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Abstract

Title: Noncognitive skills in education: investigating the interplay between genes, environments, and development.

Abstract:

Characteristics such as personality, motivation, and socioemotional competencies have been found to account for academic achievement beyond cognitive abilities. These characteristics have been broadly described as noncognitive skills. Noncognitive is an imperfect term that has been used to define those skills that differ from what has traditionally been education's primary focus: academic and cognitive performance. The role that noncognitive skills play in education has mostly been conceptualized and investigated in terms of environmental effects. However, genetic research has shown that noncognitive skills are moderately heritable and that they are genetically correlated with educational success. A more comprehensive framework for investigating the role that noncognitive skills play in education would therefore include both genes and environments, and their interplay. In the current talk, I will present evidence for the important role that noncognitive skills play in academic development, triangulating findings across multiple methods. I will focus on presenting our recent investigations into the interplay between genetic, environmental, and developmental processes. I will then discuss how a holistic view of education, one that considers both cognitive and noncognitive skills and their biological and environmental underpinnings, is a fundamental step for moving towards a more inclusive and evidencebased model of education.