



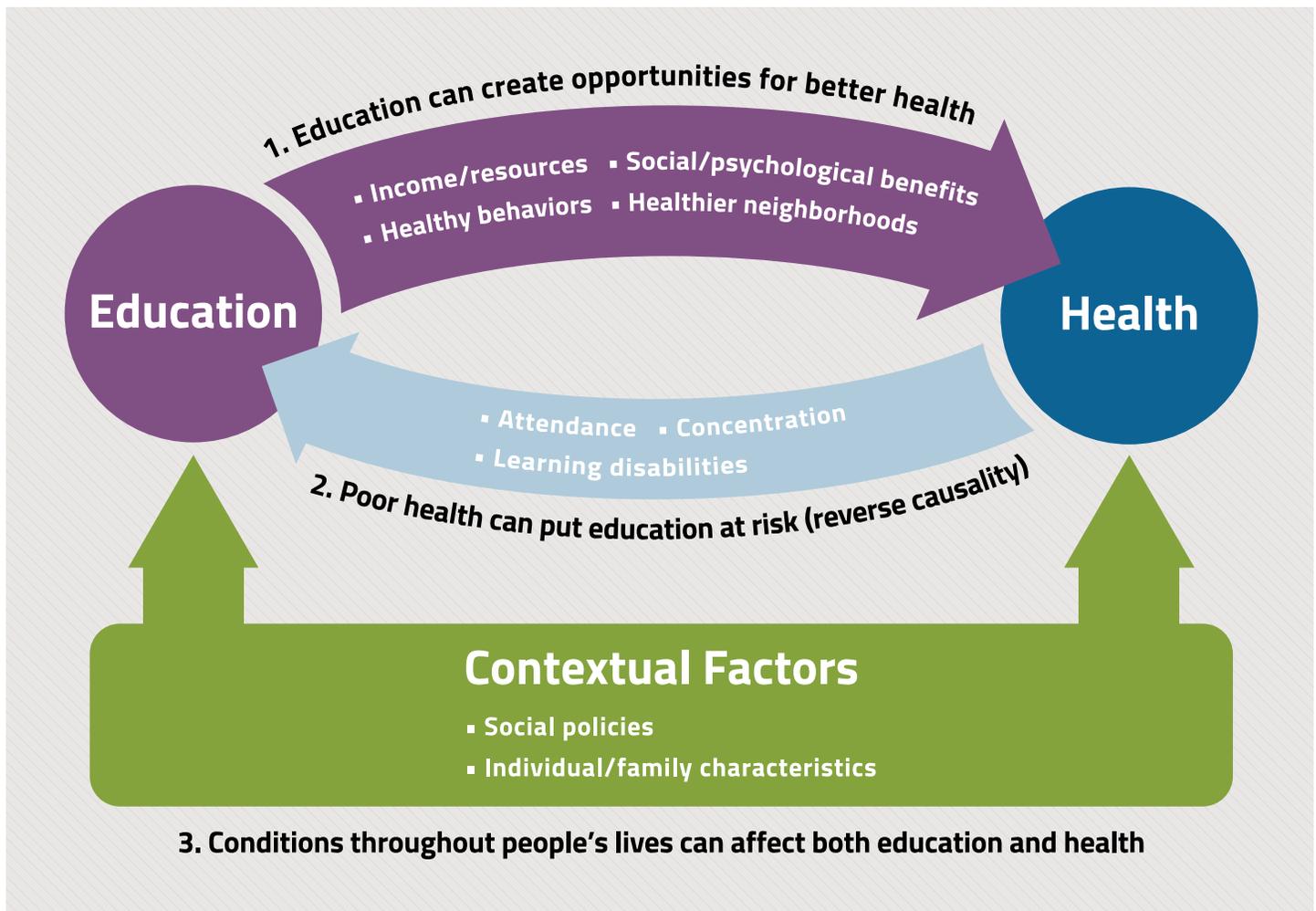
Why Education Matters to Health: Exploring the Causes

Americans with more education live longer, healthier lives than those with fewer years of schooling (see [ISSUE BRIEF #1](#)). But why does education matter so much to health? The links are complex—and tied closely to income and to the skills and opportunities people have to lead healthy lives in their communities.

