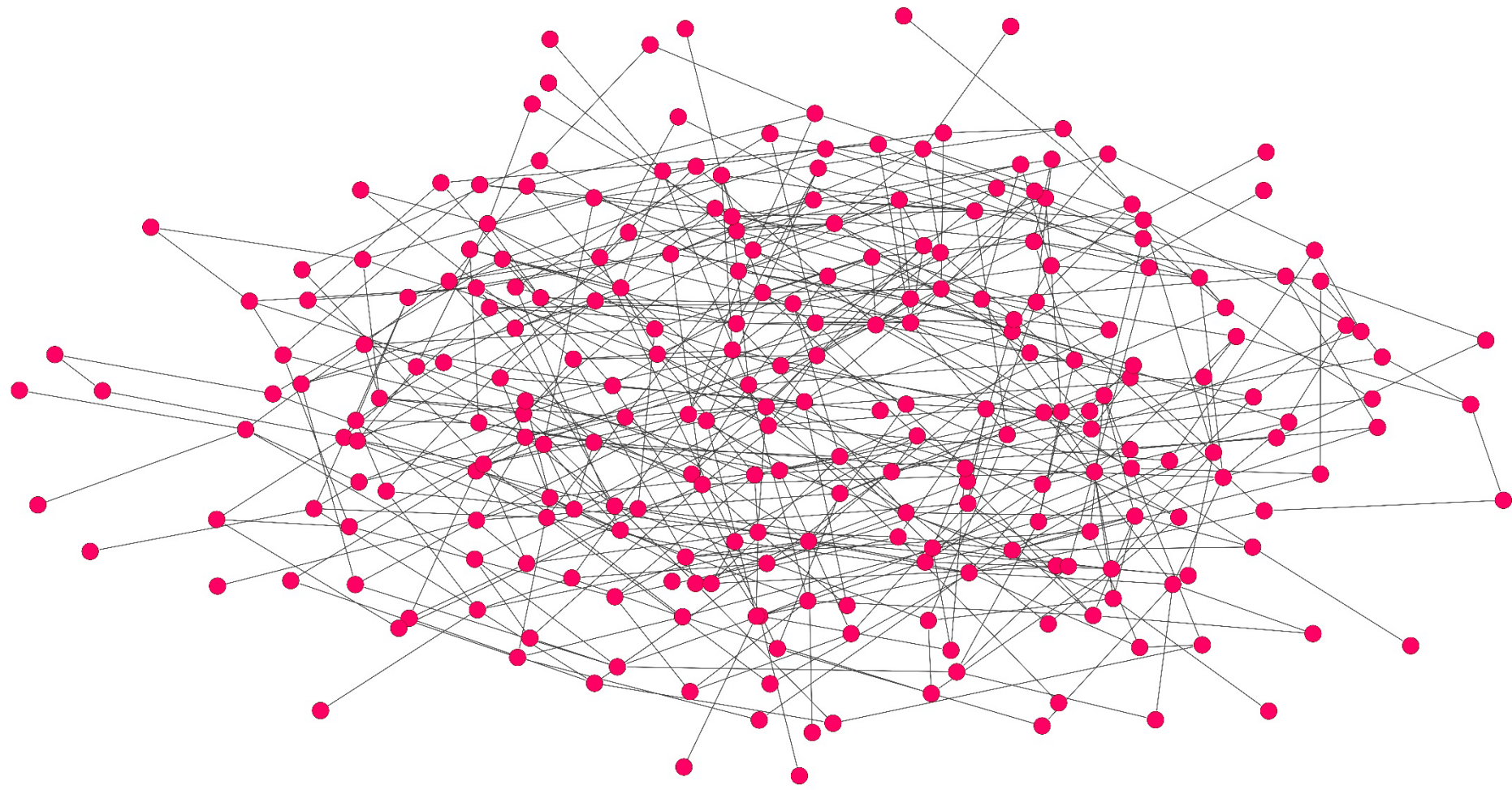
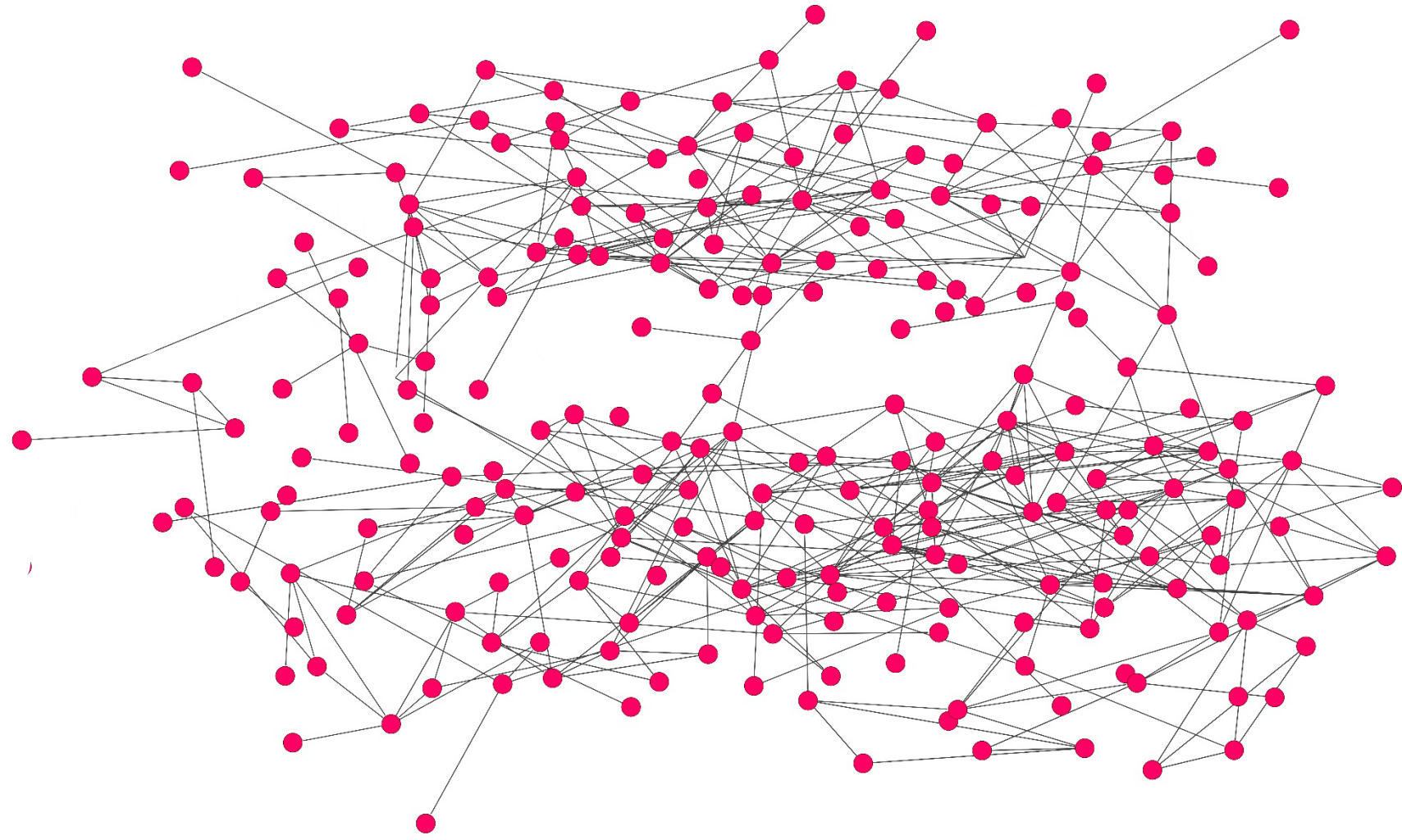
A complex network graph with nodes and edges, overlaid with a large blue title and a green dashed line. The graph consists of numerous nodes connected by thin grey lines. The nodes are represented by two types of markers: solid red circles and squares with a blue cross-hatch pattern. The nodes are distributed across the frame, with a higher density of red circles on the right side and cross-hatched squares on the left and top. A thick, dashed green line curves across the lower half of the image, starting from the bottom left and moving towards the right, with a slight upward curve in the middle. The background is plain white.

