Broadband Technology, Aging, and Mental Health

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Abstract

Recent evidence from the economics literature highlights the detrimental impact of social media technology on the mental health of college students, primarily attributed to unfavorable *social comparisons*. This paper examines the effect of a similar technology, high-speed internet broadband, on the mental health of older adults (aged 50+) in the United States. Leveraging the quasi-experimental staggered rollout of high-speed broadband at the census tract level from 2010 to 2018, combined with individual panel data, I utilize spatial, temporal, and individual-level variations in broadband availability and employ the latest difference-in-differences (DID) estimator. I find that the introduction of high-speed broadband improves mental health (decline in depression symptoms) among older adults, primarily due to improvement in *social connectedness*. These contrasting findings for younger and older cohorts emphasize that the impact of similar technologies can differ significantly based on age and how the technology is being used. The positive effects are driven by Whites, with no effects on African-Americans. However, I find a larger positive effect on mental health in rural areas and also modestly higher estimates for women. I find an inverted U shape of the positive effects concentrated among the 65 to 85 age groups. The paper also uncovers other unexplored mechanisms, such as decreased social isolation, improved health literacy and cognition, and improved technological efficiency in nearby hospitals that might account for the observed positive effects on mental health. In the events of very recent investments of $42.45 Billion in broadband, these results carry significant policy implications for broadband availability policies and emphasize the potential benefits for the mental health of older adults. JEL I12, I14, I18, L86, O18

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