

Discussion

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Educational Testing Service

“The Utility and Need for Incorporating Non-Cognitive Skills into Large Scale Educational Assessments”

Henry M. Levin

Teachers College, Columbia University

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Summary

- Human capital is more than years of education or even cognitive skills (e.g., PISA scores)¹
- Noncognitive skills, controlling for cognitive skills, predict educational and employment outcomes
- Noncognitive skills are numerous and varied
- Despite that, we don't pay much attention to them...

¹ Bowles, Gintis, & Osborne (2001)

Summary

- ...we don't pay much attention to them, perhaps because...
- Levin: "...first we must acknowledge them, conceptualize their roles and identities, and measure them"
 - We're just starting to figure out what they are
 - We don't measure them very well
 - Inferring causality is difficult

We're just starting to figure out what they are

- Levin—"attitudes, behaviors, and values that contribute to adult competencies....some of these interact with cognitive skills..."
- Expansion: some may be valuable in their own right (e.g., interest fosters lifelong learning, tolerance, happiness)

We don't measure them very well

“Using <NELS data> The main finding is that eighth grade misbehavior [**based on 8th grade teacher evaluations**] is important for earnings over and above eighth grade test scores. Moreover, controlling for educational attainment, childhood misbehavior is associated with earnings at all educational levels. By contrast, achievement test scores are only related to earnings for young men with postsecondary degrees.”

Segal, Carmit (2011). Misbehavior, Education, and Labor Market Outcomes. (Stanford dissertation) www.econ.upf.edu/~segal/MisbehaviorJan2011.pdf .

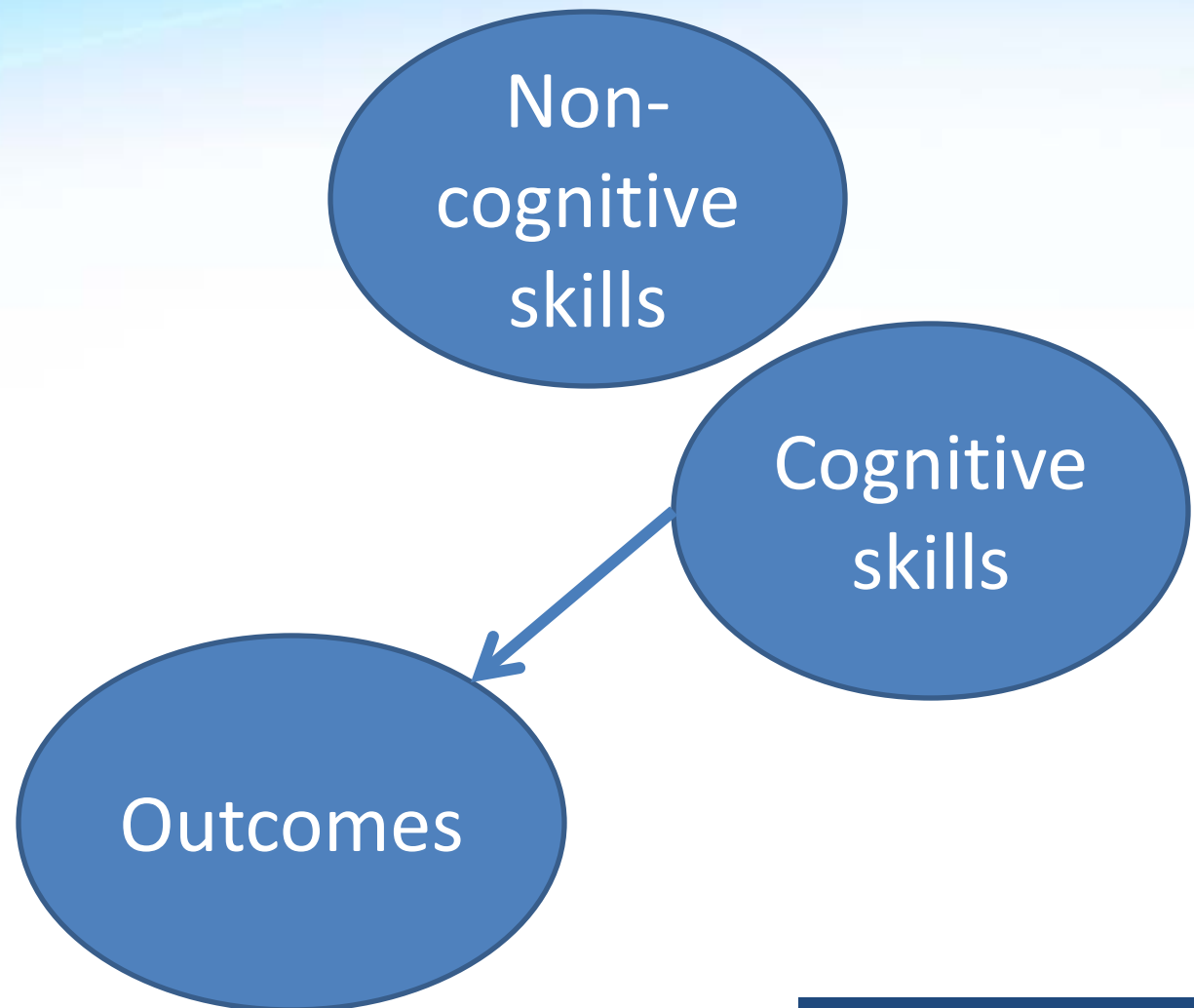
“A key problem in the literature on personality and labor market outcomes is to obtain valid measures of noncognitive abilities. In this paper, we have used a measure of noncognitive ability **based on a personal interview**. In contrast to survey-based measures of noncognitive ability, this measure is a substantially stronger predictor of labor market success than cognitive ability.”

