-quarters of the analytical approaches used. Importantly, causal inference strategies, such as fixed-effects models, appear in fewer than 3% of studies. This means that questions about what drives the observed SES inequalities in school children's achievement remain unanswered.

Conclusion: A Strong but Geographically Narrow Foundation

The field appears methodologically sophisticated within a relatively narrow set of countries, measures and analytical techniques. The consistent association between SES and achievement across studies confirms that socioeconomic inequality in education is a durable and persistent phenomenon rather than an artefact of measurement or context. Early advantages and disadvantages appear to set children on diverging trajectories that schooling alone appears incapable, in most cases, to substantially reverse.

However, the concentration of research in a small number of Western European countries means that findings may not generalise to the full diversity of European educational contexts. In particular, countries with different welfare regimes, different tracking structures, or different levels of investment in early childhood and compulsory education are underrepresented. The predominance of associational rather than causal methods also means that the precise mechanisms through which SES shapes achievement development and the conditions under which schooling might genuinely equalise opportunities remain inadequately understood.

Implications and Recommendations for Policy and Practice

This review has several actionable implications for both researchers and policymakers.

First, expanding the geographic coverage of longitudinal educational research across Europe is essential. Policymakers and research funders in underrepresented regions, particularly Eastern and Southern Europe, should prioritise investment in the infrastructure needed to collect and analyse longitudinal data on children's educational experiences and family backgrounds. Without this, the field cannot determine whether the highly consistent SES-achievement associations observed across this review reflect dynamics common to all European systems, or whether they are specific to the Western and Northern European institutional contexts that currently dominate the literature.

Second, the narrow operationalisation of SES in existing studies could be addressed through more multidimensional measures of disadvantage. Relying predominantly on parental education captures only one dimension of family background. Incorporating income, housing, material hardship, and neighbourhood-level deprivation would provide a more complete picture of the mechanisms linking family circumstances to children's learning.

Third, methodological investment in causal identification would strengthen the policy relevance of the field. The dominance of associational designs means that policymakers have limited direct evidence about whether specific schooling practices, interventions, or structural features can close socioeconomic gaps in achievement. Longitudinal designs that exploit natural experiments, reforms, or quasi-experimental variation, including the timing and structure of tracking, would provide much stronger foundations for policy.

Finally, the consistency of findings across this review provides a clear message for schools and systems: socioeconomic inequalities in learning do not disappear with school entry. Targeted support for children from disadvantaged backgrounds should be integrated systematically into schooling from the earliest years, with explicit monitoring of whether gaps are narrowing or widening over time, rather than assuming that school attendance alone will equalise outcomes.

NOTE

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

REFERENCES

Chzhen K., Symonds J., Fedeli E., Zwier D., Petersoo P., Nilles M-L., Bittmann F., Heydari I., Kaye N., Reiska E., Heilman R., Dodan D., Tuominen M., Torabian J., Hanappi D., & Bernardi L. (2026). Longitudinal Relationships Between Socioeconomic Status and Academic Achievement Across Primary and Secondary Schooling: A Systematic Scoping Review.