Racial Differences in the Reciprocal Relationship between Health and Socioeconomic Status across the Lifecourse

Liana J. Richardson¹ University of North Carolina at Chapel Hill Department of Sociology and Carolina Population Center Brandon G. Wagner Princeton University Office of Population Research

Although the relationship between socioeconomic status (SES) and health is likely bidirectional, studies have provided mixed support for the hypothesis that health influences subsequent SES. Moreover, relatively few U.S. studies of this hypothesis have examined the potential moderating effect of race—a crucial omission given persistent black-white health and socioeconomic attainment gaps. We use data from Waves I, III, and IV of the National Longitudinal Study of Adolescent Health (Add Health) to examine the association between health and SES from birth to ages 24 – 32 among non-Hispanic blacks and whites. In structural equation models with latent variables, we find direct and indirect effects of early life health on subsequent SES, as well as a reciprocal relationship between health and SES in adulthood. When stratified by race, we find differences in both fit and structural coefficients, suggesting that the lifelong relationship between health and SES may differ between blacks and whites.

The social gradient in health is one of the most consistent findings in medical sociology and social epidemiology. Frequently, this finding is interpreted to mean that health is a consequence of socioeconomic status (SES). However, several scholars have noted the likelihood that SES is a consequence of health (Case and Paxson 2010; Smith 1999). Indeed, some studies have documented instances of downward socioeconomic drift due to health shocks during adulthood (Smith 1999). Others view the influence of health on SES as a process that develops over the life course (Palloni, Milesi, White, and Turner 2009). Thus, adult socioeconomic attainment models have increasingly considered the role of early life health (e.g., Haas 2006; Haas, Glymour, and Berkman 2011; Jackson 2010; Palloni, Milesi, White, and Turner 2009; Smith

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2009). This inclusion is important for testing health selection, as well as hypotheses about the intergenerational transmission of health and SES (Currie and Moretti 2007; Goodman, Gisselmann, and Koupil 2010).

Evidence for the health selection hypothesis, however, has been mixed. Warren (2009), for example, found support for social causation but none for the health selection hypothesis using data from the Wisconsin Longitudinal Study. On the other hand, using data from the Panel Study of Income Dynamics, Haas (2006) found support for both social causation and health selection hypotheses. Similarly, using data from Manitoba, Canada, Currie and colleagues (2010) found that birth weight was a significant predictor of whether respondents reached grade 12 by age 17, net of a comprehensive set of child and adolescent health outcomes. Palloni and colleagues (2009), however, found no effect of low birth weight status nor number of chronic conditions at age 16 on educational attainment at age 20 among males in the National Child Development Study (NCDS) in Great Britain. In addition to differences in datasets and samples, other factors may contribute to these inconsistent findings. Palloni (2006), for example, argues that previous studies of the association between childhood health and subsequent SES likely underestimated it due to reliance on relatively narrow or single indicators of health.

The present study was designed to extend previous studies by testing the possibility of a bidirectional or reciprocal relationship between health and socioeconomic attainment over the life course, while addressing the limitations of those studies. In particular, we used data from a nationally representative, longitudinal study with a more educationally and racially diverse sample than the samples used in previous work. This diversity allowed us to evaluate race as a potential moderator of the SES and health relationship-a task largely ignored in the extant health selection literature-and to assess this relationship across the entire socioeconomic hierarchy. We also used a younger American cohort (born roughly between 1976 and 1984), which differs in important ways (e.g., lower childhood exposures to infectious diseases) from either older American or European birth cohorts that have been studied in previous work. This difference enabled us to examine a birth cohort currently approaching middle age in the U.S. and also allowed for cross-national comparisons that may shed light on macrosocial and historical factors that contribute to differences in the relationship between health and SES. Finally, we incorporated a more comprehensive set of early life health indicators than previous studies, including but not limited to indicators of fitness at birth (i.e., birth weight) and parental investments in infant health (i.e., breastfeeding), as well as a richer set of prospective health measures than previous studies. This inclusion helped us develop measurement models of health and SES from all available indicators, thereby producing a more nuanced test of health selection and social causation hypotheses.

Our preliminary findings suggested that the reciprocal relationship between health and socioeconomic status exists only for whites. For blacks, there seems to be no SES advantage to having good health. Thus, Whites may experience cumulative advantage, i.e., increasing socioeconomic returns to their good health, that blacks cannot match because improvements in health do not confer the same (if any) socioeconomic benefits for them. The absence of this link between health and socioeconomic attainment among blacks could have tremendous implications for the maintenance and reproduction of existing inequalities between racial groups.

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