

## **Schooling and the Production of Health Inequality** (extended abstract)

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A large literature documents the stable positive association between nearly every marker of socioeconomic status—education, income, occupational class, wealth—and markers of good health status.<sup>1</sup> Among these SES markers, the relationship between education and health is particularly interesting because education generally precedes other measures of SES and is completed early in life and then constant thereafter. Thus, after early adulthood, educational attainment does not have the same issues of reverse causation with health status that might exist with income or wealth. Recent research also suggests that educational attainment might be the most salient of the SES markers because education has large, robust effects on health even when income, wealth, and previous health status are controlled.<sup>2-3</sup>

Although the associations between education and health are pronounced and enduring, we know relatively little about the mechanisms that mediate the relationship between formal schooling and health. For example, can we identify which components along the path of formal schooling predict health outcomes? People with more schooling, usually measured coarsely by years of school completed or type of college schooling, have more information about health and healthy behavior, more incentive to invest in health, more social support, feel more in control of their lives, choose healthier lifestyles, are more forward looking, and have different time preferences. They are also more likely to adhere to treatment protocols.<sup>3-7</sup> Each of these factors is associated with better health. But there is little research that examines what aspects of formal schooling specifically, or factors that are correlated with schooling, might produce these associations. Understanding these mechanisms more clearly would help explain the role that formal schooling plays in the production of health inequality.

This paper examines the mechanisms that link educational attainment and health by examining how educational and health trajectories emerge and interact in adolescence and early adulthood—a point in life when individuals makes key decisions about both school continuation and health behaviors. The transition from adolescence to adulthood offers a unique opportunity to see educational trajectories and health behaviors as they evolve, and before many other

complicating factors intervene in adult health. Recent research documents that key health behaviors such as drinking, smoking, or going to a doctor when ill, and differences in these behaviors by race and sex, emerge in adolescence and young adulthood.<sup>8</sup> Individuals also make key educational choices about completing high school and entering and completing college at these ages. Understanding the educational context of adolescents and how these inform their early health choices will shed light on the underlying mechanisms that relate schooling and health both in early adulthood and later in life.

Using data from the National Longitudinal Study of Adolescent Health (Add Health), I examine the relationship between schooling and health by race and sex in adolescence and early adulthood. Add Health offers nationally representative panel data with rich detail on family and school environments, health and risk behaviors, and educational trajectories including family background, cognitive skills and test scores, progress through school, friendship networks and the transition from high school to college. Data were first collected in 1994 from a sample of adolescents in grades 7 through 12. These youths were followed up in 1996 and 2001/2002.

I address four research questions. First, how much of the relationship between schooling and health behaviors is explained by factors generally lumped under the rubric of “selection,” that is, factors that are correlated with schooling but not necessarily caused by it? For example, do those with higher cognitive skills or aspirations have both better school outcomes and better health outcomes? Second, does controlling for family environments and characteristics reduce the association between education and health behaviors, and explain observed differences by race and sex? Third, do measures of educational quality such as the type of school attended, the number and types of math and other advanced classes taken, type of college attended (if any) explain health behaviors? Finally, do factors such as soft skills and orientation towards the future, which are thought to develop along the path of formal schooling, help mediate the relationship between schooling and health behaviors?

The analysis uses statistical methods such as multivariate regression and discrete time hazard models to describe the relationship between selectivity, school characteristics, school progress and key health behaviors. The analysis highlights how much of the observed differences in the effect of educational attainment on health are explained by components of the schooling process versus differences in confounding factors such as family background, aspirations, cognitive skills, and early health status.

## *References*

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