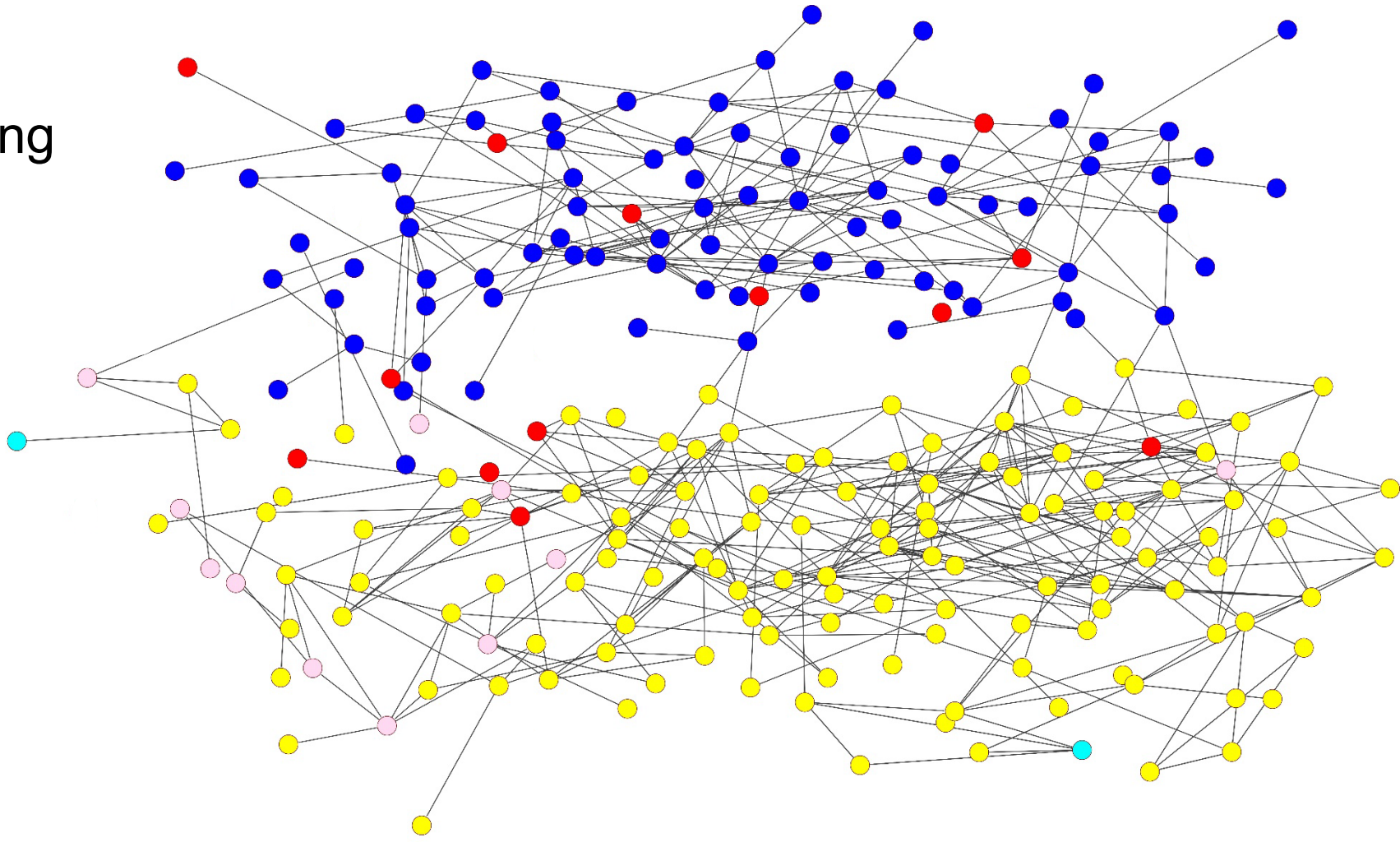
# **Social Capital, Economic Connecteness, and Economic Mobility**

**Matthew O. Jackson**



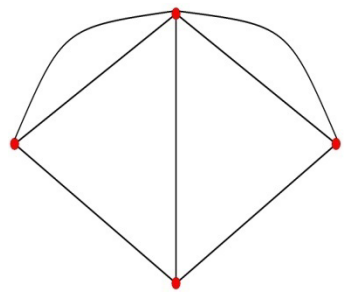


Blue: Black  
Reds: Hispanic  
Yellow: White  
Pink: Other  
Light Blue: Missing



Add health 🇺🇸  
Curarrini, Jackson Pin (2009,2010)  
figure, Jackson (2019)

# Homophily, Behavior, and Economic Well-Being: Three Network Forces



- Job contacts
  - *opportunities* flow via family, friends
- Peer influence, identity, pressures
  - *behaviors*: norms, culture, aspirations shaped by friends, family...
- Information
  - *learn* about benefits of decisions from friends, herding of groups



## Social Capital in US I and II

Raj Chetty\*, Matthew Jackson\*, Theresa Kuchler\*, Johannes Stroebel\*  
Nathan Hendren, Robert Fluegge, Sara Gong, Federico González, Armelle Grondin  
Matthew Jacob, Drew Johnston, Martin Koenen, Eduardo Laguna-Muggenburg  
Florian Mudekereza, Tom Rutter, Nicolaj Thor, Wilbur Townsend, Ruby Zhang  
Mike Bailey, Pablo Barberá, Monica Bhole & Nils Wernerfelt

# **Social Capital: which ones predict economic mobility?**

- **Connectedness** - *bridging capital* - access to info, opportunities
  - cross-class connections: inverse of homophily

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  - clustering: are my friends friends with each other? Do my friend and I have friends in common?



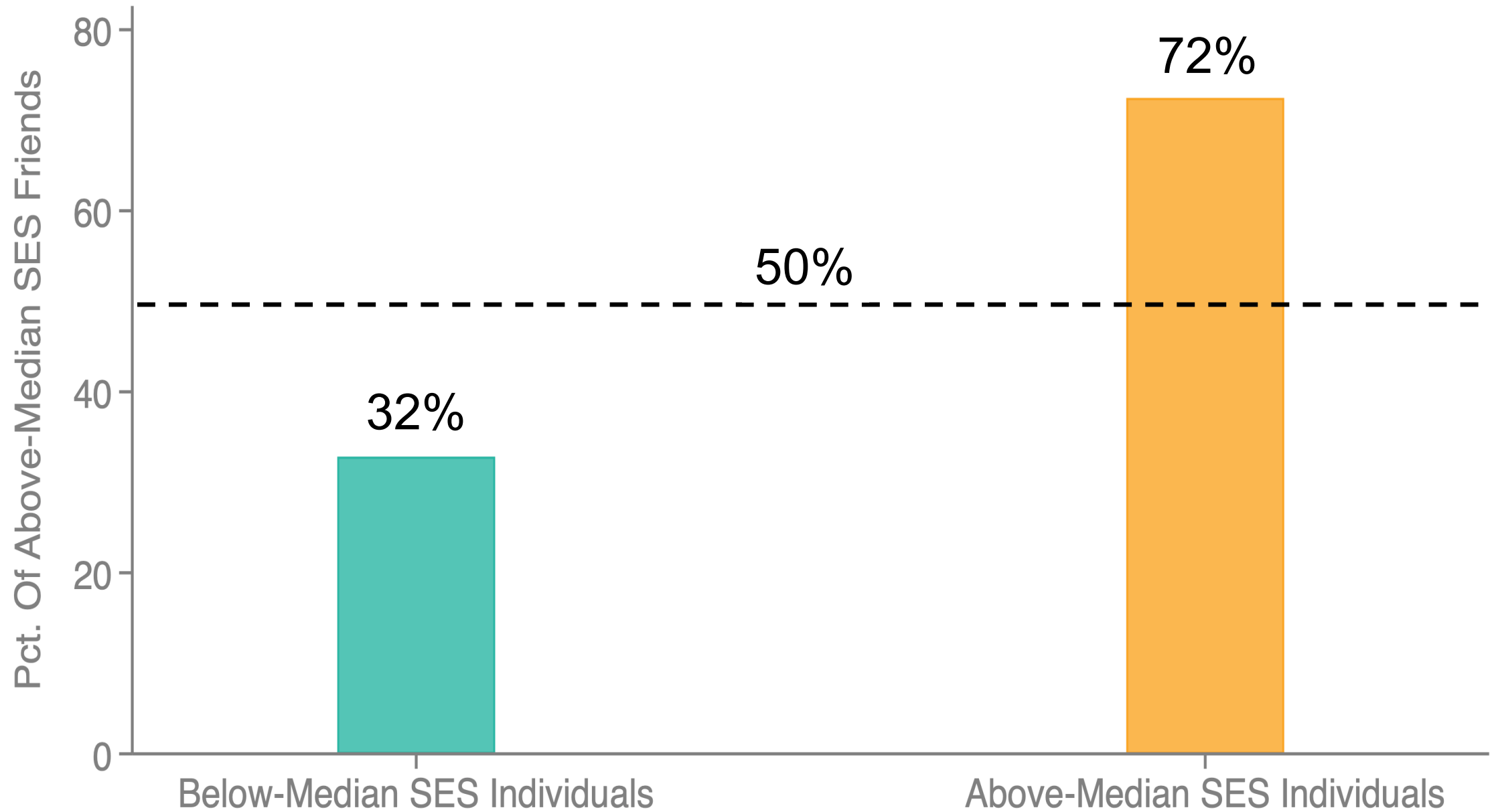
# **Social Capital: which ones predict economic mobility?**

