

SES and Midlife Health/Mortality: The (Underappreciated) Role of US States

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Socioeconomic Status and Increasing Mid-Life Mortality

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Two Objectives

1. Change the way we think about education → health
2. Recognize the role of US states

Persistent and Pressing Questions

- *Why does education shape health & mortality?*
- *Why has the association grown stronger?*
- *Why has mortality of low-educated adults increased?*

Conventional Ways of Thinking

- Education is a **personal** resource
- Focus on “**agentic**” explanations
- Adults with more education are thought to...
pursue healthy lifestyles,
seek medical knowledge,
avoid financial hardship,
develop social ties, etc...
- Void of context!

1964 Surgeon General's Report

High-educated adults...

- *learned risks of smoking sooner
- *more likely to understand and believe science

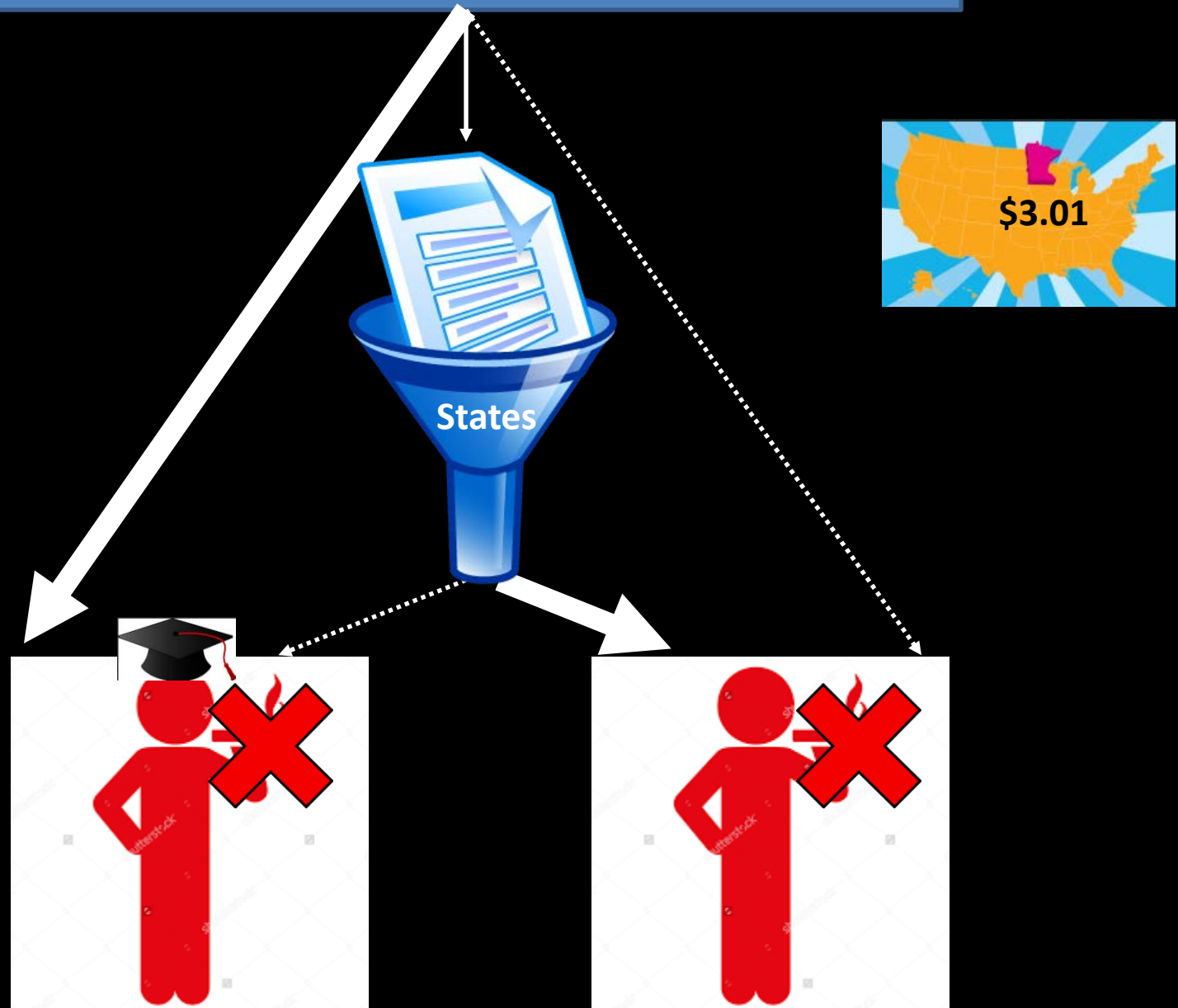
(Link 2008; Cutler & Lleras-Muney 2010)



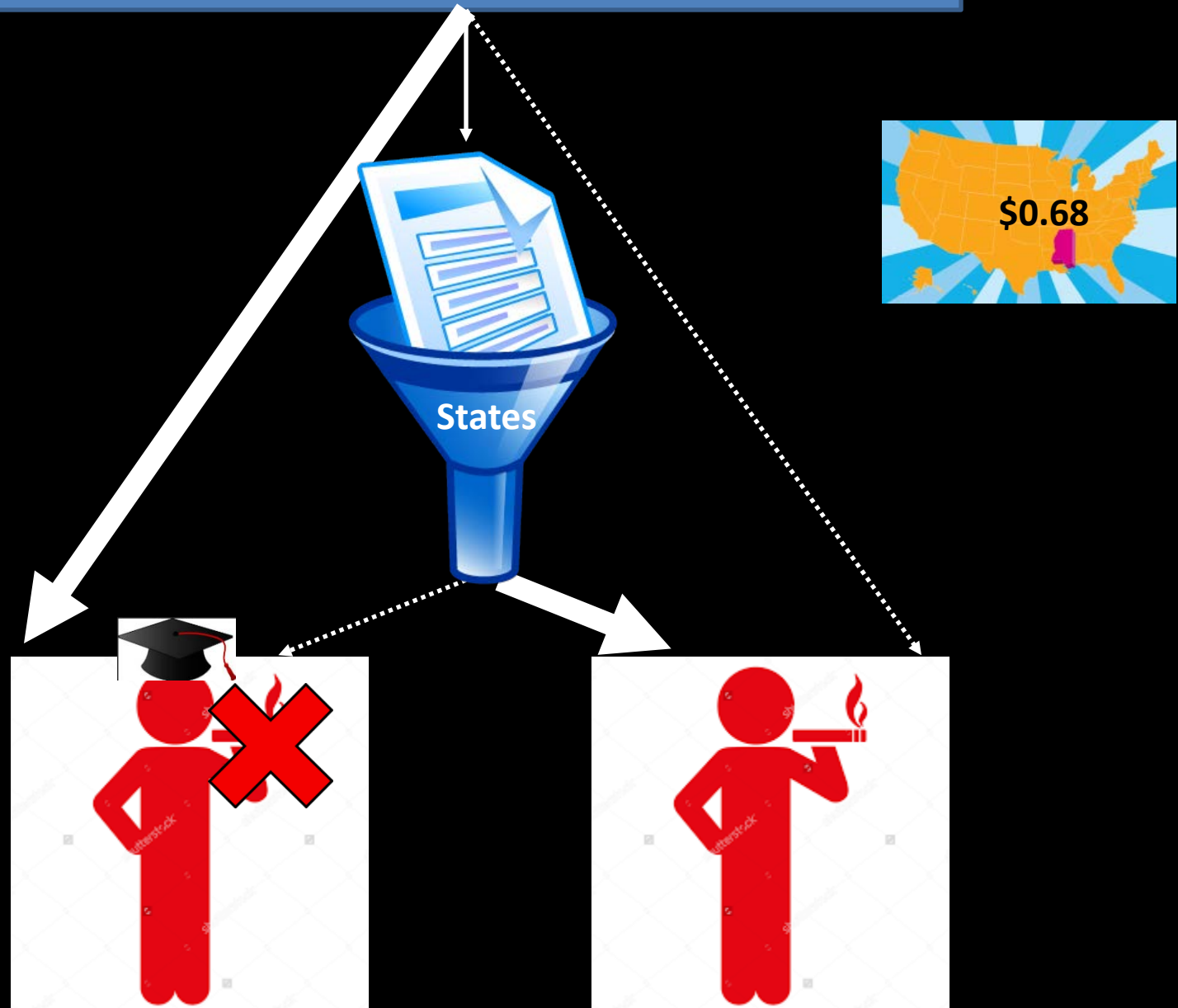
Low-educated adults are more sensitive to cigarette tax increases (Chaloupka et al 2002)



