



Trade and Development Seminar

Smog in Our Brains: Gender Difference in the Impact of Exposures to Air Pollution on Cognitive Performance

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119 Ruttan Hall

Compared to the large body of literature on the negative health effects of air pollution, the effect on cognitive performance has been much less understood. By merging a nationally representative panel survey at the individual level in China with local air quality data according to the exact dates and locations of interviews, we study both the contemporaneous and cumulative effects of exposures to air pollution on word and math test scores. We find that in the long run, air pollution impedes both word and math scores of survey subjects. In the short term, the negative effect shows up more evidently in word tests. We also observe heterogeneous effects by gender and age: Men perform worse than women in both tests when exposed to the same dose of air pollution; the gender difference in word tests is more salient among the old cohort, while it is more evident among the young in math tests.