

Faculti Summary

<https://faculti.net/factors-predicting-mathematics-achievement-in-pisa/>

This video outlines a systematic review conducted on the factors influencing mass achievement in the Program for International Student Assessment (PISA) during 2021 and 2022. PISA evaluates students aged 15 from various countries, and the latest cycle in 2022 involved participation from 81 countries. The author highlights that PISA provides extensive data useful for examining educational quality and equity and influencing school practices and policy changes globally.

The review focused on mathematical achievement within PISA and identified a complex interplay of 135 factors impacting student performance, encompassing individual, household, school, educational system, and societal levels. Among these, 57 factors were investigated across multiple studies, yielding key insights. Notably, the review found seven consistently influential factors, such as family socioeconomic status and teacher shortages. A surprising finding was the consistently negative association between student-centered instruction and mathematics performance across ten studies.

The author stresses the need for future research to explore the interactions among these factors and calls for a variety of methodologies in PISA-related research. Overall, the review aims to provide a comprehensive understanding of the various influences on students' mass achievements in mathematics within the global context of PISA assessments.