1964 Surgeon General's Report

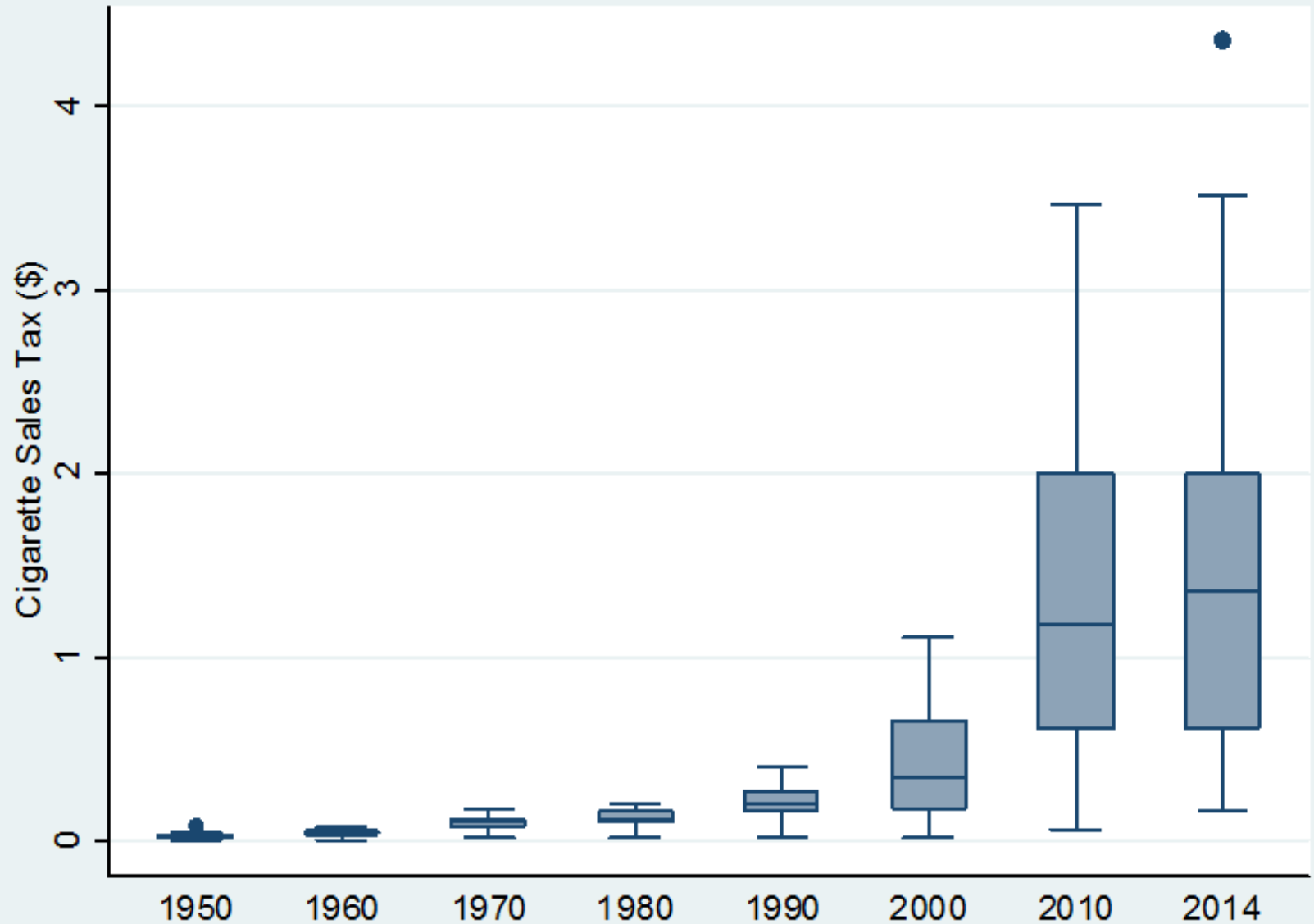


1964 Surgeon General's Report



Divergence in States' Cigarette Sales Tax

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States' policy contexts differ dramatically

	Mississippi	Minnesota
Cigarette tax	39 th	7 th
Minimum wage	No	Yes
EITC	No	Yes
Medicaid expansion	No	Yes
Incarceration rates	46 th	3 rd
Education expenditures	46 th	23 rd
High school dropout	48 th	2 nd
Individual poverty	50 th	3 rd

Minnesota EITC began 1991. Minnesota minimum wage depends on size of employer (for large employers it is \$9.50)

"Low-educated" = no high school credential.

Incarceration rates: <http://www.sentencingproject.org/the-facts/#rankings?dataset-option=SIR>

Education expenditures: <https://www2.census.gov/govs/school/13f33pub.pdf>

Is the importance of education for health/mortality influenced by US states?

Contextualizing the Social Determinants of Health: Disparities in Disability by Educational Attainment Across US States

Jennifer Karas Montez, PhD, Anna Zajacova, PhD, and Mark D. Hayward, PhD

Objectives. To examine how disparities in adult disability by educational attainment vary across US states.