- **Connectedness** - *bridging capital* - access to info, opportunities
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- **Civic Engagement** - Trust, Culture, Norms... functioning of institutions

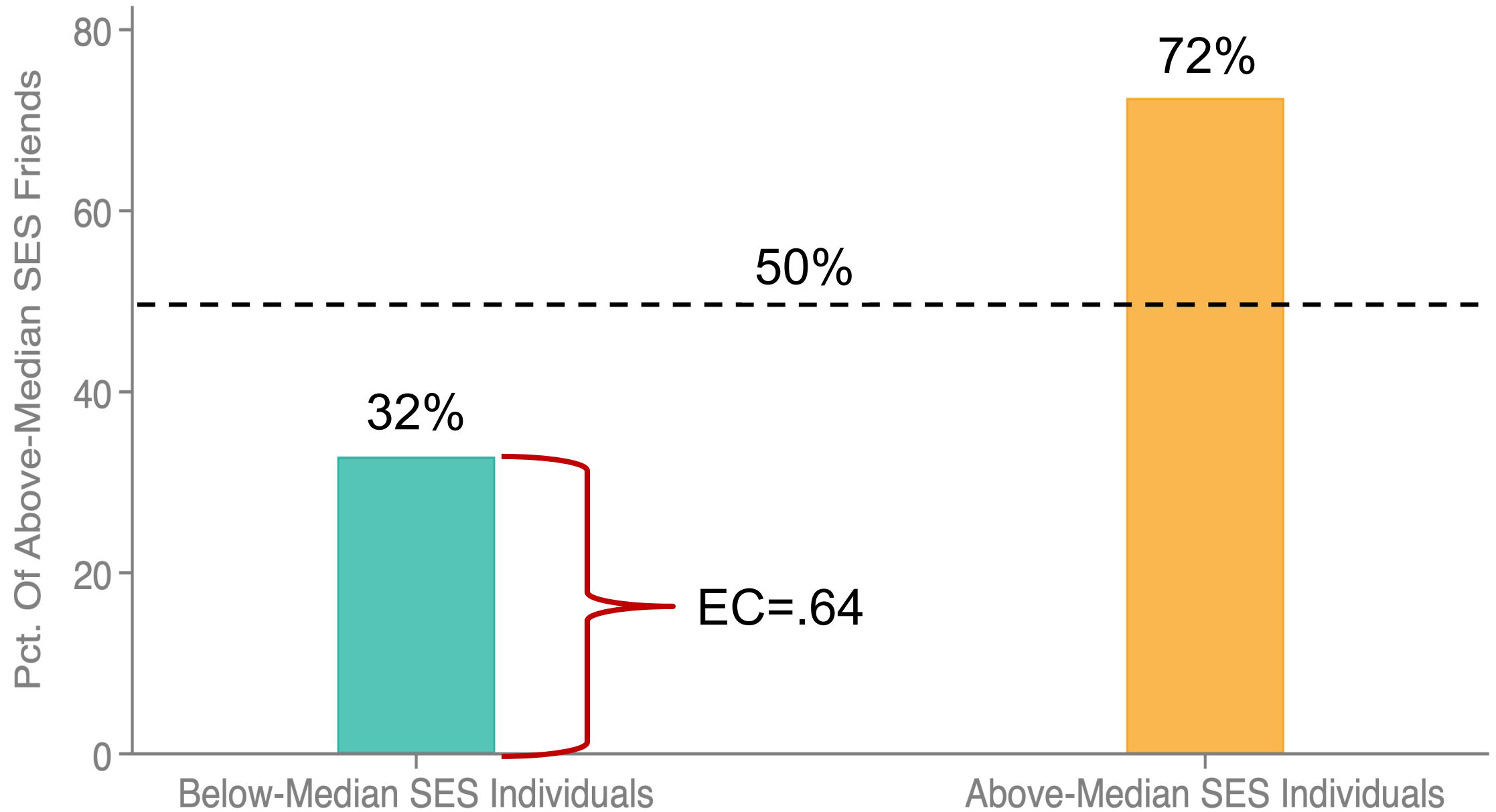
# Data

- U.S. Facebook users May 28, 2022
  - ages 25–44 (1978–1997 birth cohorts)
  - 30-day active
  - at least 100 friends in US
- 72.2 million individuals, 21 billion friendships: 84% coverage of 25–44-year-olds
- Friendships, demographics, memberships, geography (zip, county)
- Supplementary data :
  - Census data: incomes, economic mobility
  - Parent-child links: self-reported parent and other clues, prioritizing mothers

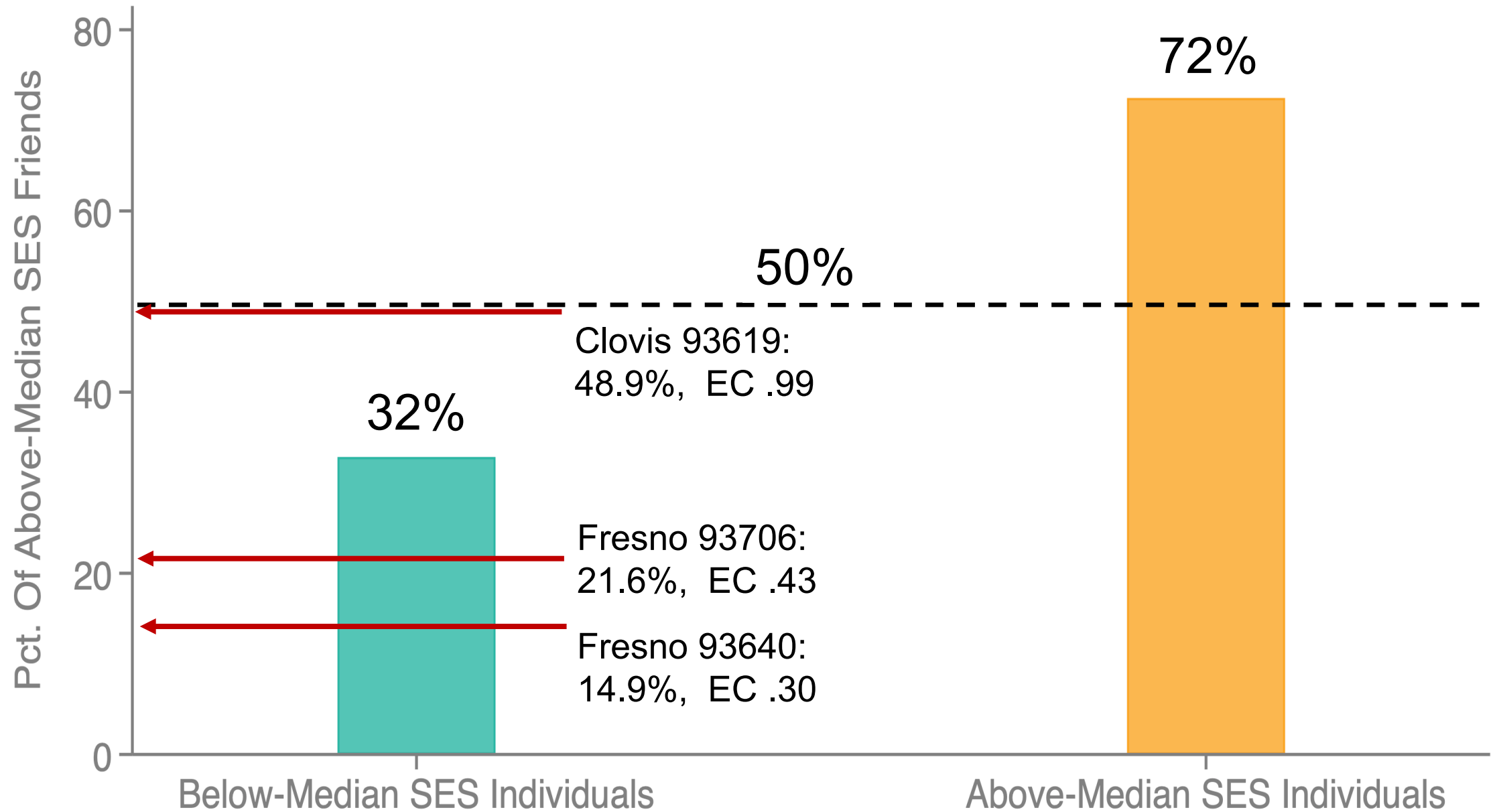
# Economic Connectedness / Homophily: Percent of High-SES Friends



