

## **Abstract**

Cognitive performance during high-stakes exams can be affected by random disturbances that, even if transitory, may have permanent consequences for educational attainment and labor market outcomes. We evaluate this hypothesis among Israeli students who took a series of matriculation exams between 2000 and 2002. Exploiting variation across the same student taking multiple exams, we find that transitory  $PM_{2.5}$  exposure is associated with a significant decline in student performance. We then examine these same students in 2010 and find that  $PM_{2.5}$  exposure during exams is negatively associated with post-secondary educational attainment and earnings. The results highlight how reliance on noisy signals of student quality can lead to allocative inefficiency.