Methods. We used the nationally representative data of more than 6 million adults aged 45 to 89 years in the 2010–2014 American Community Survey. We defined disability as difficulty with activities of daily living. We categorized education as low (less than high school), mid (high school or some college), or high (bachelor's or higher). We estimated age-standardized disability prevalence by educational attainment and state. We assessed whether the variation in disability across states occurs primarily among low-educated adults and whether it reflects the socioeconomic resources of low-educated adults and their surrounding contexts.

Results. Disparities in disability by education vary markedly across states—from a 20 percentage point disparity in Massachusetts to a 12-point disparity in Wyoming. Disparities vary across states mainly because the prevalence of disability among low-educated adults varies across states. Personal and contextual socioeconomic resources of low-educated adults account for 29% of the variation.

Conclusions. Efforts to reduce disparities in disability by education should consider state and local strategies that reduce poverty among low-educated adults and their surrounding contexts. (*Am J Public Health*. Published online ahead of print May 18, 2017: e1–e8. doi:10.2105/AJPH.2017.303768)

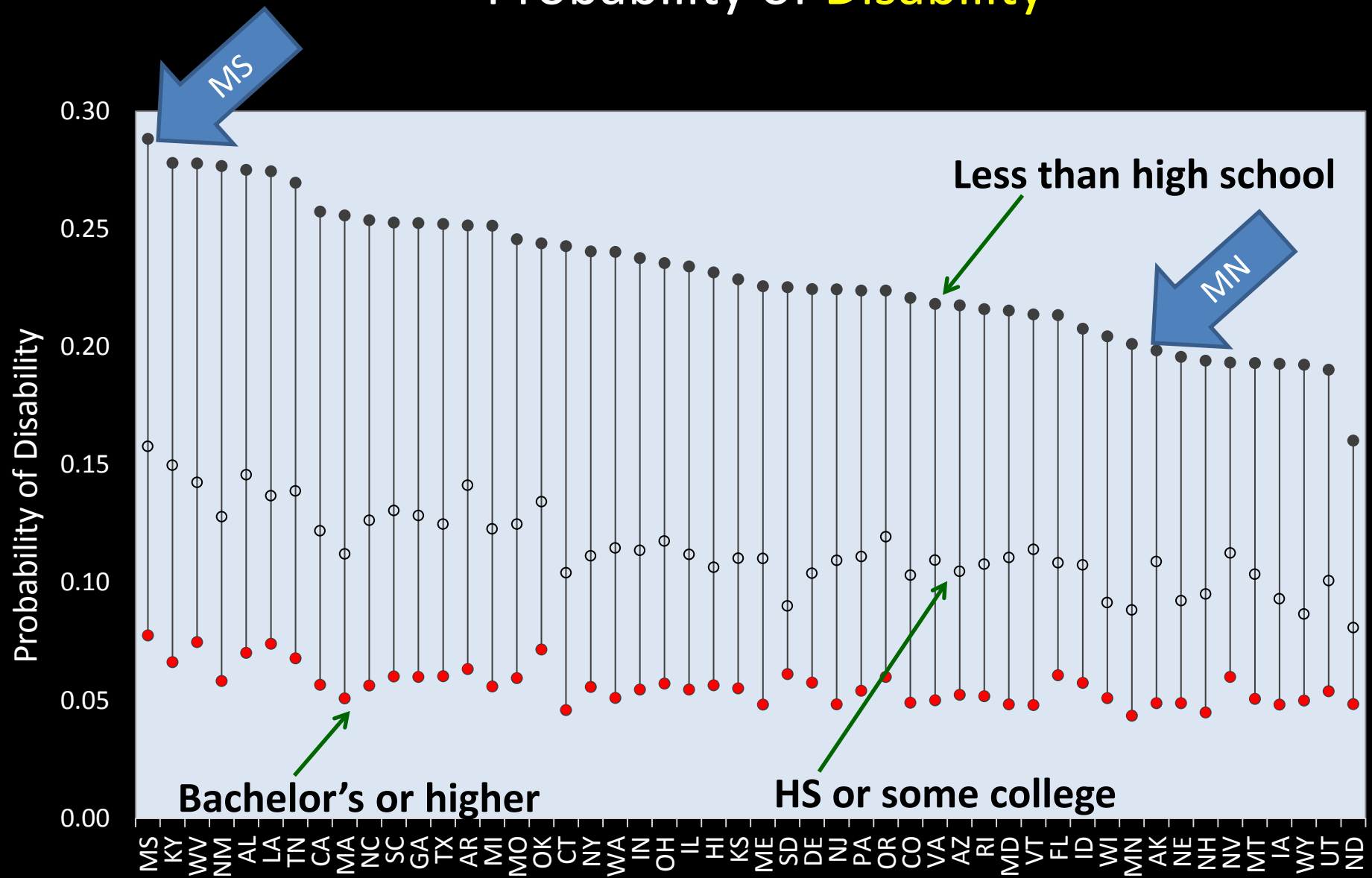
for adults living alone in impoverished areas without public transportation and with fractured social networks.

The importance of the environment for disability suggests that disparities in disability by educational attainment vary across place. Understanding why these disparities vary across place can shed light on the underlying causes of the education–disability association. Places differ in their demographic, socioeconomic, and policy contexts in ways that may make education more important for health in some places than in others. It is well established, for instance, that disparities in health and mortality by educational attainment vary across European countries and welfare regimes.^{7,11–16}

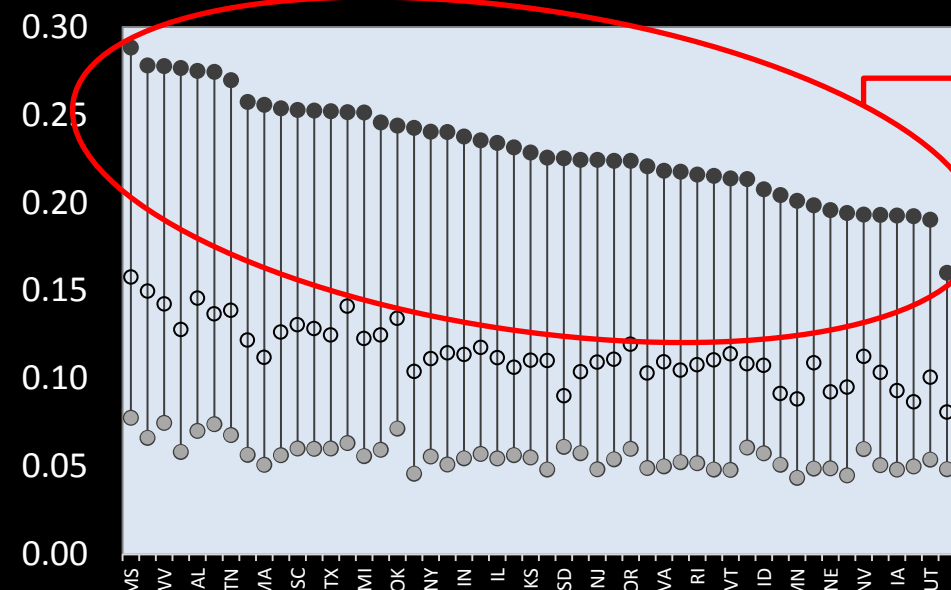
The contextual characteristics of places may be particularly salient for disability of lower-educated adults. Their higher-educated peers may be able to marshal their