# Economic Connectedness: Percent of High-SES Friends

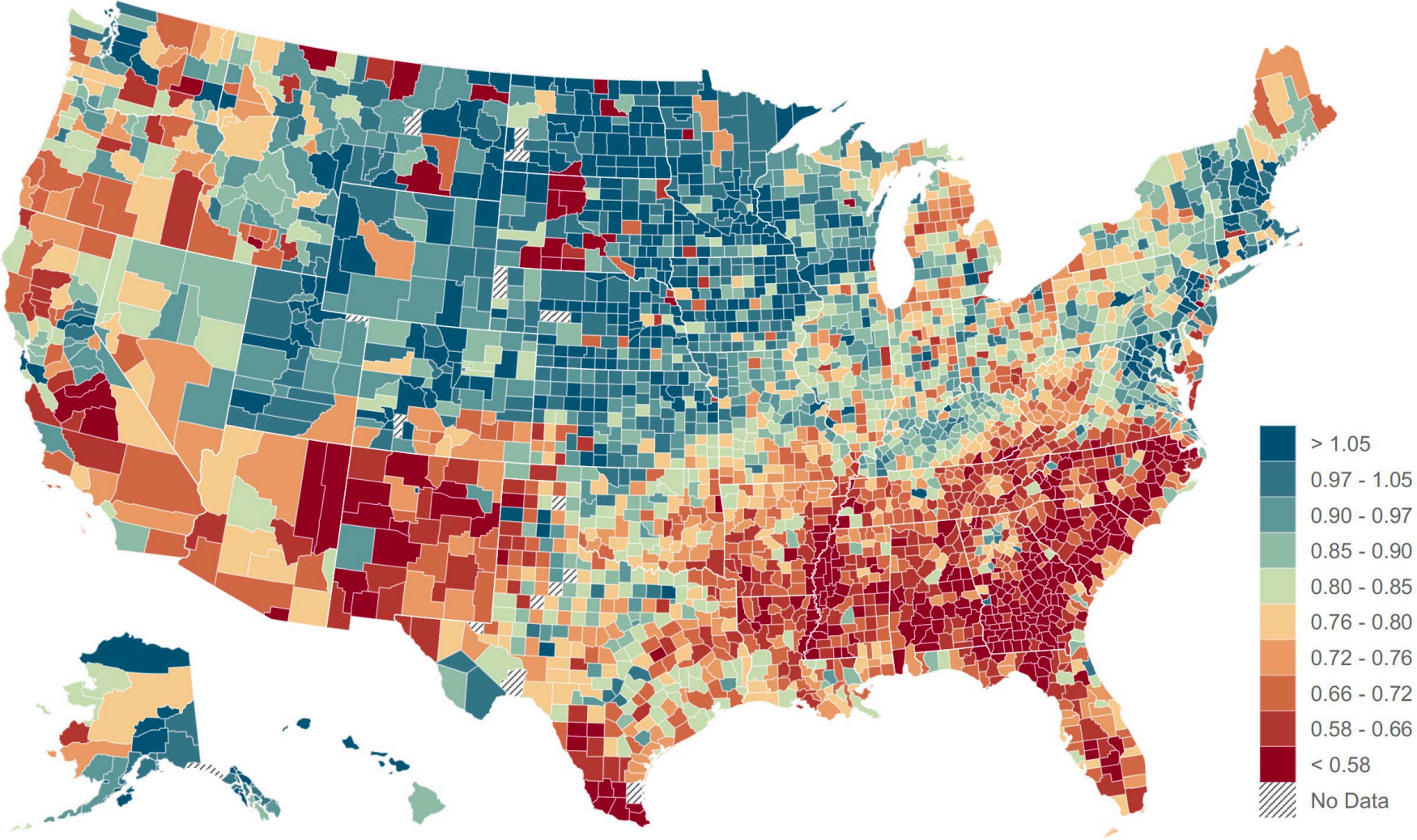


# Economic Connectedness: Percent of High-SES Friends



# Economic Connectedness of Low-SES Individuals by County

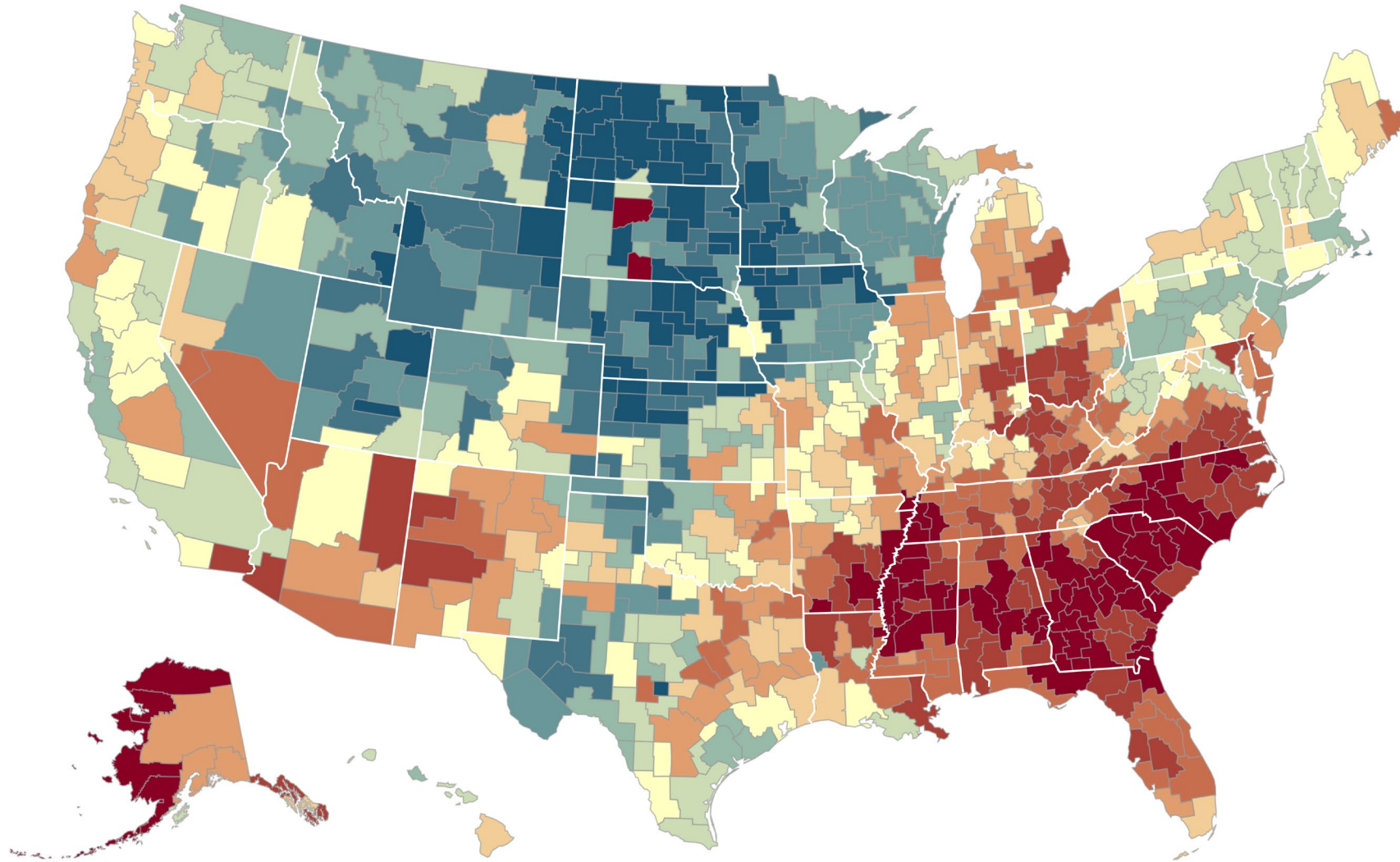
## Normalized Share of Above-Median Friends Among Below-Median People



Note: see the Social Capital Atlas ([www.socialcapital.org](http://www.socialcapital.org)) for an interactive version of this map and downloadable data

# The Geography of Upward Mobility in the United States

Average Income at Age 35 for Children whose Parents Earned \$27,000 (25<sup>th</sup> percentile)



