



Seminar on

Climate Change and Intelligence: Evidence from Extreme Temperatures

Date: November 2, 2018 (Friday)

Time: 4:30pm – 5:30pm

Venue: 902, 9/F, Yasumoto International Academic Park,

The Chinese University of Hong Kong

Speaker: Professor Xi CHEN, PhD

School of Public Health, Yale University



Xi CHEN, Ph.D., is an assistant professor of Health Policy and Economics at Yale University. He is also the President of China Health Policy and Management Society, Fellow and Research Cluster Lead in Environment and Human Capital at the Global Labor Organization, a Senior Consultant at the United Nations, and Research Fellow at IZA. He co-directs research events at the Yale Program on Aging and Yale PEPPER Center. His research focuses on public policies related to childhood development, population aging, climate change and health, and quality of life. Professor Chen's work has been funded by NIH, USDA, and other major public and private funding sources worldwide, recognized through numerous internationally recognized awards, and reported widely in major global media.

Abstract

Linkages between climate change and cognitive performance are not well understood, especially across all age cohorts. More frequent extreme weather, such as heat waves and cold spells, is among the primary ways that most people experience climate change. This paper examines the effect of transitory exposure to heat waves for the same individuals over years on cognitive performance. We match a national sample with rich weather and climate data in China according to the exact time and geographic locations of the cognitive tests. We show that exposure to heat waves (>85 °F) impedes females' cognitive performance in both verbal and math tests, and the effect is more pronounced for verbal test takers, females, and the older cohort. People who live in the north or do not have AC installed in the test locations are more vulnerable to the hot days, while those with AC show somewhat muted effects, indicating some evidence of adaptation. The results survive a key set of falsification tests and robustness checks. Our findings suggest that heat waves may not operate through economic impacts on families or impatience during the tests but directly through impaired brain functioning.

~All are Welcome~