Probability of Disability

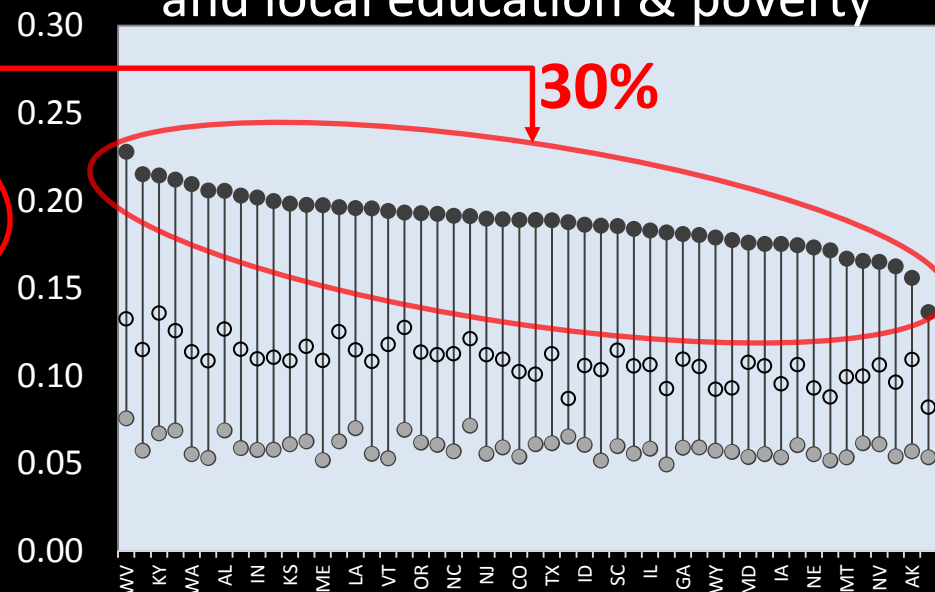
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Baseline model



Adjusted for race, poverty, and local education & poverty



“All happy families are alike; each unhappy family is unhappy in its own way” Tolstoy

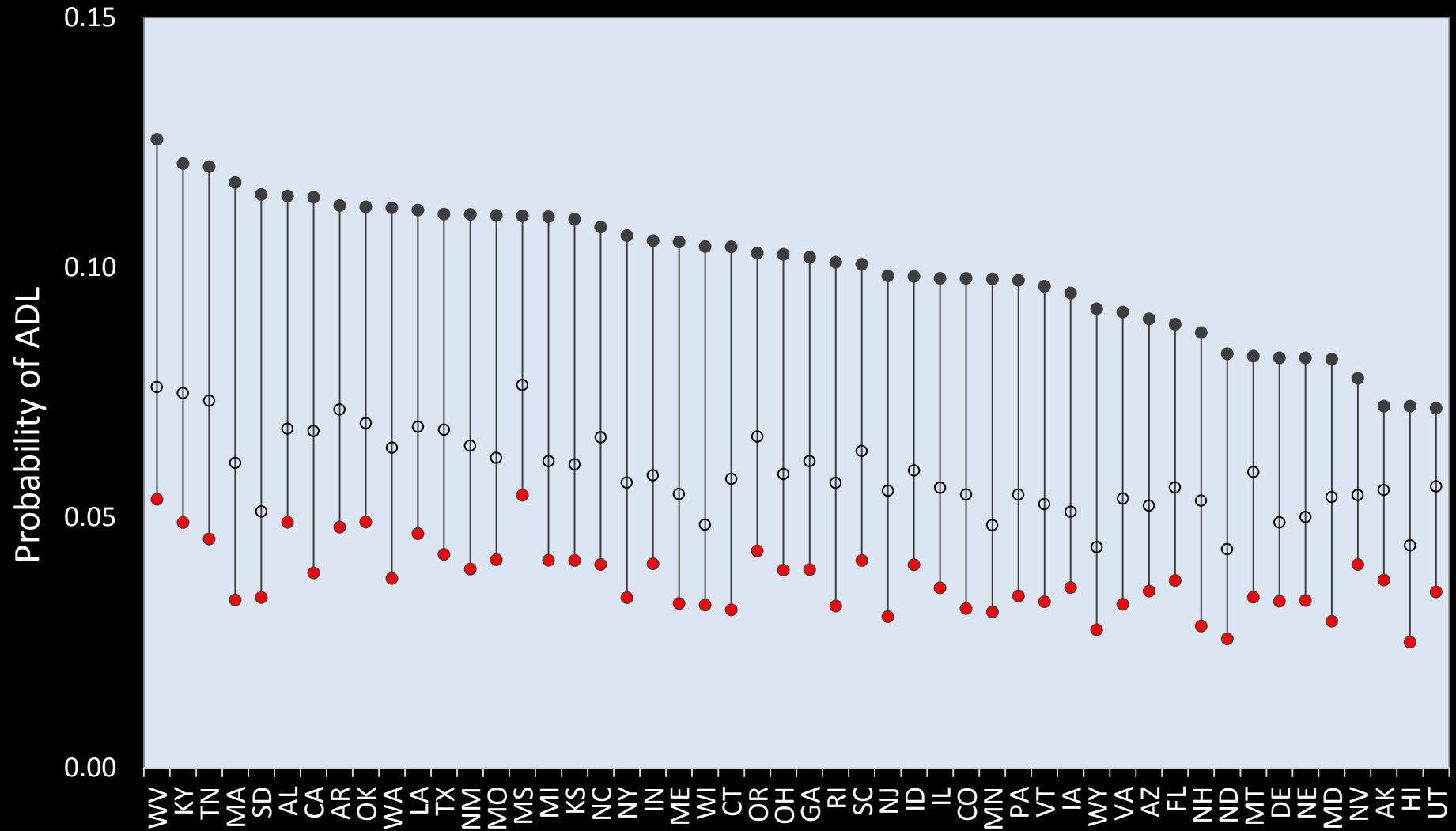
Local areas are important, but so too are states

The importance of education for health is shaped by US states

Biggest disparities: states where low education more often means living in poverty, and around others who are also low-educated and impoverished