<\$20k

\$33k

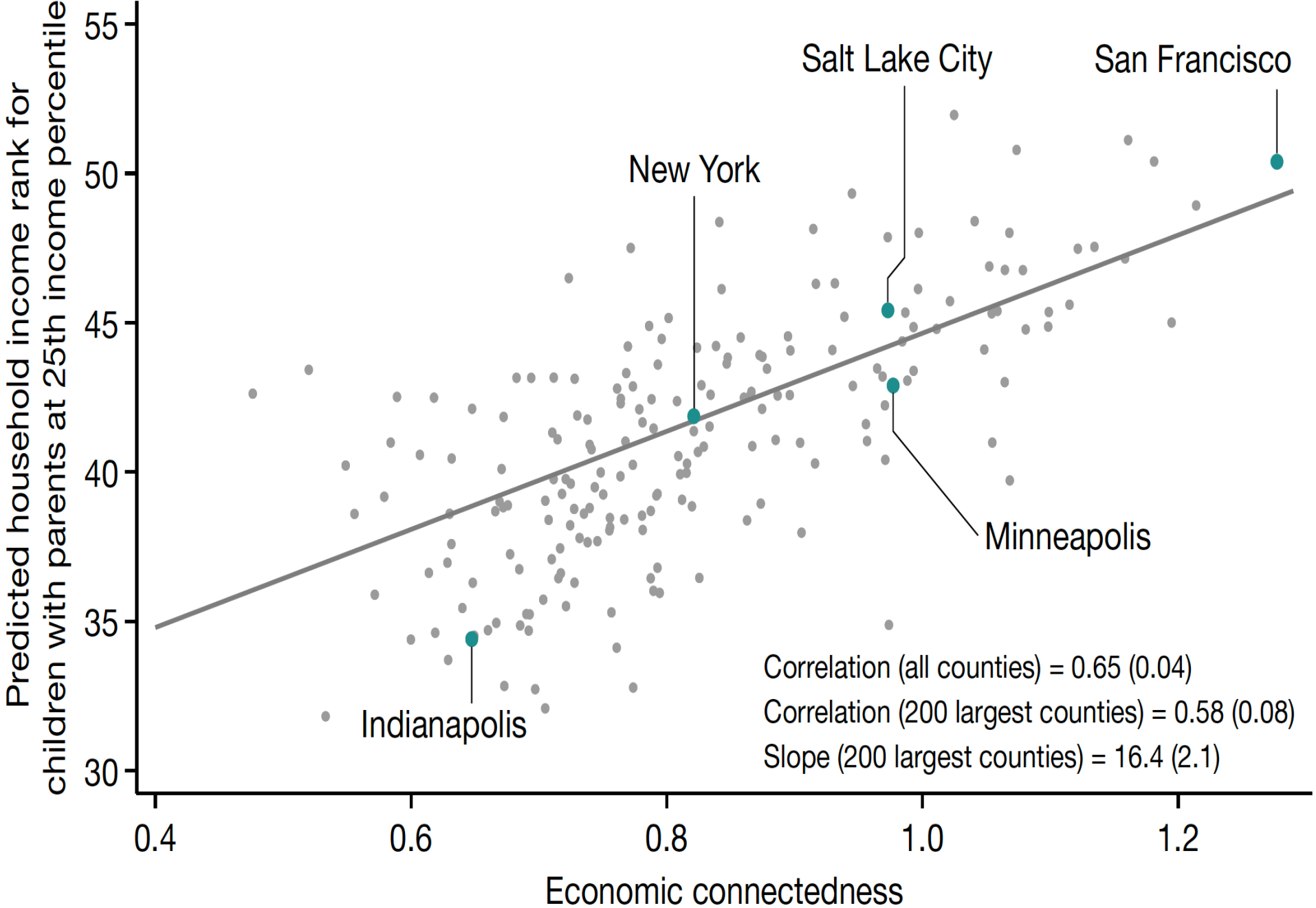
>\$55k



Note: Blue = More Upward Mobility, Red = Less Upward Mobility

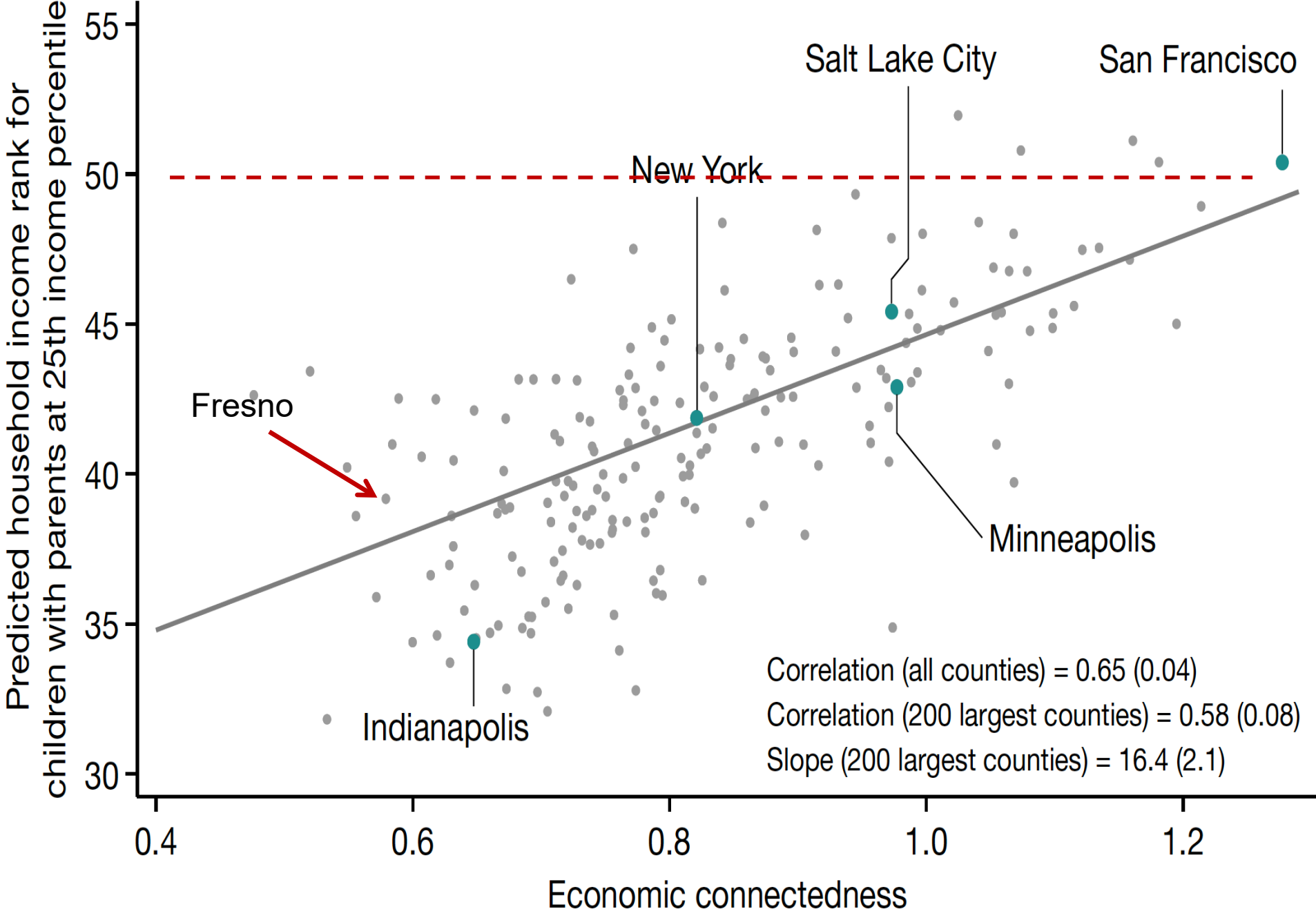
Source: Chetty, Friedman, Hendren, Jones, Porter 2018

