

Living in better neighborhood may protect health of kids in poverty

May 8, 2018 - 2:11pm

By Suzanne Leigh [1]



“Our study indicates that the quality of a neighborhood where a child grows up is one of several factors that can have a protective effect on their health,” said lead study author Danielle Roubinov, PhD.

While poverty has long been linked with poor health, a study from UC San Francisco has found that simply living in a more desirable neighborhood may act as a health booster for low-income children.

UCSF Department of Psychiatry researchers compared levels of the stress hormone cortisol in 338 kindergartners whose families’ annual incomes ranged from less than \$10,000 to \$200,000-plus. The research team found that the average cortisol level among 113 of low-income children who lived in poor neighborhoods reached the 75th percentile. But when they looked at cortisol levels in 32 low-income children living in better-quality neighborhoods, the average was in the 45th percentile, the researchers report in the May 8, 2018, issue of *Psychosomatic Medicine*.



Danielle Roubinov,
PhD [2]

“Cortisol is a measure of biological stress arousal, and elevated levels can place children at risk for both poorer physical and mental health,” said first author Danielle Roubinov, PhD [2], assistant professor of psychiatry and a member of the UCSF Weill Institute for Neurosciences [3].

High cortisol levels are associated with elevated blood sugar, raised blood pressure, back pain, bone thinning, obesity, insomnia, anxiety and fatigue.

“The quality of neighborhoods was assessed by a measure that evaluates access to green spaces, exposure to environmental toxins, and availability of early childhood education centers and grocery stores selling healthy food,” said Roubinov. “Our study indicates that the quality of a neighborhood where a child grows up is one of several factors that can have a protective effect on their health.”

Better neighborhood equals better health

The researchers also asked teachers and parents of the kindergartners, who were enrolled at six public schools in the San Francisco Bay Area, to report on the children’s overall health and any impairments that may prevent them from participating in desired activities. They

found that the 113 low-income children living in poor neighborhoods were in the 75th percentile when it came to such health issues, while the 32 low-income children in better-resourced neighborhoods scored in the 55th percentile.

The work follows a 2011 government study that found when low-income adults moved to wealthier neighborhoods as a result of a voucher housing initiative, the prevalence of obesity, diabetes and other self-reported health limitations improved. Taken together, such results suggest that infusing a neighborhood with resources across various domains could influence the negative effects of a family's economic status, said Roubinov. Initiatives such as supportive social services, efforts to improve neighborhood safety and housing quality, and redesigning parks and open spaces may offer physiological and physical benefits.

The study's senior author is Nicole R. Bush, PhD, [4] an associate professor in psychiatry and pediatrics at UCSF. Co-authors are Melissa J. Hagan, PhD, MPH [5], of UCSF and San Francisco State University, and W. Thomas Boyce, MD [6], and Nancy E. Adler, PhD [7], of UCSF.

The study was funded by the National Institute of Mental Health [8], the MacArthur Foundation Research Network on Psychopathology and Development [9], and the Canadian Institute for Advanced Research [10].

Further coverage

- **U.S. News & World Report:** Build a better neighborhood to boost kids' health [11]

About UCSF Psychiatry

The UCSF Department of Psychiatry [12] and the Langley Porter Psychiatric Institute are among the nation's foremost resources in the fields of child, adolescent, adult, and geriatric mental health. Together they constitute one of the largest departments in the UCSF School of Medicine and the UCSF Weill Institute for Neurosciences, with a mission focused on research (basic, translational, clinical), teaching, patient care and public service.

UCSF Psychiatry conducts its clinical, educational and research efforts at a variety of locations in Northern California, including UCSF campuses at Parnassus Heights, Mission Bay and Laurel Heights, UCSF Medical Center, UCSF Benioff Children's Hospitals, Zuckerberg San Francisco General Hospital and Trauma Center, the San Francisco VA Health Care System and UCSF Fresno.

About the UCSF Weill Institute for Neurosciences

The UCSF Weill Institute for Neurosciences [13], established by the extraordinary generosity of Joan and Sanford I. "Sandy" Weill, brings together world-class researchers with top-ranked physicians to solve some of the most complex challenges in the human brain.

The UCSF Weill Institute leverages UCSF's unrivaled bench-to-bedside excellence in the neurosciences. It unites three UCSF departments—Neurology, Psychiatry, and Neurological Surgery—that are highly esteemed for both patient care and research, as well as the Neuroscience Graduate Program, a cross-disciplinary alliance of nearly 100 UCSF faculty

members from 15 basic-science departments, as well as the UCSF Institute for Neurodegenerative Diseases, a multidisciplinary research center focused on finding effective treatments for Alzheimer's disease, frontotemporal dementia, Parkinson's disease, and other neurodegenerative disorders.

About UCSF

UC San Francisco (UCSF) ^[14] is a leading university dedicated to promoting health worldwide through advanced biomedical research, graduate-level education in the life sciences and health professions, and excellence in patient care. It includes top-ranked graduate schools of dentistry, medicine, nursing and pharmacy; a graduate division with nationally renowned programs in basic, biomedical, translational and population sciences; and a preeminent biomedical research enterprise. It also includes UCSF Health, which comprises top-ranked hospitals ? UCSF Medical Center ^[15] and UCSF Benioff Children's Hospitals in San Francisco ^[16] and Oakland ^[17] ? and other partner and affiliated hospitals and healthcare providers throughout the Bay Area.

Contact Us
Psychiatry Intranet
UCSF Webmail
UCSF Main Site

© 2021 The Regents of the University of California

Source URL (modified on 05/10/2018 - 9:48am): <https://psychiatry.ucsf.edu/news/living-better-neighborhood-may-protect-health-kids-poverty>

Links

- [1] <https://www.ucsf.edu/content/leigh-suzanne>
- [2] <http://profiles.ucsf.edu/danielle.roubinov>
- [3] <https://weill.ucsf.edu/>
- [4] <http://profiles.ucsf.edu/nicki.bush>
- [5] <http://profiles.ucsf.edu/melissa.hagan>
- [6] <http://profiles.ucsf.edu/tom.boyce>
- [7] <http://profiles.ucsf.edu/nancy.adler>
- [8] <https://www.nimh.nih.gov>
- [9] <https://www.macfound.org/networks/research-network-on-psychopathology-development/details>
- [10] <https://www.cifar.ca/>
- [11] <https://www.usnews.com/news/healthiest-communities/articles/2018-05-09/study-neighborhood-quality-may-blunt-health-impact-of-being-poor>
- [12] <https://psychiatry.ucsf.edu/welcome-ucsf-psychiatry>
- [13] <http://weill.ucsf.edu/>
- [14] <http://www.ucsf.edu/>
- [15] <https://www.ucsfhealth.org/>
- [16] <https://www.ucsfbenioffchildrens.org/>
- [17] <http://www.childrenshospitaloakland.org/main/home.aspx>