Probability of Difficulty with ADL

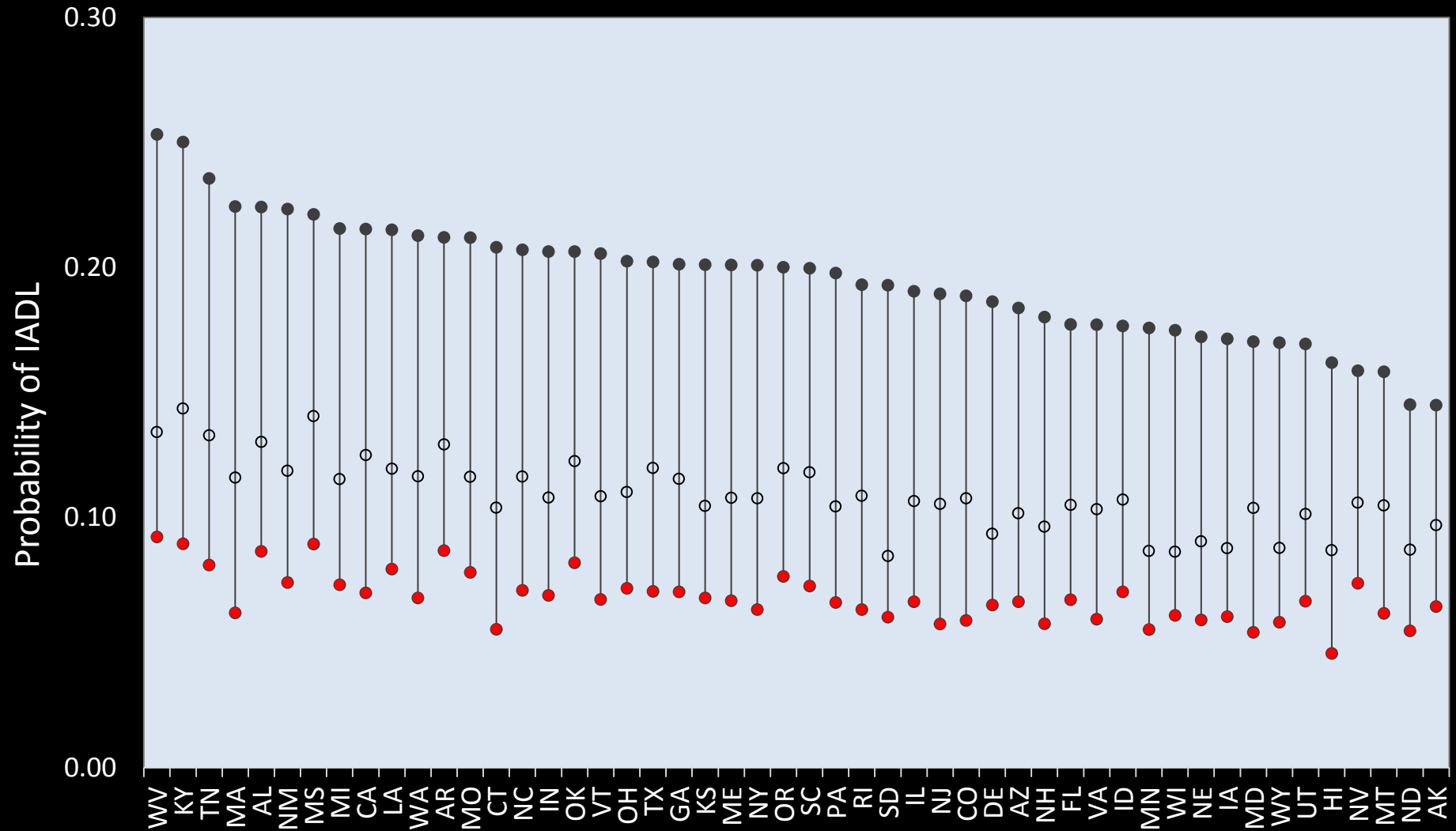
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2010-2014 ACS. US-born adults aged 45-89. Probabilities are shown for NHW women aged 65. Education includes LTHS, HS, MTHS

