Kaiyi Wen

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Education

Ph.D. Economics, Binghamton University, 2025 (expected).

M.A. Economics, Boston University, 2020.

B.A. Economics, China Agricultural University & University of Colorado Denver, 2018.

Area of Interests

Environmental Economics; Health Economics; Labor Economics

Working Papers

Neglected Hazard: Mental Health and Traffic Noise, with Neha Khanna

As Time Goes By: Redlining, Kinship, and Environmental Justice, with Neha Khanna

Too Shiny to Handle: Nighttime Light and Mental Health, with Yushang Wei

Energy Transition and Mental Health, with Jancy Liu, and Dylan Brewer

Work in Progress

Highway Noise Pollution and Infant Health Outcomes: Evidence from California, with Huan Li, Ruohao Zhang, and Neha Khanna

Extreme Precipitation, Flooding, and Land Use: Evidence from Daily Data, with Huan Li, Ruohao Zhang, and Yuqiao Cen

Conferences

ASSA 2025 Annual Meeting, San Francisco, CA, January 2025

SEA 94th Annual Meeting, Washington, DC, November 2024

The Heartland Environmental and Resource Economics Workshop, Champaign, IL, October 2024

OSWEET (Online Workshop), September 2024

2024 NAERA Annual Meeting and Workshop, Rehoboth Beach, DE, June 2024

AERE 2024 Summer Conference, Washington, DC, May 2024

2024 CES North America Conference, Lewisburg, PA, March 2024

*ASSA 2024 Annual Meeting, San Antonio, TX, January 2024 (NSF-RA project was accepted for presentation)

2023 HINTS Data Users Conference, Bethesda, MD, September 2023

AERE 2023 Summer Conference, Portland, ME, June 2023

* indicates attendee, instead of presenter

Awards and Scholarships

Teaching Assistant Fellowship; Binghamton University, 2025

National Science Foundation Research Assistant Fellowship; Supervisor: Neha Khanna, 2023-2025

Teaching Assistant Fellowship; Binghamton University, 2020-2023

Graduate Tuition Scholarship; Binghamton University, 2020-2025

Teaching Experience

Instructor of Record - Binghamton University

Econ 160: Principles of Microeconomics, Spring 2025

Graduate Teaching Assistant - Binghamton University

Econ 696G: Industrial Organization 1, Fall 2024

Econ 466: Introduction to Econometrics, Fall 2022

Econ 454: Economics of Corporations, Spring 2022

Econ 461: Game Theory, Fall 2021

Econ 360: Microeconomic Theory, Fall 2020, Spring 2021

Programming Skills

Stata, ArcGIS Pro, QGIS, R, Latex, Python

Paper Abstracts

Job Market Paper: "Neglected Hazard: Mental Health and Traffic Noise" (Under Review)

Abstract: Poor mental health triggers serious labor market penalties and is a growing cause for concern among health professionals and economists. While the literature has linked several factors to poor mental health, the role of non-chemical environmental factors is unclear. Using restricted data on 14,000 survey respondents, we estimate that road noise is associated with sleep deprivation and has a statistically significant, causal effect on mental health, equivalent to a 10% increase in the number of respondents experiencing mild symptoms. This translates to an annual welfare loss as large as $13 billion for the US.

"As Time Goes By: Redlining, Kinship, and Environmental Justice"-*Working Paper*

Abstract: We contribute to the literature on environmental justice by exploring the role of two relatively unexplored factors, redlining and kinship, in explaining the environmental pollution gap between marginalized and non-marginalized communities. Using restricted data on 20,000 survey respondents in the contiguous US, we measure onsite toxic emissions, ambient road noise, $PM_{2.5}$, and toxicity concentrations at the individual and community levels between 2014 and 2022. We show both redlining and kinship play significant roles in explaining the contemporary pollution gap. We also find that individuals identifying as Black and Hispanic are exposed to higher levels of all four pollutants as compared to White individuals. However, the results are sensitive to geographic scale and it matters whether we measure pollution at the local (i.e. individual) or neighborhood scale. Overall, our results suggest that while neighborhoods with higher shares of African Americans may have no greater ambient pollution than relatively white neighborhoods, within these neighborhoods, individuals of color may still be disproportionately exposed to pollutants as compared to white individuals.

"Too Shiny to Handle: Nighttime Light and Mental Health"-*Working Paper*

Abstract: Poor mental health imposes significant labor market penalties and is a growing concern among health professionals and economists. While several factors are linked to poor mental health, the role of non-chemical environmental factors remains unclear. Meanwhile, the average night sky has become brighter by 9.6% per year since 2011. This excessive light usage results in substantial welfare losses and health problems. We conduct the first study to establish a causal relationship between light pollution and mental health in the US. Using restricted data on approximately 14,000 survey respondents and granular nighttime light data from NASA, we exploit variations in local cloud cover to establish the exogenous change in nighttime light pollution. Our findings demonstrate that 2.7% of respondents who previously reported minimal mental health concerns are now showing mild symptoms of mental health issues. This translates to an annual welfare loss of up to $47 billion attributed to lost earnings in the labor market.

"Energy Transition and Mental Health"-*Working Paper*

Abstract: We provide quasi-experimental estimates of the impact of coal and natural gas power plant retirements on the mental health of local residents in the United States. Combining data on power plant retirements and restricted mental health data, we employ a difference-indifferences approach and find that coal-fired power plant retirements have a significant negative impact on mental health, while natural gas retirements have a positive effect. We explore potential mechanisms and find evidence suggesting that economic impacts and local amenity improvements drive these divergent effects. Our findings highlight the importance of considering mental health implications in energy transition policies and strategies.

Miscellaneous

Language: English (Fluent), Chinese (Native)

Citizenship: Chinese (US visa status: F-1)

Reference

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