This issue brief provides an overview of what research shows about the links between education and health alongside the perspectives of residents of a disadvantaged urban community in Richmond, Virginia. These community researchers, members of our [ENGAGING RICHMOND](#) partnership, collaborate regularly with the Center on Society and Health’s research and policy activities to help us more fully understand the “real life” connections between community life and health outcomes. Video interviews are also available [HERE](#).

HOW ARE HEALTH AND EDUCATION LINKED? THERE ARE THREE MAIN CONNECTIONS:¹

1. Education can create opportunities for better health
2. Poor health can put educational attainment at risk (reverse causality)
3. Conditions throughout people’s lives—beginning in early childhood—can affect both health *and* education



1. The health benefits of education

INCOME AND RESOURCES:

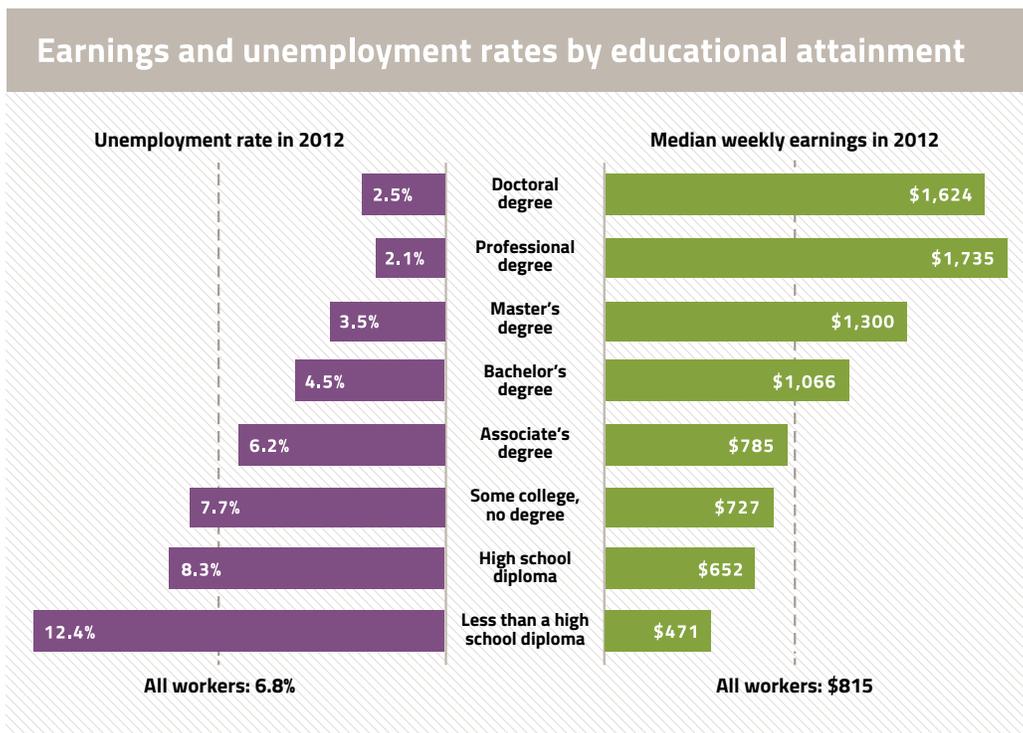
Better jobs: In today’s knowledge economy, an applicant with more education is more likely to be employed and land a job that provides health-promoting benefits such as health insurance, paid leave, and retirement.² Conversely, people with less education are more likely to work in high-risk occupations with few benefits.

Higher earnings: Income has a major effect on health and workers with more education tend to earn more money.³ In 2012, the median wage for college graduates was more than twice that of high school dropouts and more than one-and-a-half times higher than that of high school graduates.⁴

Resources for good health: Families with higher incomes can more easily purchase healthy foods, have time to exercise regularly, and pay for health services and transportation. Conversely, the job insecurity, low wages, and lack of assets associated with less education can make individuals and families more vulnerable during hard times—which can lead to poor nutrition, unstable housing, and unmet medical needs.