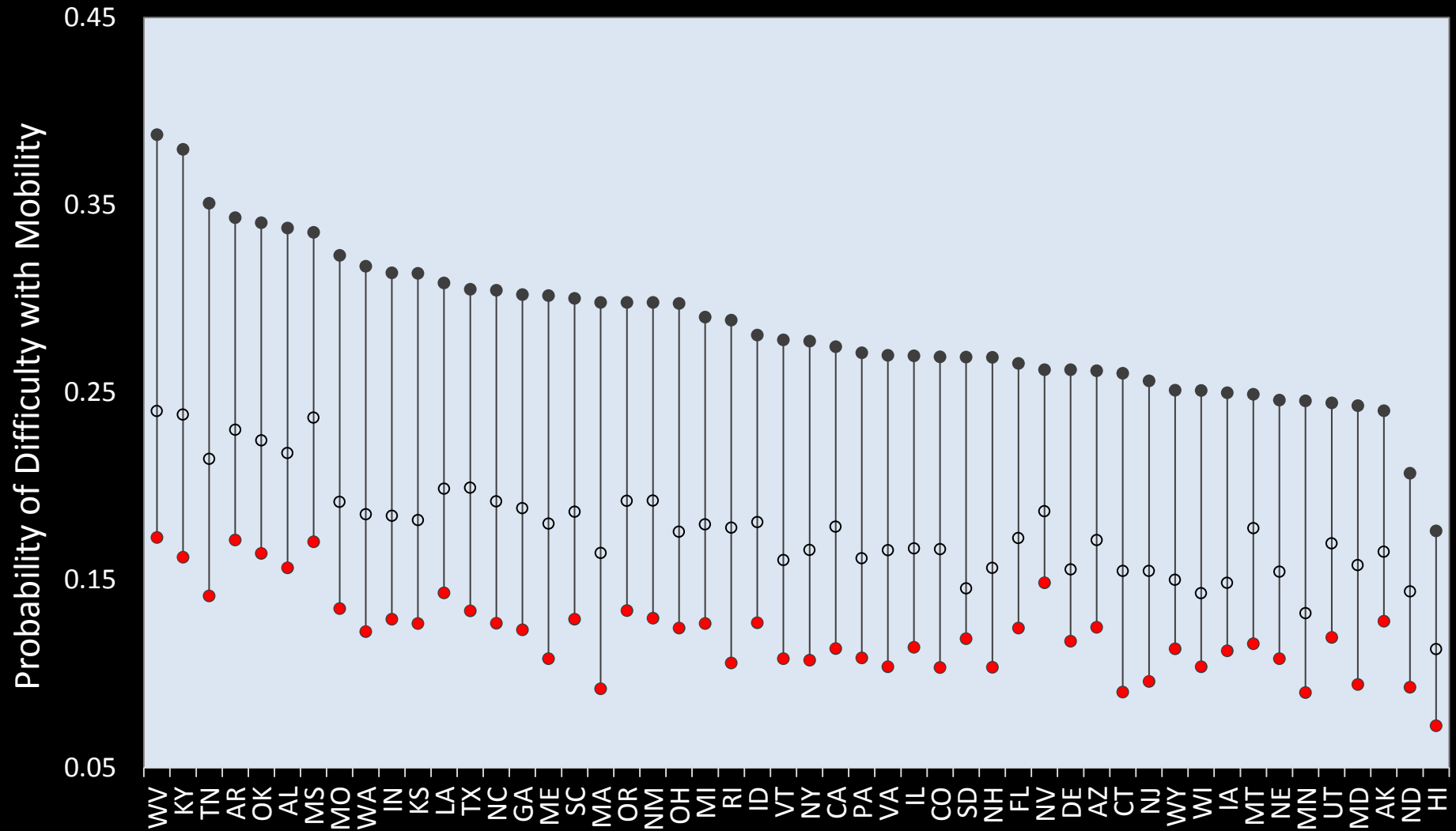
Probability of Difficulty with IADL

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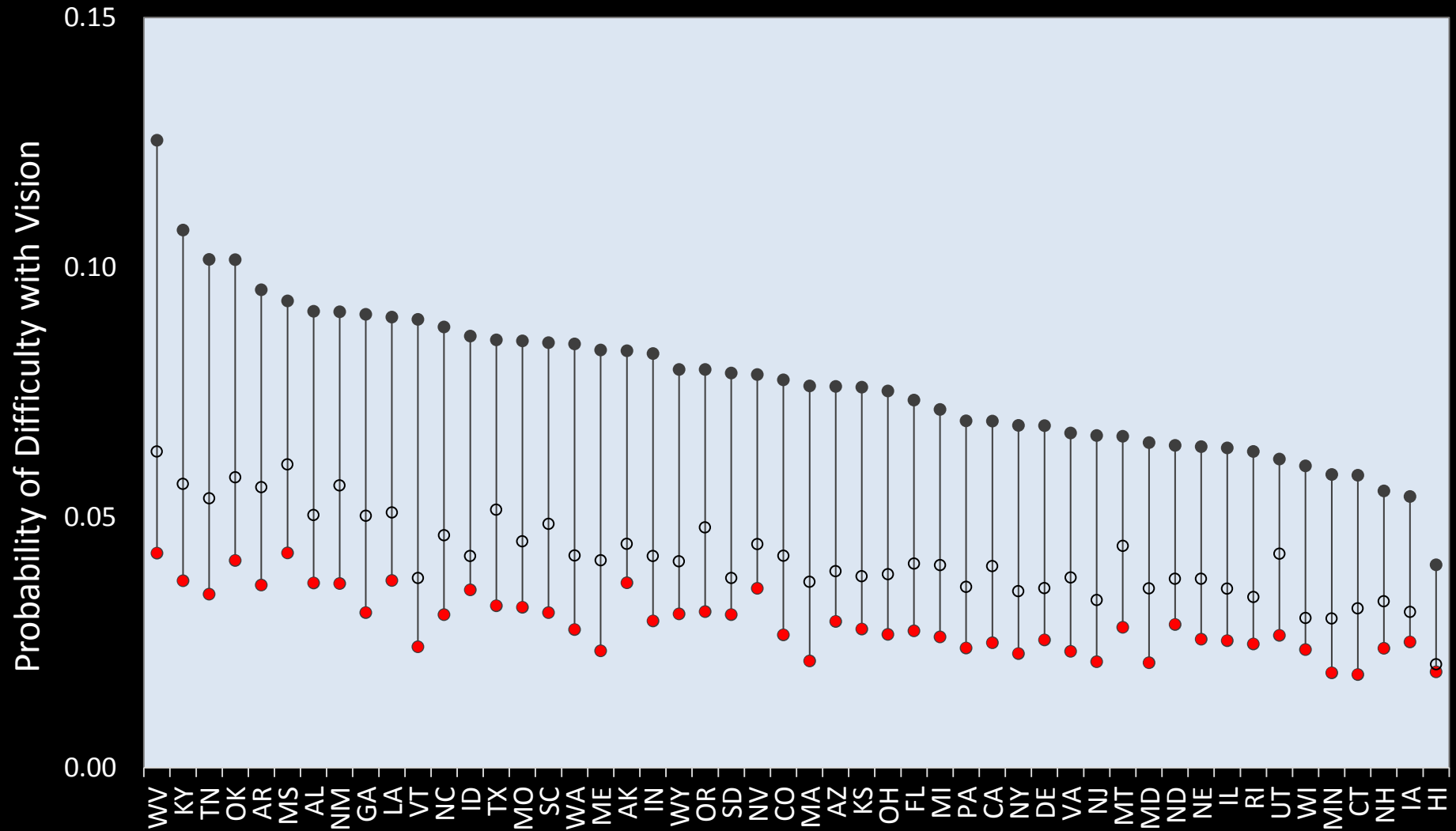
Probability of Difficulty with Mobility

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Probability of Difficulty with Vision

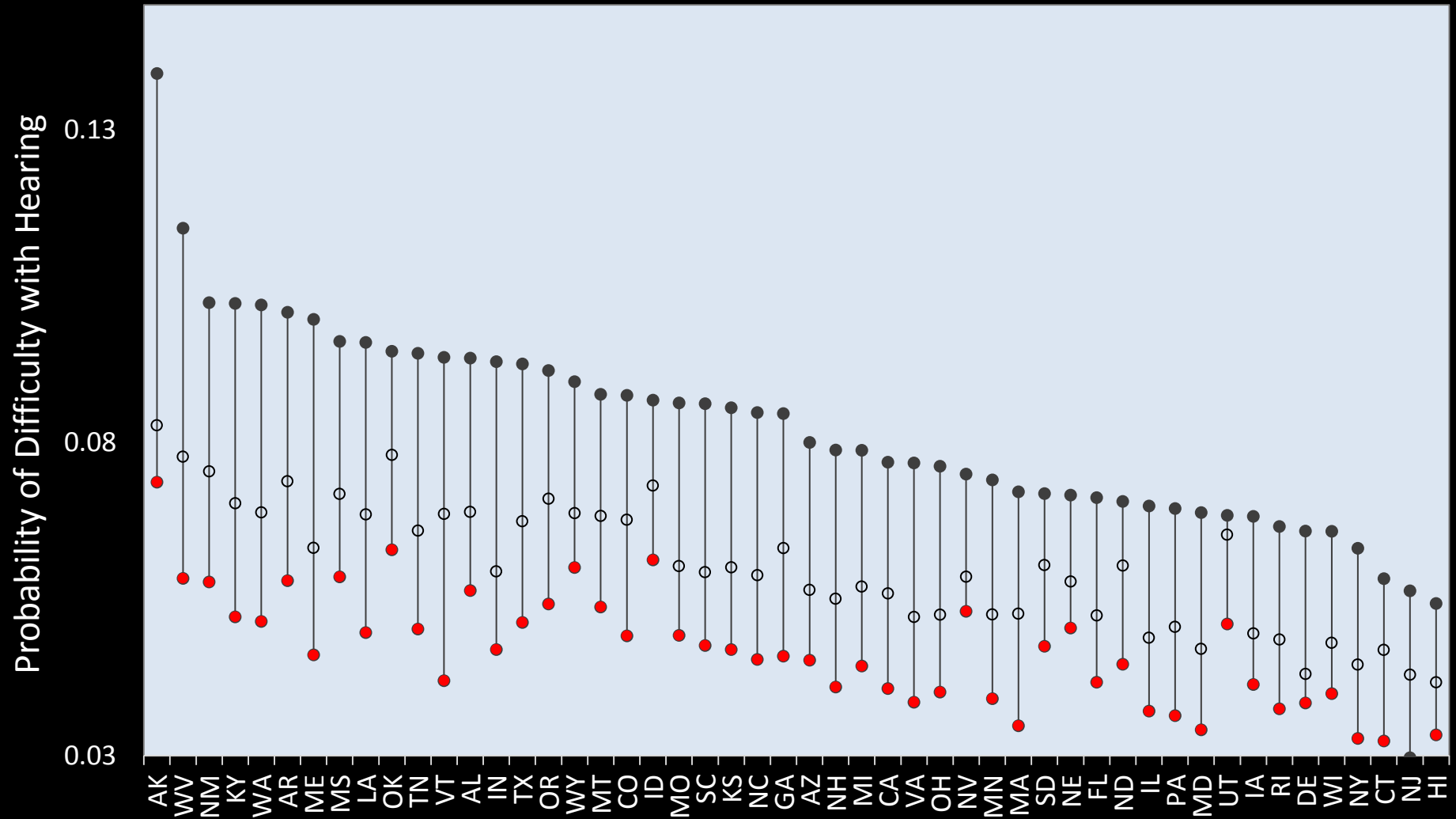
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2010-2014 ACS. US-born adults aged 45-89. Probabilities are shown for NHW women aged 65. Education includes LTHS, HS, MTHS