# Upward Mobility vs. Economic Connectedness, by County 200 Largest Counties



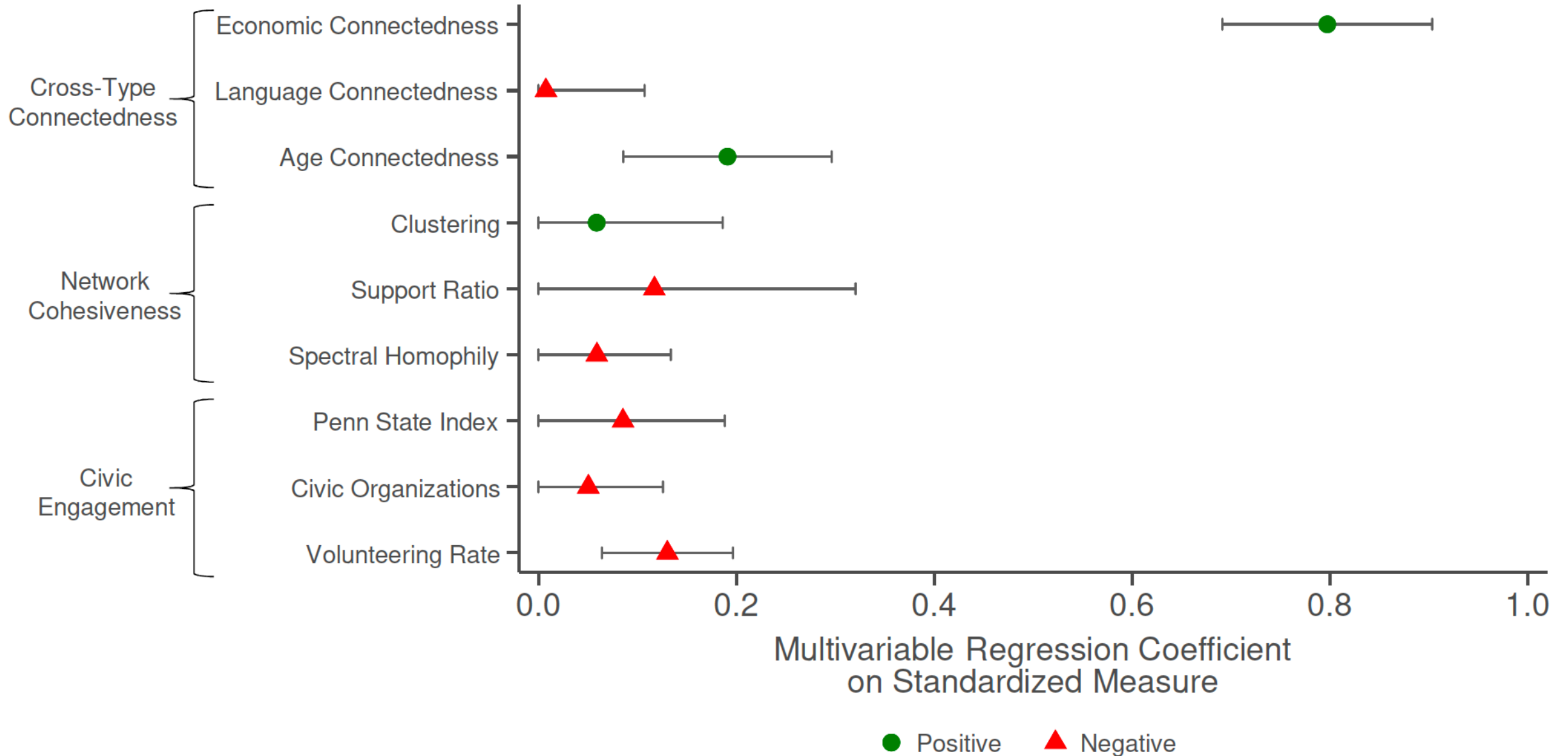


# Upward Mobility vs. Economic Connectedness, by County 200 Largest Counties



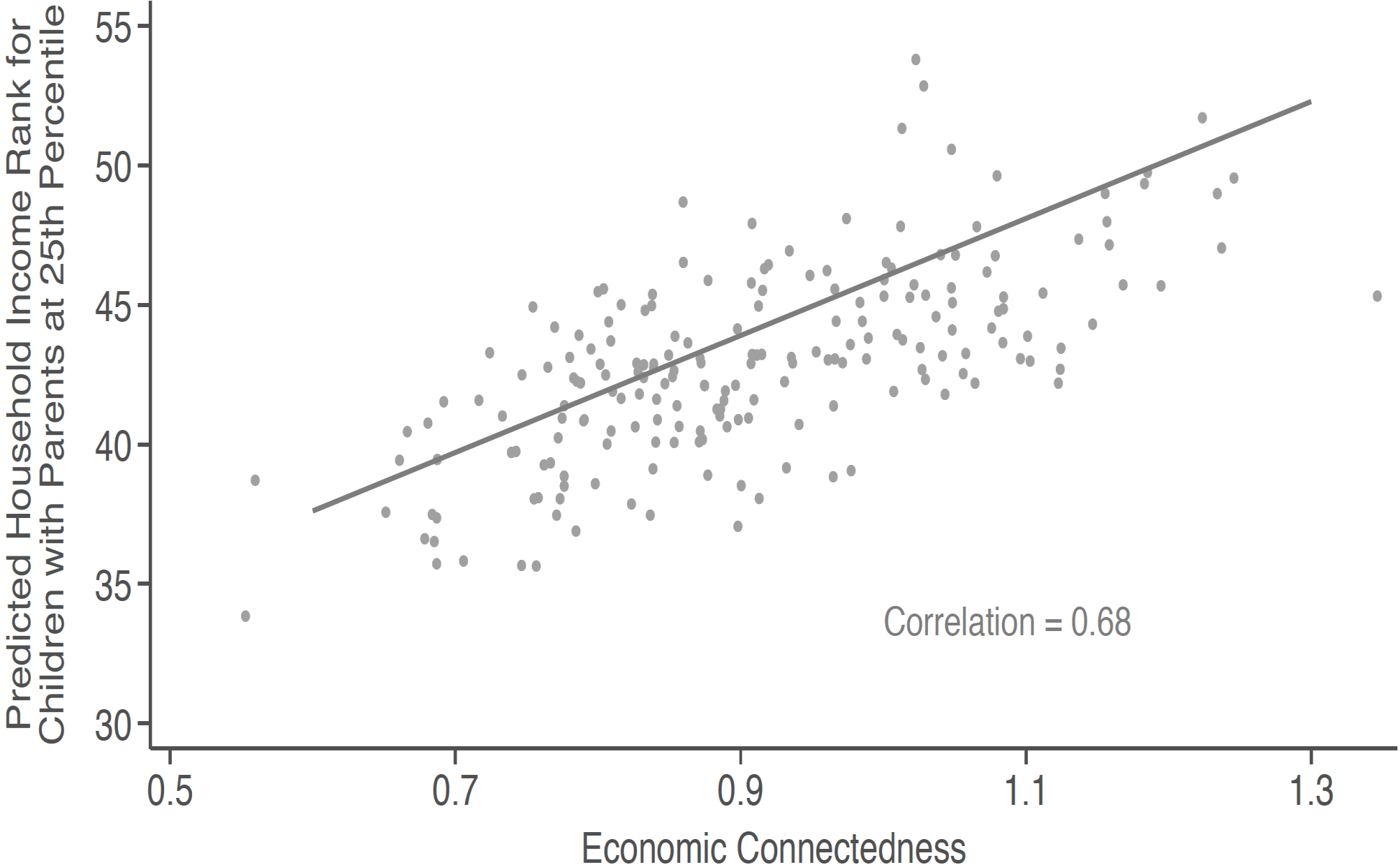
# Correlations between Upward Mobility and Measures of Social Capital