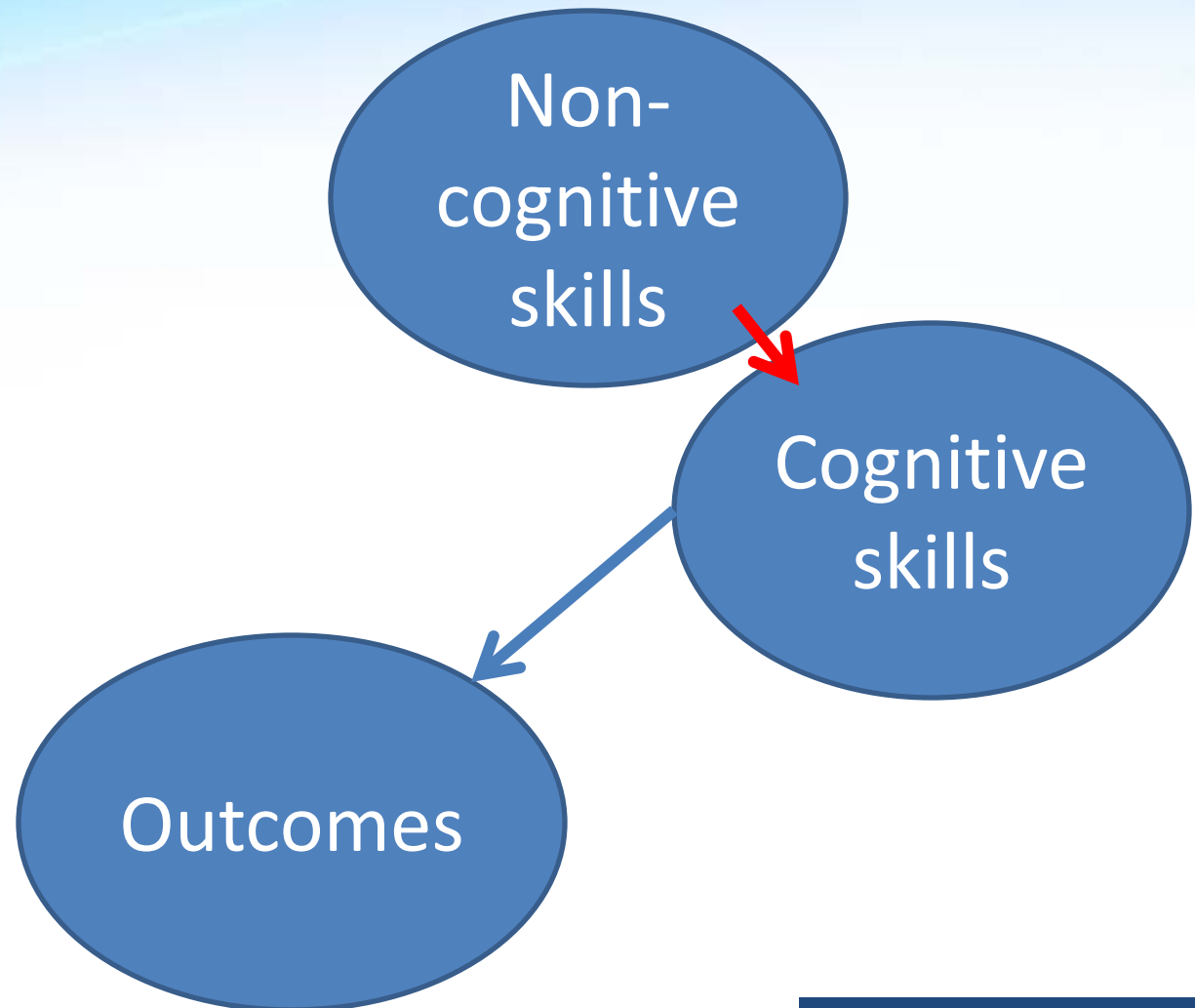
Lindqvist, Erik, & Vestman, Roine (2011). The Labor Market Returns to Cognitive and Noncognitive Ability: Evidence from the Swedish Enlistment. *American Economic Journal: Applied Economics*, 3 (1), 101-128.