“Being educated now means getting better employment, teaching our kids to be successful and just making a difference in, just in everyday life.” – Brenda

“Definitely having a good education and a good paying job can relieve a lot of mental stress.” – Chimere



Data from: Bureau of Labor Statistics, Current Population Survey, http://www.bls.gov/emp/ep_chart_001.htm

SOCIAL AND PSYCHOLOGICAL BENEFITS:

Reduced stress: People with more education—and thus higher incomes—are often spared the health-harming stresses that accompany prolonged social and economic hardship. Those with less education often have fewer resources (e.g., social support, sense of control over life, and high self-esteem) to buffer the effects of stress.

Social and psychological skills: Education in school and other learning opportunities outside the classroom build skills and foster traits that are important throughout life and may be important to health, such as conscientiousness, perseverance, a sense of personal control, flexibility, the capacity for negotiation, and the ability to form relationships and establish social networks. These skills can help with a variety of life's challenges—from work to family life—and with managing one's health and navigating the health care system.

Social networks: Educated adults tend to have larger social networks—and these connections bring access to financial, psychological, and emotional resources that may help reduce hardship and stress and improve health.⁵

HEALTH BEHAVIORS:

Knowledge and skills: In addition to being prepared for better jobs, people with more education are more likely to learn about healthy behaviors. Educated patients may be more able to understand their health needs, follow instructions, advocate for themselves and their families, and communicate effectively with health providers.⁶

HEALTHIER NEIGHBORHOODS:

Lower incomes and fewer resources mean that people with less education are more likely to live in low-income neighborhoods that lack the resources for good health. These neighborhoods are often economically marginalized and segregated and have more risk factors for poor health such as:

- **Less access to supermarkets** or other sources of healthy food and an oversupply of fast food restaurants and outlets that promote unhealthy foods.⁷
- **Less green space**, such as sidewalks and parks to encourage outdoor physical activity and walking or cycling to work or school.



So through school, we learn how to socially engage with other classmates. We learn how to engage with our teachers. How we speak to others and how we allow that to grow as we get older allows us to learn how to ask those questions when we're working within the health care system, when we're working with our doctor to understand what is going on with us." – Chanel

What about individual characteristics?

Characteristics of individuals and families are important in the relationship between education and health. Race, gender, age, disability, and other personal characteristics often affect educational opportunities and success in school. (See [ISSUE BRIEF #1](#))

Discrimination and racism have multiple links to education and health. Racial segregation reduces educational and job opportunities⁸ and is associated with worse health outcomes^{9,10}

- Rural and low-income areas, which are more populated by people with less education, often suffer from **shortages of primary care physicians** and other health care providers and facilities.
- **Higher crime rates**, exposing residents to greater risk of trauma and deaths from violence and the stress of living in unsafe neighborhoods. People with less education, particularly males, are more likely to be incarcerated, which carries its own public health risks.
- **Fewer high-quality schools**, often because public schools are poorly resourced by low property taxes. Low-resourced schools have greater difficulty offering attractive teacher salaries or properly maintaining buildings and supplies.
- **Fewer jobs**, which can exacerbate the economic hardship and poor health that is common for people with less education.
- **Higher levels of toxins**, such as air and water pollution, hazardous waste, pesticides, and industrial chemicals.¹¹
- **Less effective political influence** to advocate for community needs, resulting in a persistent cycle of disadvantage.

“**Poor neighborhoods oftentimes lead to poor schools. Poor schools lead to poor education. Poor education oftentimes leads to poor work. Poor work puts you right back into the poor neighborhood. It’s a vicious cycle that happens in communities, especially inner cities.**” – Albert

“**If the best thing that you see in the neighborhood is a drug dealer, then that becomes your goal. If the best thing you see in your neighborhood is working a 9 to 5, then that becomes your goal. But if you see the doctors and the lawyers, if you see the teachers and the professors, then that becomes your goal.**” – Marco

“**Being able to advocate and ask for what you want, helps to facilitate a healthier lifestyle. ... If it’s needing your community to have green spaces, have a park, a playground, have better trails within the community, advocating for that will help.**” – Chanel

What about social policy?