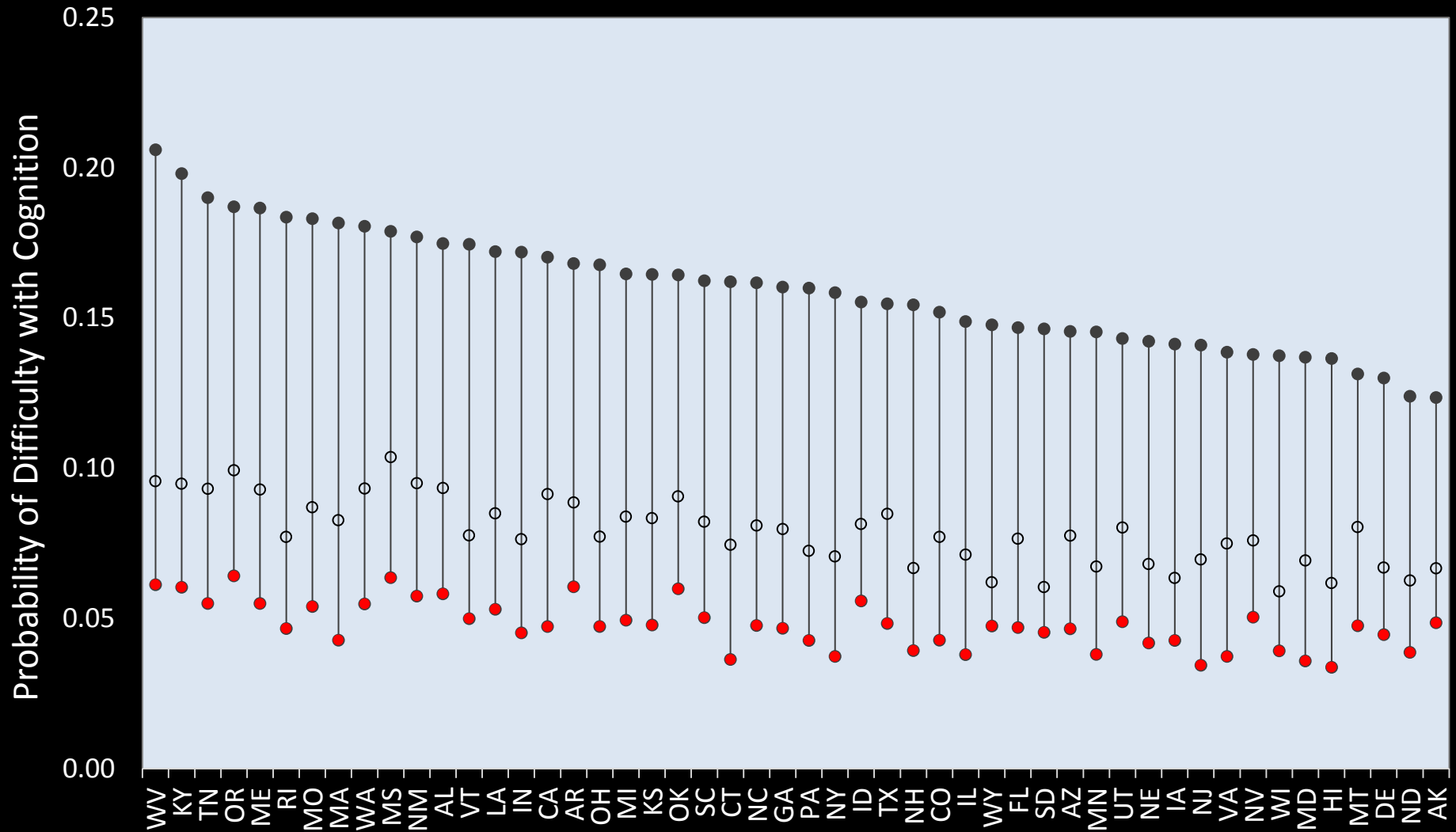
Probability of Difficulty with Hearing

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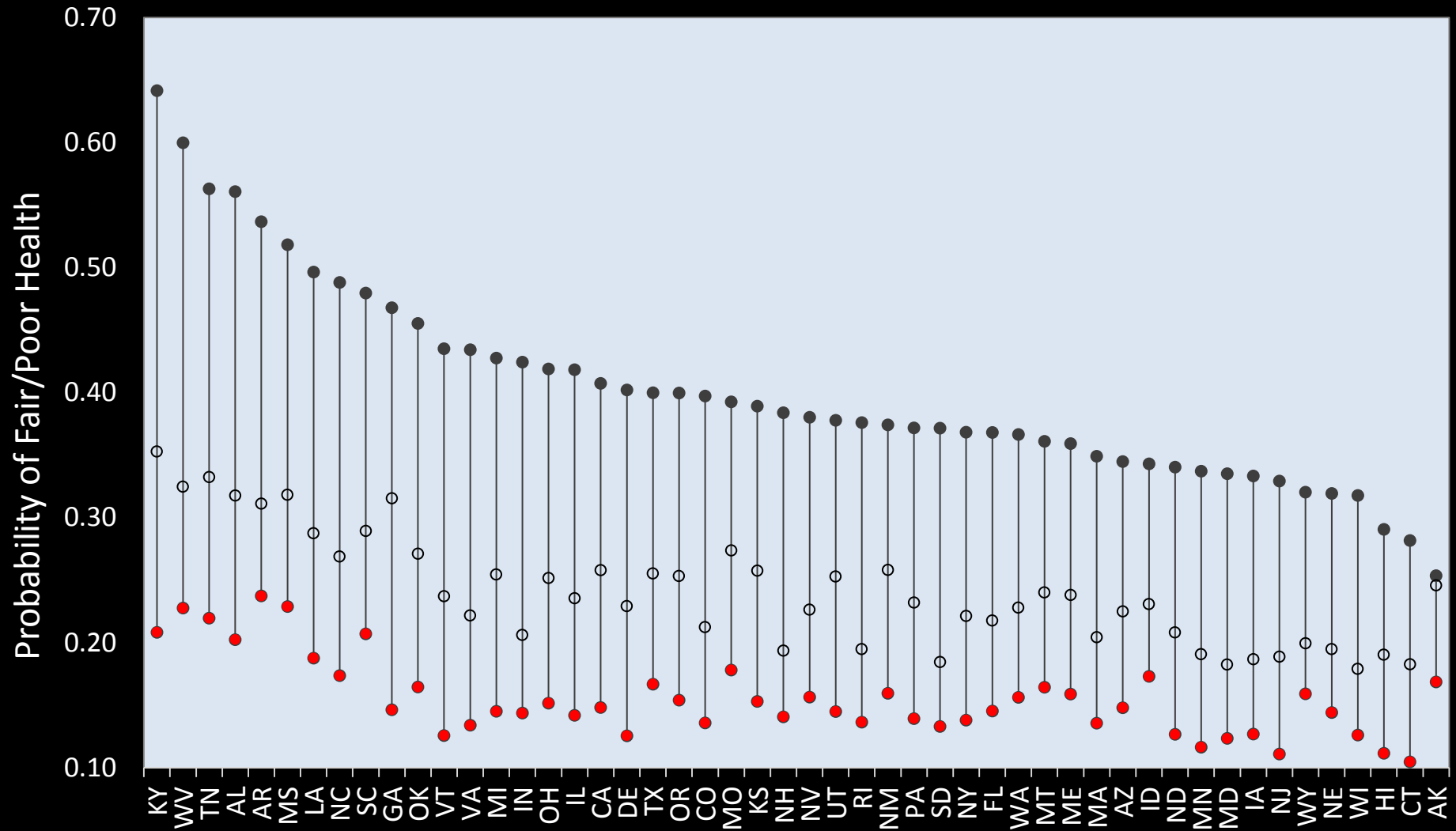
Probability of Difficulty with Cognition

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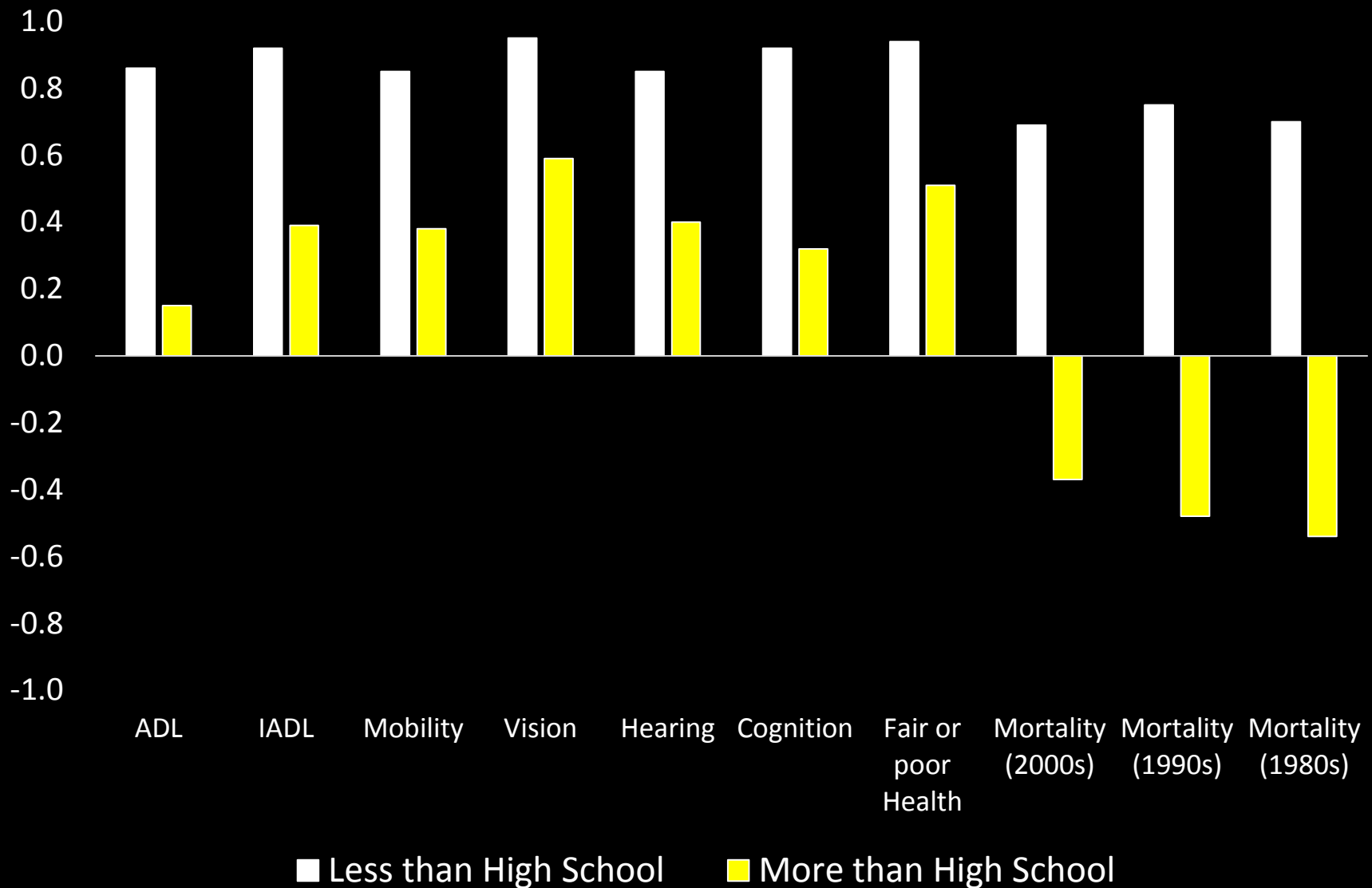


Probability of Fair/Poor Health

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Correlation between the disparity & the prevalence of bad health



- Must put education in context
- Social determinants are.....*socially determined*. To explain the ed→health association, we must examine the social contexts that create & sustain it.



- Decisions of US states help explain growing importance of ed→health
- Need a stronger focus on broader contexts and state/local policies as explanations for the education-health association