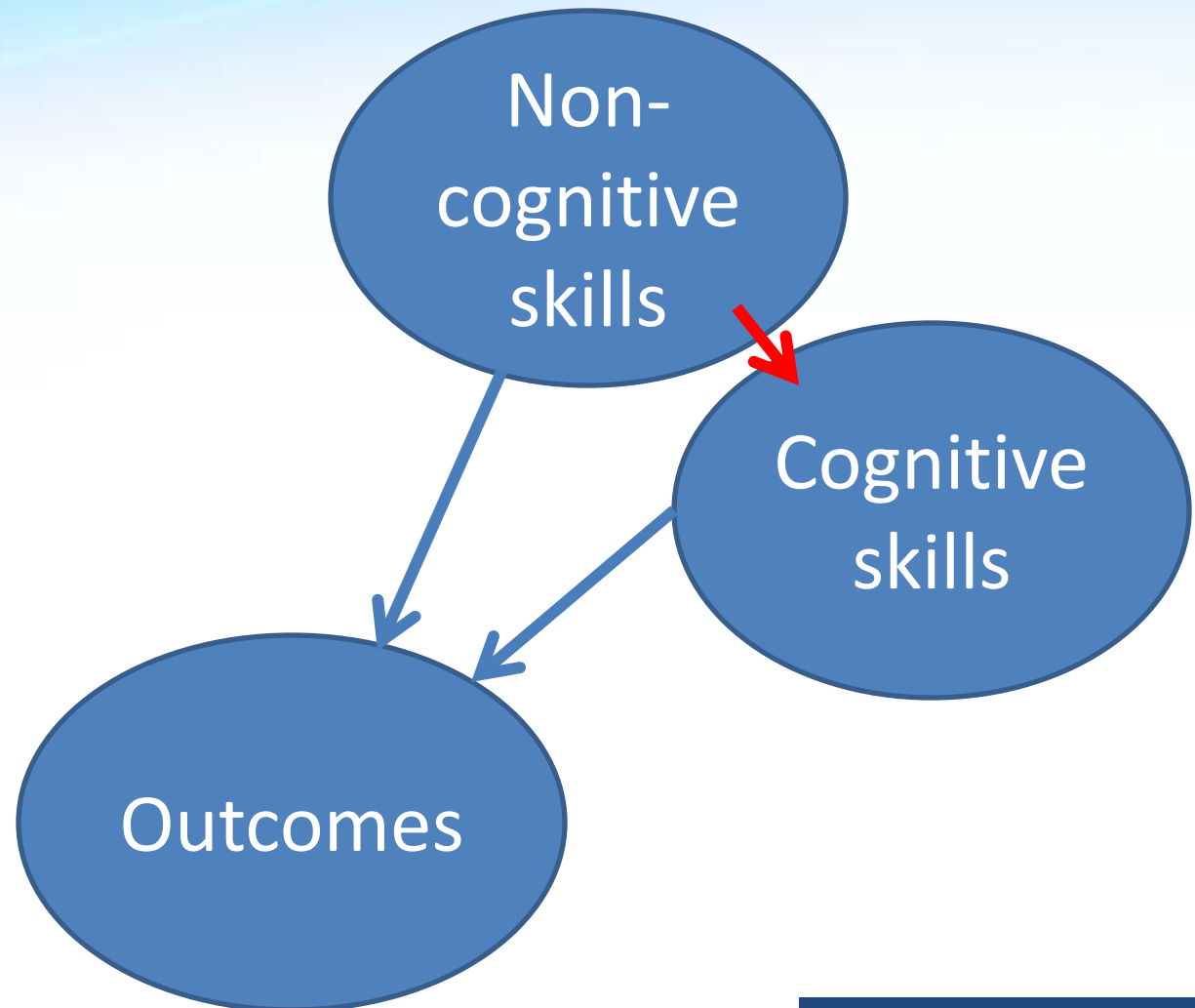
Inferring causality is difficult

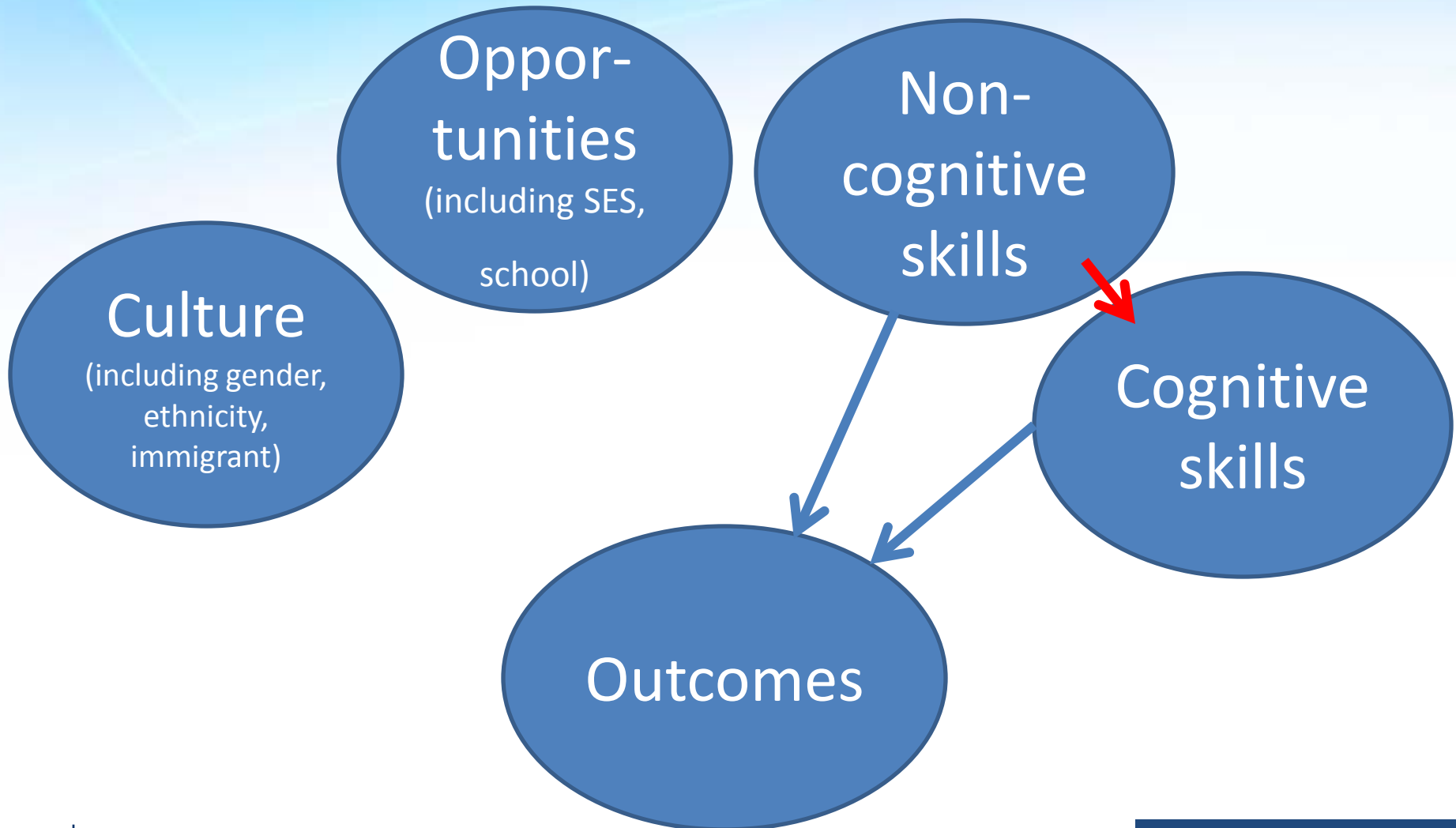
Inferring causality is difficult

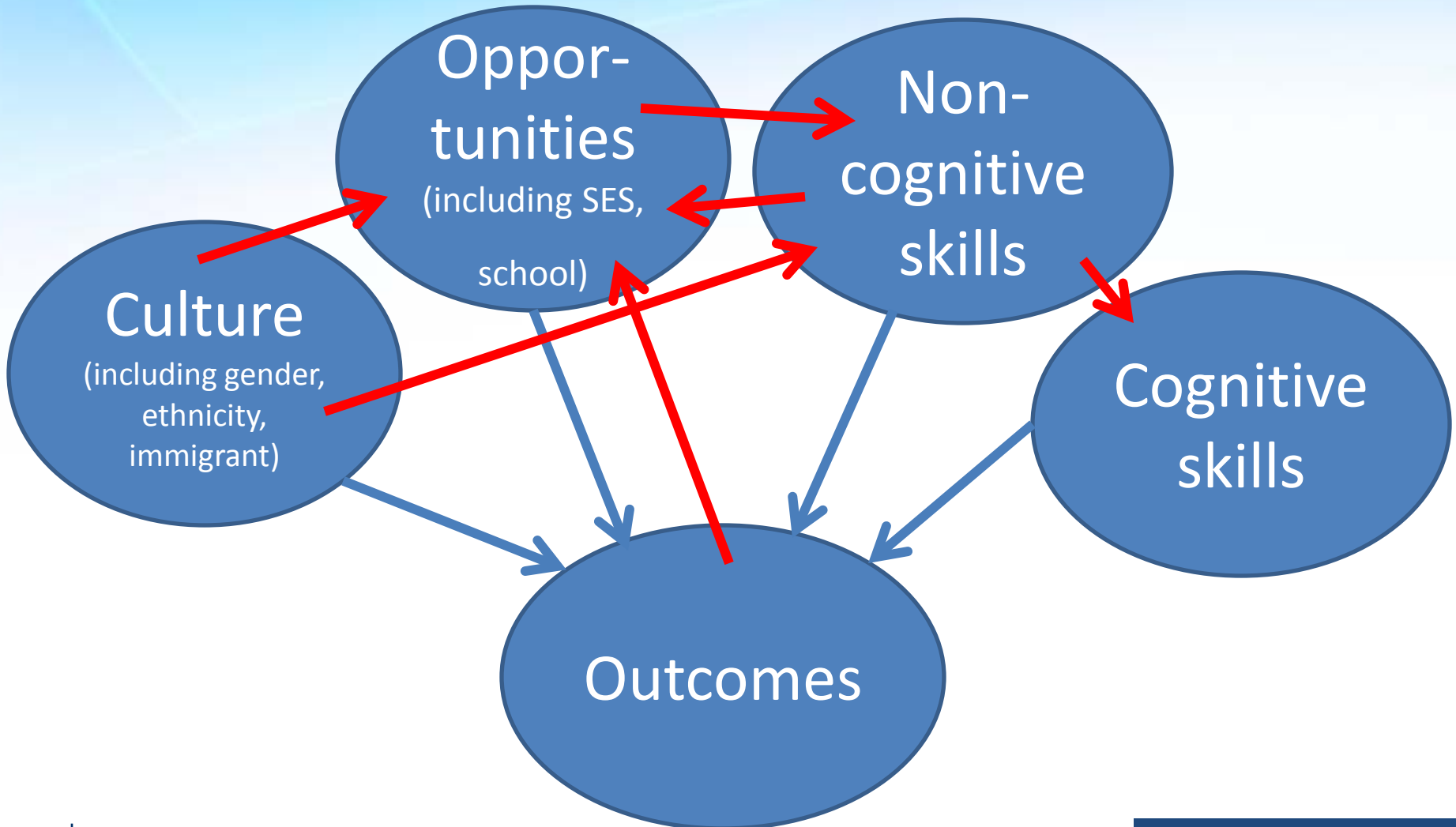
- Economics + Psychology marriage has several benefits
 - Expands the literature (economists contributing to personality literature)
 - Expands the outcomes space (beyond education)
 - Psychologists taking causality issues more seriously











Consequences of Ignoring Noncognitive Skills

- Levin: We think cognitive variables are more important than they are, too much emphasis on the narrow goal of raising test scores, and rewarding teachers who do, and too much emphasis on closing the cognitive achievement gap
- Additions: Reduced validity and adverse impact in admissions, personnel selection

Next Steps

- Levin: focus on “a few noncognitive skill areas and measures that can be incorporated into research on academic achievement, school graduation, postsecondary attainments, labor market outcomes, health status, and reduced involvement in the criminal justice system...lead to a deeper understanding of school effects and school policy”
- Assessment can drive policy