Social policy—decisions about jobs, the economy, education reform, etc.—is an important driver of educational outcomes AND affects all of the factors described in this brief. For example, underperforming schools and discrimination affect not only educational outcomes but also economic success, the social environment, personal behaviors, and access to quality health care. Social policy affects the education system itself but, in addition, individuals with low educational attainment and fewer resources are more vulnerable to social policy decisions that affect access to health care, eligibility for aid, and support services.

2. Poor health that affects education (reverse causality)

The relationship between education and health is never a simple one. Poor health not only results *from* lower educational attainment, it can also *cause* educational setbacks and interfere with schooling.

For example, children with asthma and other chronic illnesses may experience recurrent absences and difficulty concentrating in class.¹² Disabilities can also affect school performance due to difficulties with vision, hearing, attention, behavior, absenteeism, or cognitive skills.

“Things that happen in the home can definitely affect a child being able to even concentrate in the classroom. ... If you’re hungry, you can’t learn with your belly growling. ... If you’re worried about your mom being safe while you’re at school, you’re not going to be able to pay attention.” – Chimere

How important are years of school?

Research has focused on the number of years of school students complete, largely because there are fewer data available on other aspects of education that are also important. It’s not just the diploma: education is important in building knowledge and developing literacy, thinking and problem-solving skills, and character traits. Our community research team noted that early childhood education and youth development are also important to the relationship between education and health.

“The connection that I will say between education and health would be a healthy mind produces a healthy person. A motivated mind produces a motivated person. A curious mind produces a curious person. When you have those things it drives you to want to know more, to want to have more, to want to inquire more. And when you want more, you will get more. You know where the mind goes the person follows... and that includes health.” – Marco



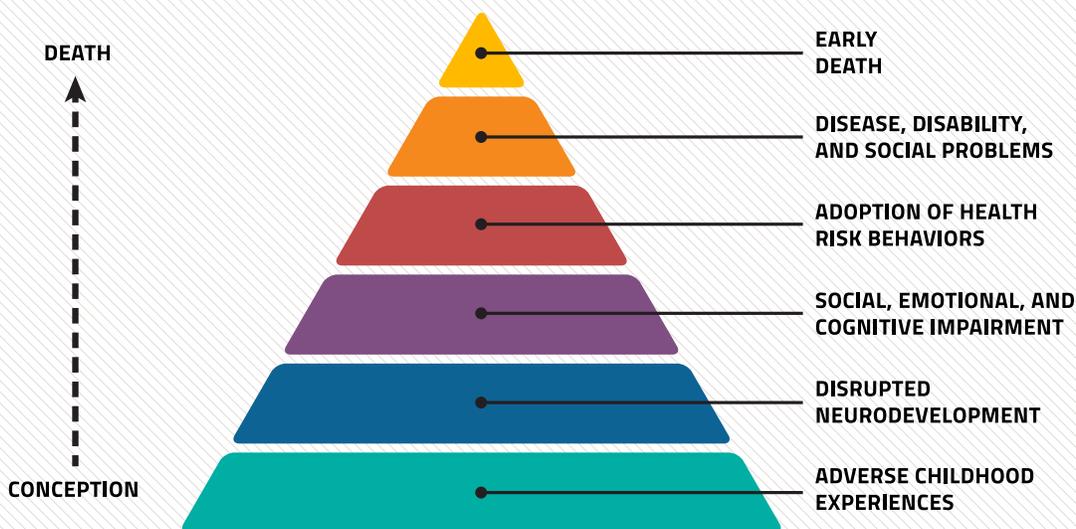
3. Conditions throughout the life course—beginning in early childhood—that affect both health and education

A third way that education can be linked to health is by exposure to conditions, beginning in early childhood, which can affect both education and health. Throughout life, conditions at home, socioeconomic status, and other contextual factors can create stress, cause illness, and deprive individuals and families of resources for success in school, the workplace, and healthy living.

