

HOW IS INEQUALITY MEASURED IN INTERNATIONAL STUDIES ON STUDENT ACHIEVEMENT?

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International large-scale student assessments provide a unique framework of comparison for researchers interested in the individual-level outcomes of educational systems. Increasingly, the distribution of achievement is considered an important outcome, alongside with its average level. However, different measures are often interchangeably used in order to operationalize educational inequalities. In this paper, we argue that the different measures commonly used in the international literature based on large scale assessments can be grouped in three categories: (i) dispersion measures, according to which the mere existence of variation in achievement constitutes inequality; (ii) correlation measures, for which inequality consists in performance gaps between social groups; (iii) threshold measures, which conceive inequality as a severe lack of competences by a part of the student population. By applying correlational analysis to PISA data, we show that measures pertaining to the same category of inequalities highly correlate with each other, while measures pertaining to different dimensions do not. The results are consistent over the three domains of achievement (reading, mathematics, and science), and the five available waves (2000, 2003, 2006, 2009, 2012). Therefore, choosing one measure of educational inequality over another has significant consequences on the conclusions we draw about the degree of inequality within an educational system. We conclude with a discussion on the normative implications of choosing a measure over another, since operationalization choices in the measurement of educational inequalities are not neutral, but correspond to distinct theories of justice.