

Still in the Nation's Service: What Military Retirees' Educational Histories Reveal About Health

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What makes us healthy? Good genes, good living, or just good luck? Doctors and health researchers have a variety of answers to this question, but specific medical advice can vary significantly across decades, and even year-to-year. While not an excuse to ignore your doctor, the ephemeral nature of dietary and behavioral advice raises the obvious question of which determinants of good health are more stable over time, are more fundamental, and arguably most important, which are subject to intervention. It turns out that the life histories of U.S. military retirees offer new and important insights into these research and policy questions.

Health economists and social epidemiologists have identified education as one of the most stable and robust indicators of good health in old age [1, 2]. This may first sound more than a little odd; my undergraduate students at Queens College typically burst out laughing when I tell them that staying in school will actually lengthen their lives in addition to increasing their earnings. As any good college student knows, education is associated with increased earnings, promotion, and other labor market outcomes [3]. But estimates imply that the returns to education in terms of improved health and increased longevity are large, perhaps 7 more months of life for each additional year of education [4]. More importantly, evidence suggests that at least some part of the health benefit of increased education is what economists refer to as “causal.” This means that if one were to deliver another year of education to a group of individuals, for example by raising the compulsory schooling age, that group would in fact have better health than a group that was unaffected by the change [5].

What is less clear is exactly how education improves health. It could be the case that education raises income and wealth, which allows individuals to purchase healthy inputs such as improved medical care, high quality food, and exercise, all of which then improve health. Viewed this way, the positive association between education and health may not seem odd at all; it could be the natural result of earning more given more education. But income could also facilitate unhealthy behaviors like drinking or smoking. Education imparts a wide range of skills and knowledge that tend to improve workplace productivity but could also

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be independently important for health. Understanding the pathways by which education influences health is essential for guiding policy. If education improves health only through income, then transferring money may be a more cost effective intervention than subsidizing education, for example.

Military retirees offer new insights into these questions because their educational histories are so unique. In a recent working paper, I explore the implications of military retirees' long and relatively varied life histories of educational attainment and their associations with health and income [6]. As many readers are no doubt intimately aware, most military retirees acquired education during their years of service as part of proceeding "up or out" of the command structure. And like the broader group of U.S. veterans, many military retirees acquire education following the completion of service, often via the G.I. Bill. A big difference is that most are in their forties or fifties when they retire, and they may then return to school again; but across all life stages, military retirees have experienced significantly more changes in their educational attainment compared to all civilians. The unique timing of retirees' education across their life cycles imparts new information about how education, income, and health are related.

This information is revealed by data collected in the 2003 *Survey of Retired Military*, which was conducted by the Defense Manpower Data Center. The DMDC mailed questionnaires to 53,100 individuals who had retired between 1971 and 2001 and were either receiving retirement pay or were eligible to do so. Two thirds responded, answering questions about their retirement experiences, careers, and incomes, and also about their health status and educational histories. I limited my analysis to males aged 40 and over with 20 years of active duty service; female retirees are becoming more numerous, but they represented only 6 percent of respondents, a group small enough to require separate study.

My results revealed a steady decline in the extra health benefits of additional years of education over the life cycle. After controlling for age, rank, race, and other characteristics, I found that schooling completed later in life was much less protective against poor health in old age than schooling completed earlier in life. In particular, education received after retirement had practically no positive effect on old-age health. In contrast, the financial returns to education did not drop off as dramatically over the life cycle. Education received later in life was less valuable in terms of the additional earnings it brought, but post-retirement education still raised earnings strongly. The implication is that at least for health in old age, education is protective probably because it builds up lasting "stocks" of healthy behaviors and knowledge, which tend to stick with individuals throughout their lives, and probably not so much because education increases income. For example, education might directly enhance awareness of new findings in medicine, such as the adverse health effects of smoking or diet. Or education might impart the conceptual tools required to process new information and make healthy decisions.

Practical implications include some insights about how the G.I. Bill and other types of educational subsidies ought to be structured. If the returns to earlier education are higher, policy ought to reflect that. The new Post-9/11 G.I. Bill that took effect in August 2009 provides extremely generous subsidies to veterans of Operation Iraqi Freedom and Operation Enduring Freedom in Afghanistan. This research promotes efforts to enhance the completion of schooling early in life, perhaps by funding veterans' support groups or other programs that enhance reintegration and reduce dropping out at colleges and universities.

These research findings have not yet been peer reviewed and are only a small part of a broad effort among researchers to understand what produces good health outcomes. But they are an interesting example of how life histories and survey participation can inform research and policy. More specifically, they attest to the continuing contribution of America’s military retirees to the improvement of well-being in the nation.

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