The Educational and Cognitive Transformation of Social Opportunity and Inequality: Credentials, Cognition, and C-status

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Most research on the outcomes of educational inequality is limited in its ability to weigh in on the merits of human capital or credentialing theory because many survey datasets do not contain rigorous measures of adult cognitive skills, along with measures of income, occupational outcomes and educational attainment. This project investigates these relationships among cohorts of adults in 2012 using a sample of workers drawn from the PIAAC dataset. We focus on two research questions: ***What is the impact of cognitive job skills and educational credentials on occupational outcomes for cohorts of American adults? And, to what degree is this joint impact reflected in the differentiated structure of U.S. occupations?***

We model the data using multinomial logistic and OLS regression strategies. We also examine the joint effects of education and cognitive ability (C-status) on labor market outcomes by building a structural equation model. We find that:

1) Education and cognitive skills have *independent* effects on monthly earnings and occupational prestige.
2) Education and cognitive skills have *joint* effects on monthly earnings and occupational prestige. We argue that the joint effects of education and cognitive skills can be considered as a single construct; **C-status**. Rather than studying skills and education credentials separately, a person's C-status is a more robust predictor of labor market outcomes.
3) Findings one and two can be viewed within the current landscape of labor market. Workers who have earned advanced education credentials ***and*** demonstrate high proficiency in cognitive skills hold occupational positions that require higher order skills (frequent reading, writing and managing). In other words, workers with high C-status are more likely to be working in high prestige occupations that require skilled labor than their peers with just high skills or just advanced educational credentials.

This work makes theoretical, empirical, and policy contributions to the literature about education credentials, cognitive skills and economic outcomes. Using PIAAC's robust psychometric measure of adult skills, we create a new construct, C-status, to measure the combined effects of cognitive skills and credentials. C-status operates as a joint measure in much the same way as socioeconomic status operates as a joint measure of education, occupation and income. While each variable in socioeconomic status has independent effects on a person's social and economic wellbeing, the combined measure of all three gives a better picture of how the variables operate jointly. In the same way, C-status measures the joint effects of cognitive skills and education credentials. We show that the labor market is organized by C-status – education and cognitive skills operate jointly and C-status is a better predictor of monthly earnings and occupational prestige than either variable alone. This empirical contribution sheds new light on theories that isolate education credentialing *or* human capital skills as the important predictor of labor market outcomes. We hope to bolster new theories that consider how education credentials and cognitive skills operate jointly.

The C-status perspective presents a number of policy implications for both the development of education and labor market policies. It also presents implications for policy aimed at the lessening of social and economic inequalities.