Noncognitive Skills and the Racial Wage Gap

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Background

Noncognitive skills, or “soft skills,” describe a person’s self-perception, work ethic, ethical orientation, and overall outlook on life. These skills have been linked to a variety of economic outcomes such as educational attainment, earnings, and work habits in the general population (Heckman et al. 2006). They are important to the design of early childhood policies and adult work training programs. Less well understood is the impact of these skills on subgroups of the general population, specifically racial groups.

This paper adds two measures of noncognitive skills, locus of control and self-esteem, to a simple wage specification to determine the effect of noncognitive skills by gender on the racial wage gap (white, black, and Hispanic) and the return to noncognitive skills across the wage distribution.

Data and Skills Measures

Data

The analysis data come from the National Longitudinal Survey of Youth (NLSY79) which a person has control over their life in 1979. The NLSY79 is a panel survey that contains 12,686 individuals between the ages of 14 and 21 at the time of first interview in 1979. The NLSY79 collects information on labor market outcomes, cognitive skills, and noncognitive skills. Additional wage data come from the Current Population Survey (CPS). This analysis uses NLSY79 and CPS observations for 1991-2006.

Cognitive Skills Measure

Armored Forces Qualifying Test (AFQT) measured in 1979

Noncognitive Skills Measures

• Rotter Internal-External Locus of Control measures the degree to which a person has control over their life in 1979.
• Rosenberg Self-Esteem measures an individual’s self-esteem in 1980.

Empirical Methods

Empirical Specification

In wage = β0 + β1 SPF + β2 Hispanic + β3 Hispanic2 + β4 APR + β5 AFQT + β6 AFQT2 + β7 Rotter + β8 Rotter2 + β9 Rosenberg + εi

Key: SPF = AFQT and Noncognitive skills are measured before labor market entry (Headey and Brown 1994)

Monitor: AFQT, Hispanic, Hispanic2, and Noncognitive skills are measured before labor market entry (Headey and Brown 1994)

− Results and Implications

Quantile Regression Results

After controlling for locus of control, the

• wage gap for black and Hispanic men shrinks by 1-5 percentage points
• wage gap for black and Hispanic women shrinks by 1-5 percentage points

After controlling for self-esteem, the

• wage gap for black men and women mostly widens by 1-5 percentage points
• wage gap for Hispanic men and women mostly shrinks by 1-4 percentage points

Imperfections

Noncognitive skills have generally been found to determine wage levels in the general population and across both genders (Heckman et al. 2006). In this context, the finding in this paper that noncognitive skills cannot affect or close some racial wage gaps presents a puzzle to the noncognitive literature. On the one hand, these skills are important for wage levels; on the other hand, they do not seem to be important for wage gaps. This result has implications for education policy designed to close racial gaps.

Bibliography


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