

SUMMARY FOR EDUCATORS

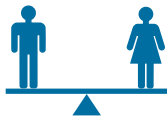
The Foundations of Health Research Center works to bridge research and the real world by examining the connections between health and social factors like race, socioeconomic status, and education. We especially focus on how inequalities in these domains are linked to health and wellness. Our hope in doing this research is that better health for all will be an achievable goal of our society. **This document is a selection of findings that are relevant to youth and educators.**

POVERTY AND HEALTH RISK

In 2013, we published a paper on how environments are linked to health in children. Essentially, **childhood poverty is associated with a cellular response that relates to health risk later in life.** Stressors associated with poverty begin and sustain this process. When we perceive external stressors, our cells respond by showing an aggressive, pro-inflammatory phenotype. When stress is chronic, our cells can over time become insensitive to signals that tell them to stop inflammatory processes. Over time, these types of immune processes have been linked to chronic diseases later in life like heart disease. In this way, childhood poverty has implications for health risks even into adulthood.

For more info, visit: <https://foundationsofhealth.org/wp-content/uploads/2013/05/13-Ch-Dev-Pers-biol-residue-child-poverty.pdf>

ACHIEVEMENT GAPS AND BOYS' HEALTH



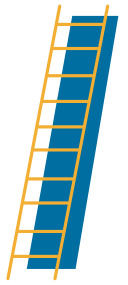
In 2019, we published research exploring how differences in academic performance between boys and girls relate to students' health. We looked at the academic achievement gaps between boys and girls at different schools and examined the cardiovascular health of students attending those schools. We found that **when schools have bigger academic achievement gaps between boys and girls, boys have higher blood pressure, obesity, and cholesterol levels.** In schools where there were big achievement gaps, it was in the direction where fewer boys than girls met grade-level expectations on standardized tests. These results suggest that **school environments can play a role in the health of students.**

For more info, visit: <https://foundationsofhealth.org/wp-content/uploads/2020/04/19-SSM-gender-disparities-in-academics-and-health.pdf>

VIOLENCE AND HEALTH RISK

In 2019, we published research exploring how neighborhood violence is linked to inflammation. We worked with a sample of adolescents living in Chicago and assessed their neighborhood-violence levels, measured by murder rates in the areas where youth lived. We found that **adolescents living in high-violence neighborhoods had higher numbers of a type of pro-inflammatory immune cell called monocytes** than those in less violent neighborhoods. Inflammation is linked to higher risk for heart disease and other illnesses. This suggests that **neighborhood violence relates to a pro-inflammatory response in youth, which if sustained over the long-term, may put them at risk for health problems later in life.**

For more info, visit: <https://foundationsofhealth.org/wp-content/uploads/2020/04/Finegood-et-al.-2020.pdf>



HEALTH CONSEQUENCES OF UPWARD MOBILITY

We recently published an article exploring the potential health consequences of upward mobility. We conducted critical literature reviews to provide an overview of how moving up the socioeconomic ladder is related to mental and physical health. We found that **upward mobility, particularly for individuals of color, was associated with positive mental health, but poorer physical health compared to individuals who came from low-income backgrounds and did not experience upward mobility.** We termed this pattern as "**skin-deep resilience**", and propose that it results from prolonged high striving, competing demands, and discrimination. We hypothesized that these stressors can lead to physiological responses and unhealthy behaviors that increase cardiometabolic risk.

For more info, visit: <https://foundationsofhealth.org/wp-content/uploads/2021/03/The-Health-Costs-of-Upward-Mobility-Annual-Review-of-Psychology-in-press.pdf>

HOW CAN WE HELP YOUTHS' HEALTH?



THE VALUE OF DIVERSITY

In 2019, we published a study that focuses on how school environments are related to students' health. We looked at school environments that emphasized diversity in their mission statements versus those that did not and measured cardiovascular health in students attending those schools. We found that **when schools emphasize the value of diversity, students of color have healthier profiles** in terms of lower biomarkers for inflammation, better cardiovascular health, and less insulin resistance.

For more info, visit: <https://foundationsofhealth.org/wp-content/uploads/2019/12/19-PNAS-diversity-mission-statements-student-health.pdf>



THE POWER OF FAMILIES

We have documented how interventions that strengthen family relationships **predict lower levels of inflammation in African American youth from low socioeconomic backgrounds.** We conducted an intervention where half of the families participated in a 7-week intervention to help improve parenting and strengthen family relationships just as children were entering adolescence (when they were age 11). Eight years later, when youth were 19 years old, we took blood samples to measure inflammation, a contributor to a number of chronic diseases later in life. We found that youth who had been randomly assigned to be part of the intervention group had lower levels of inflammation than their counterparts who had been assigned to receive pamphlets about health and child development.

For more info, visit: <https://foundationsofhealth.org/wp-content/uploads/2013/05/A-family-oriented-psychosocial-intervention-reduces-18csedq.pdf>

THE ADVANTAGES OF ROLE MODELS AND POSITIVE THINKING



For more info, visit: <https://foundationsofhealth.org/wp-content/uploads/2013/05/13-Ch-Dev-SES-role-models-inflammation.pdf>

We published a study that tested the links between role models, "shift-and-persist" strategies (coping strategies that involve shifting the way in which one thinks about stressors in a more benign way while also persisting with optimism about the future), and inflammation in youth. We sampled youth aged 13-16 and interviewed them about the presence of a supportive role model in their lives, surveyed them about the use of shift-and-persist coping strategies, and measured biomarkers of inflammation in their blood. We found that **low-SES youth who had a supportive role model were more likely to exhibit shift-and-persist strategies, which in turn was linked to lower levels of inflammation.**