Coefficients from County-level Multivariable Regression

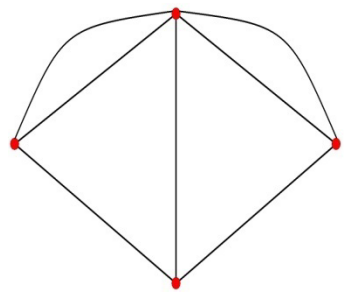


# Social Capital and Upward Mobility in Counties with Predominantly White Residents

## EC vs. Upward Mobility

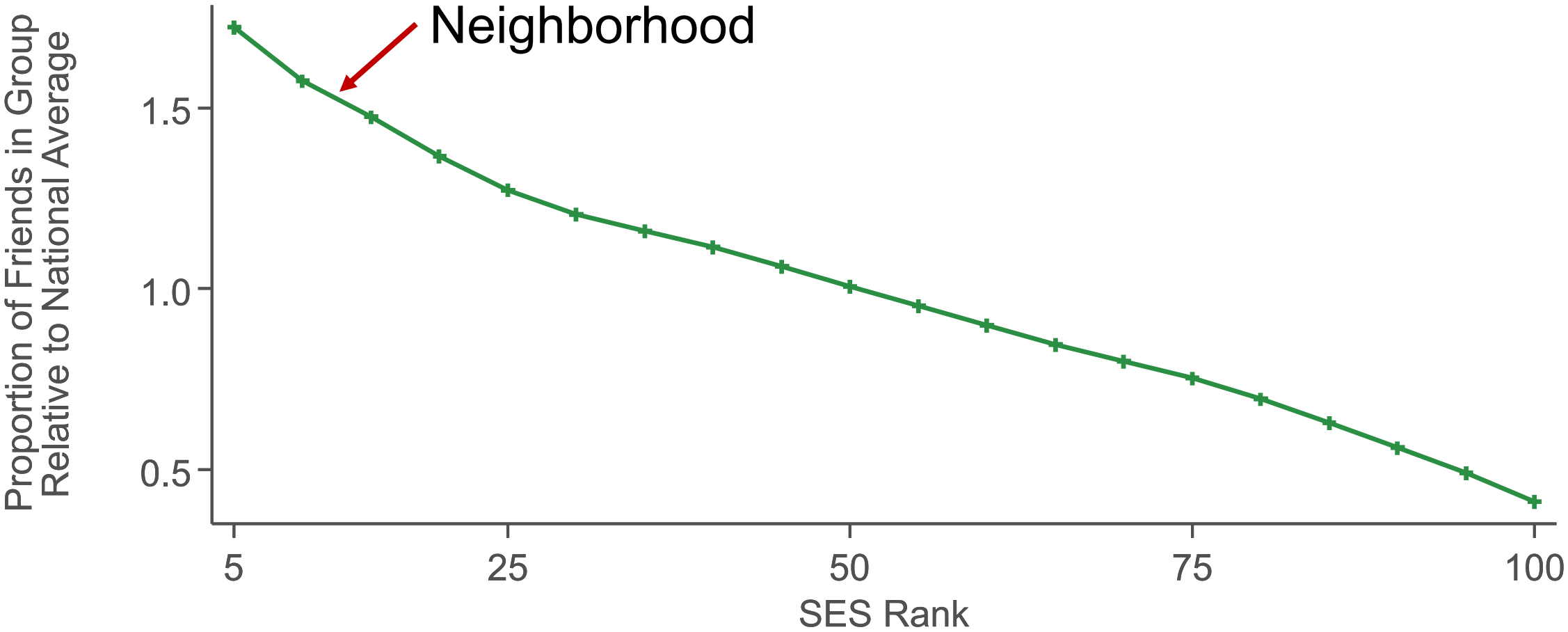


# Understanding Economic Connectedness

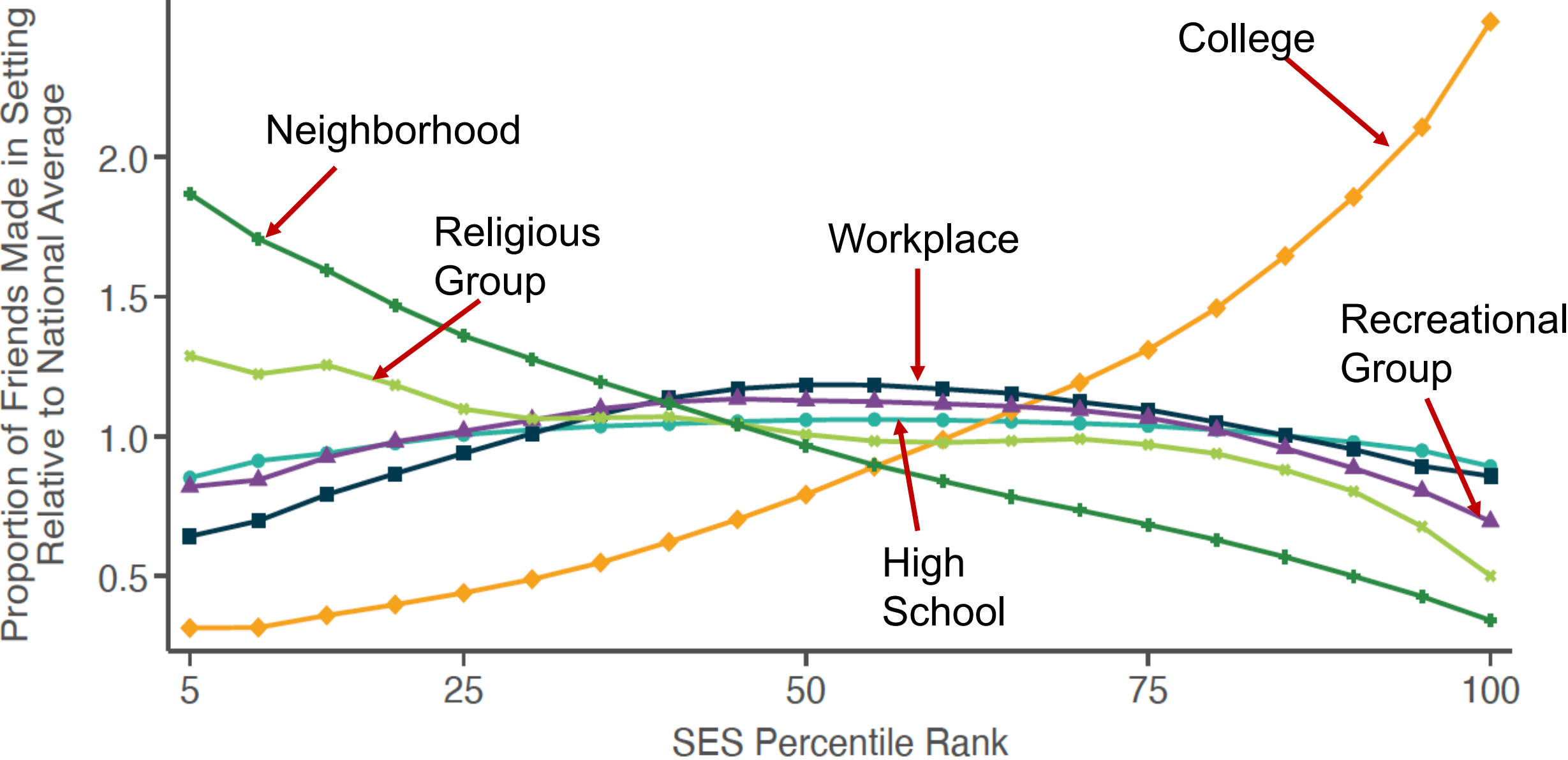


- EC *strongly* predicts mobility
- Natural next question: What drives economic connectedness?
  - **Exposure:** Are high SES people around?
  - **Bias:** Do people friend across class lines when exposed?
  - **Settings:** Where are friendships made? Different settings have different exposure and bias...

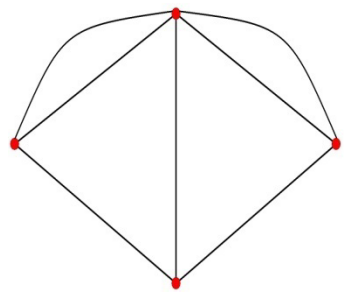
# Friendship Shares by Setting vs. Socioeconomic Status



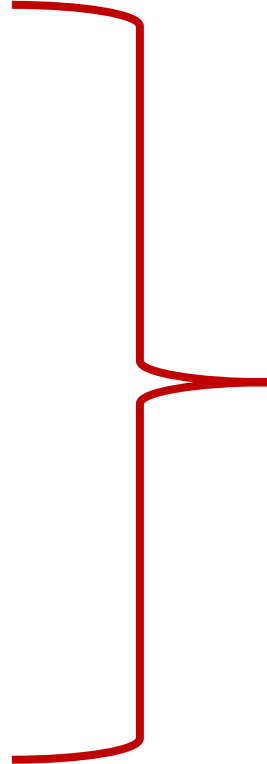
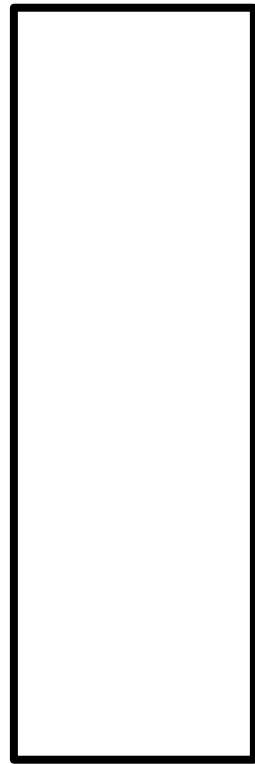
# Friendship Shares by Setting vs. Socioeconomic Status



# Decomposing Economic Connectedness

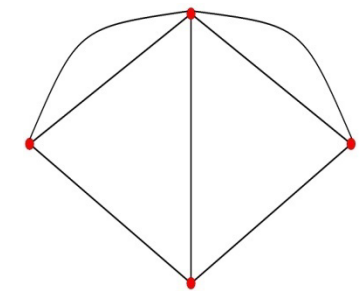


.50



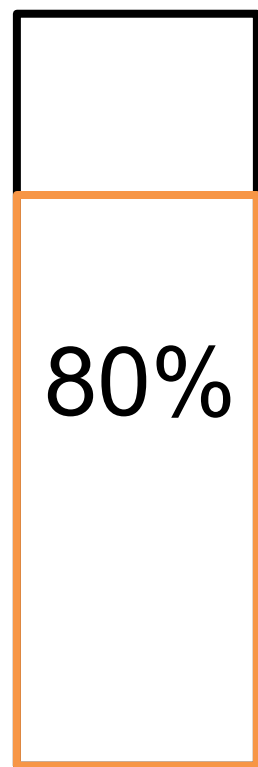
Fraction of high SES friends  
in an evenly connected world