A growing body of research suggests that chronic exposure of infants and toddlers to stressors—what experts call “adverse childhood experiences”—can affect brain development and disturb the child’s endocrine and immune systems, causing biological changes that increase the risk of heart disease and other conditions later in life.¹³ For example:

- The adverse effects of stress on the developing brain and on behavior can affect performance in school and explain setbacks in education. Thus, the correlation between lower educational attainment and illness that is later observed among adults may have as much to do with the seeds of illness and disability that are planted before children ever reach school age as with education itself.
- Children exposed to stress may also be drawn to unhealthy behaviors—such as smoking or unhealthy eating—during adolescence, the age when adult habits are often first established.¹⁴

How Adverse Childhood Experiences Can Influence Health Throughout Life



Adapted from Felitti et al., 1998 and Whitfield CL at <http://www.cbwhit.com/ACEstudy.htm>.

How does education impact health in your community?

The Center on Society and Health worked with members of Engaging Richmond, a community-academic partnership that included residents of the East End, a disadvantaged neighborhood of Richmond, Virginia. This inquiry into the links between education and health was a pilot study to learn how residents could add to our understanding of this complex issue using the lens of their own experiences.

What does your community have to say about the links between education and health—or other health disparities? Learn more about community research partnerships and community engagement:

Principles of Community Engagement, 2nd Edition
http://www.atsdr.cdc.gov/communityengagement/pdf/PCE_Report_508_FINAL.pdf

Community Campus Partnerships for Health
<https://depts.washington.edu/ccph/>

Community Engaged Scholarship Toolkit
<http://ccph.memberclicks.net/ces-toolkit>

AHRQ—The Role of Community-Based Participatory Research
<http://archive.ahrq.gov/research/cbprrole.htm>

CSH's Community University Partnership
<http://www.go.vcu.edu/engagingrichmond>

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Other issue briefs from the Education and Health Initiative

HOW BIG OF AN ISSUE IS THIS?

ISSUE BRIEF #1: **The Growing**

Importance of Education: Education matters more to health now than it ever has before. Today, people with less education live shorter lives with worse health and greater disability than their more educated peers. Education is important not only for higher paying jobs and economic productivity, but also for saving lives and saving dollars. Policies that address early child care, housing, transportation, food security, unemployment, and economic development are important to improving the deteriorating health of Americans with fewer years of education.

WILL HEALTH CARE REFORM SOLVE THE PROBLEM?

ISSUE BRIEF 3 (FORTHCOMING):

Health Care: Necessary but Not Sufficient: Efforts to achieve improved access to health care and health insurance are vital, but they cannot erase the health gaps related to education. Evidence from integrated health systems where all members have similar access to care (such as Kaiser Permanente) still show that college-educated patients have better outcomes than those with less education.

DOES CUTTING EDUCATION SPENDING SAVE MONEY?

ISSUE BRIEF 4 (FORTHCOMING): **The Return on Investment:** In an era of fiscal austerity and spiraling health care costs, policymakers are often forced to make difficult decisions on funding for education, social programs, and public health services. How does disinvestment in education connect to illness and medical care costs? This issue brief will examine the return on investment, exploring how higher educational attainment relates to costs for medical care.

THE EDUCATION AND HEALTH INITIATIVE

This issue brief is a product of the Education and Health Initiative (EHI), a program of the Virginia Commonwealth University Center on Society and Health, supported by the Robert Wood Johnson Foundation.

- Launched in September 2012, the aim of the EHI is to raise awareness about the important connections between education and health.
- We “connect the dots” between distinct education and health policy spaces.
- We meet with leaders in government and the private sector—at the national, state, and local level—to explore the ties between education and better health.
- We produce online media and issue briefs to explore specific themes and stimulate discussion.

THE CENTER ON SOCIETY AND HEALTH

The VCU Center on Society and Health is an academic research center that studies the health implications of social factors—such as education, income, neighborhood and community environmental conditions, and public policy. Its mission is to answer relevant questions that can “move the needle” to improve the health of Americans. We present our work in formats and venues that are useful to decision-makers and change agents. The Center pursues these goals through collaboration with scholars in different disciplines at VCU and other institutions, and by nurturing partnerships with community, government, and private-sector stakeholders.

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