# Decomposing Economic Connectedness

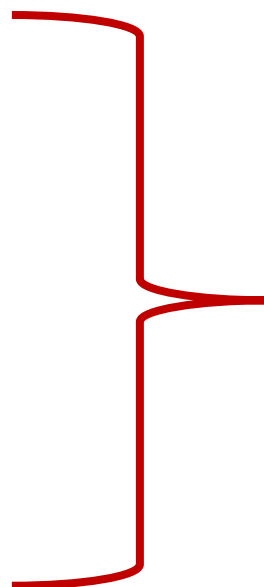


.50

.40



80%

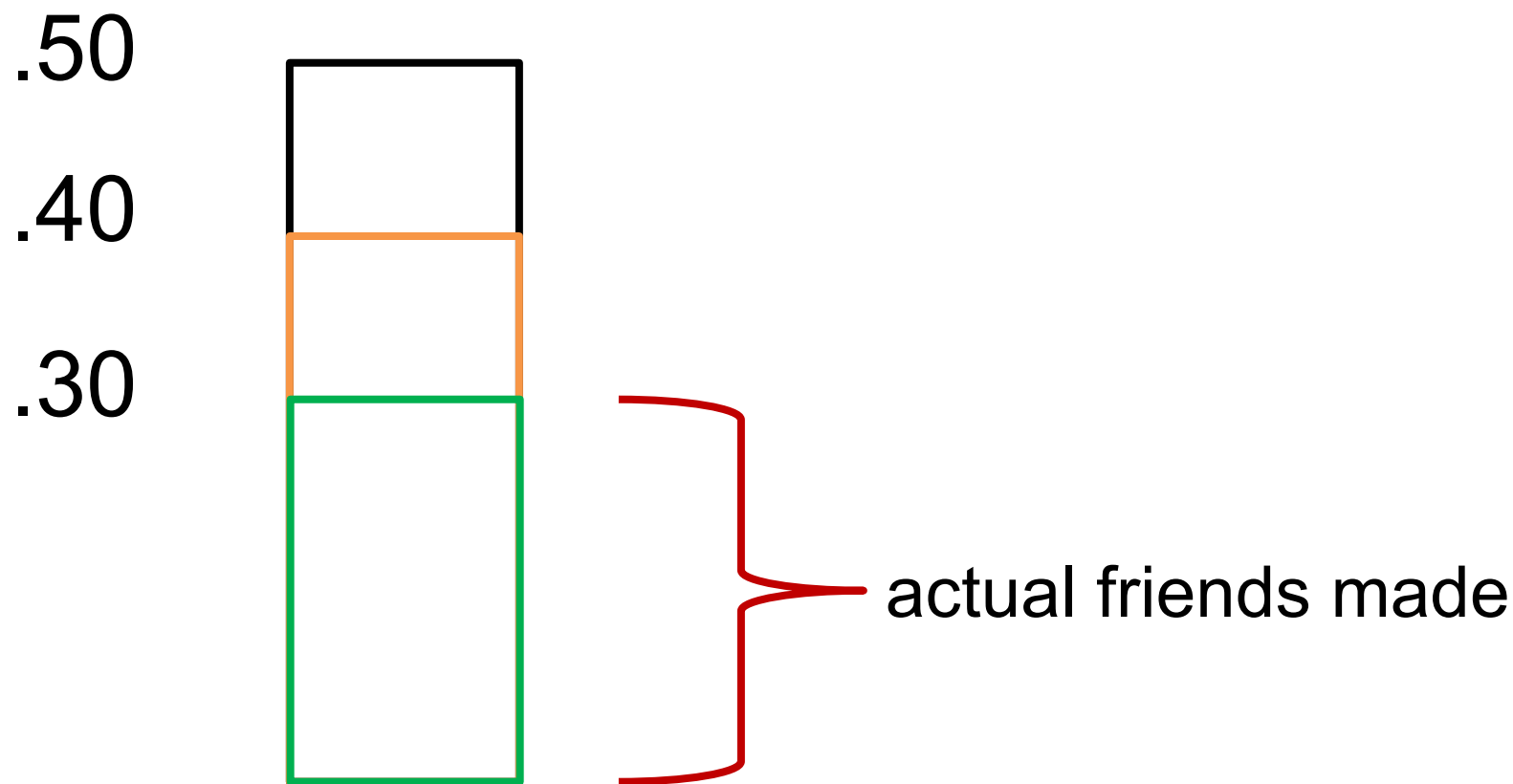
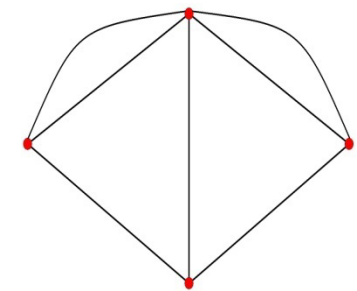


**Exposure:**

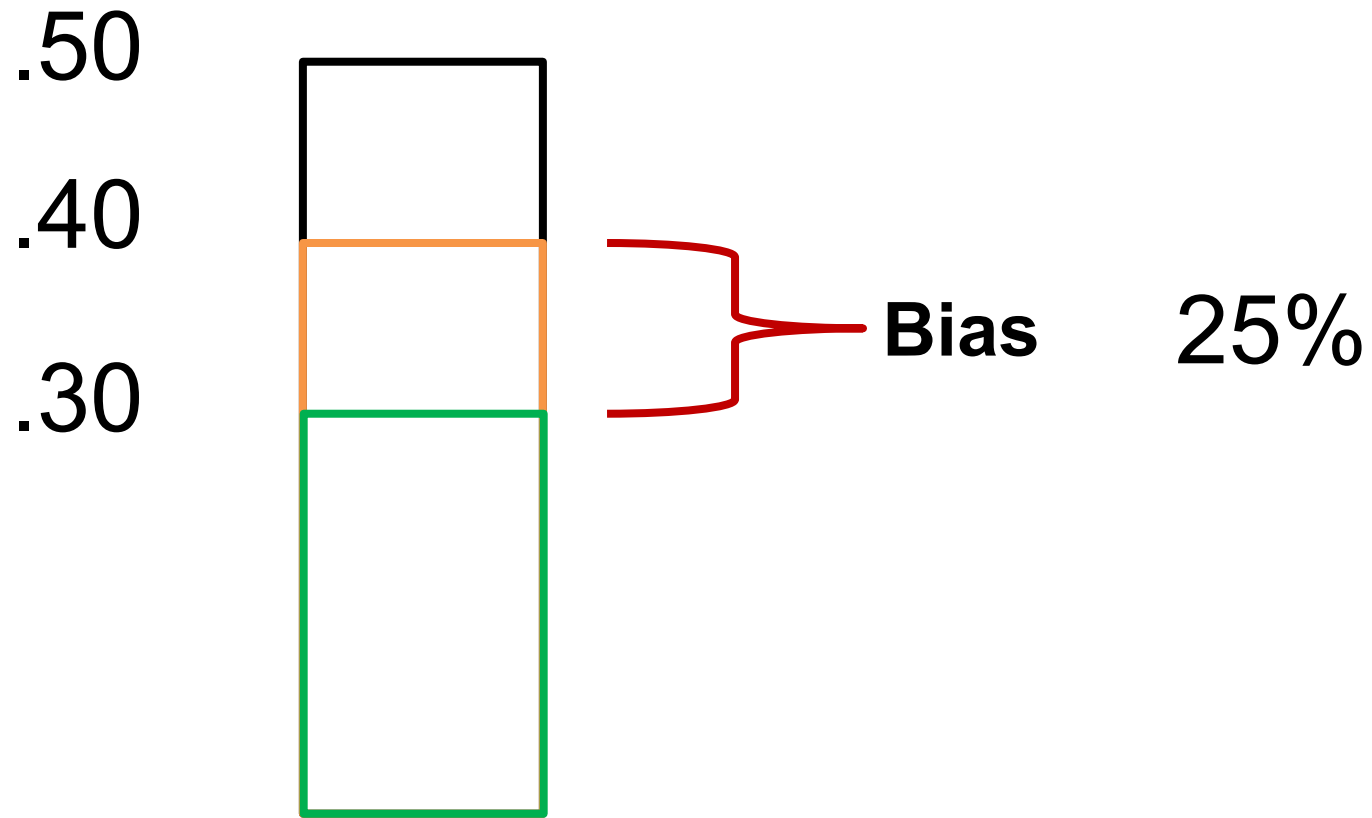
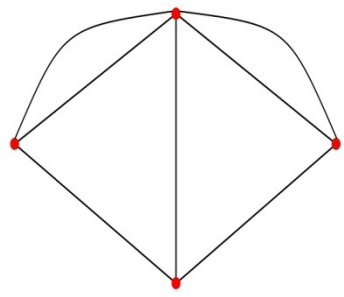
Available high SES people in the area



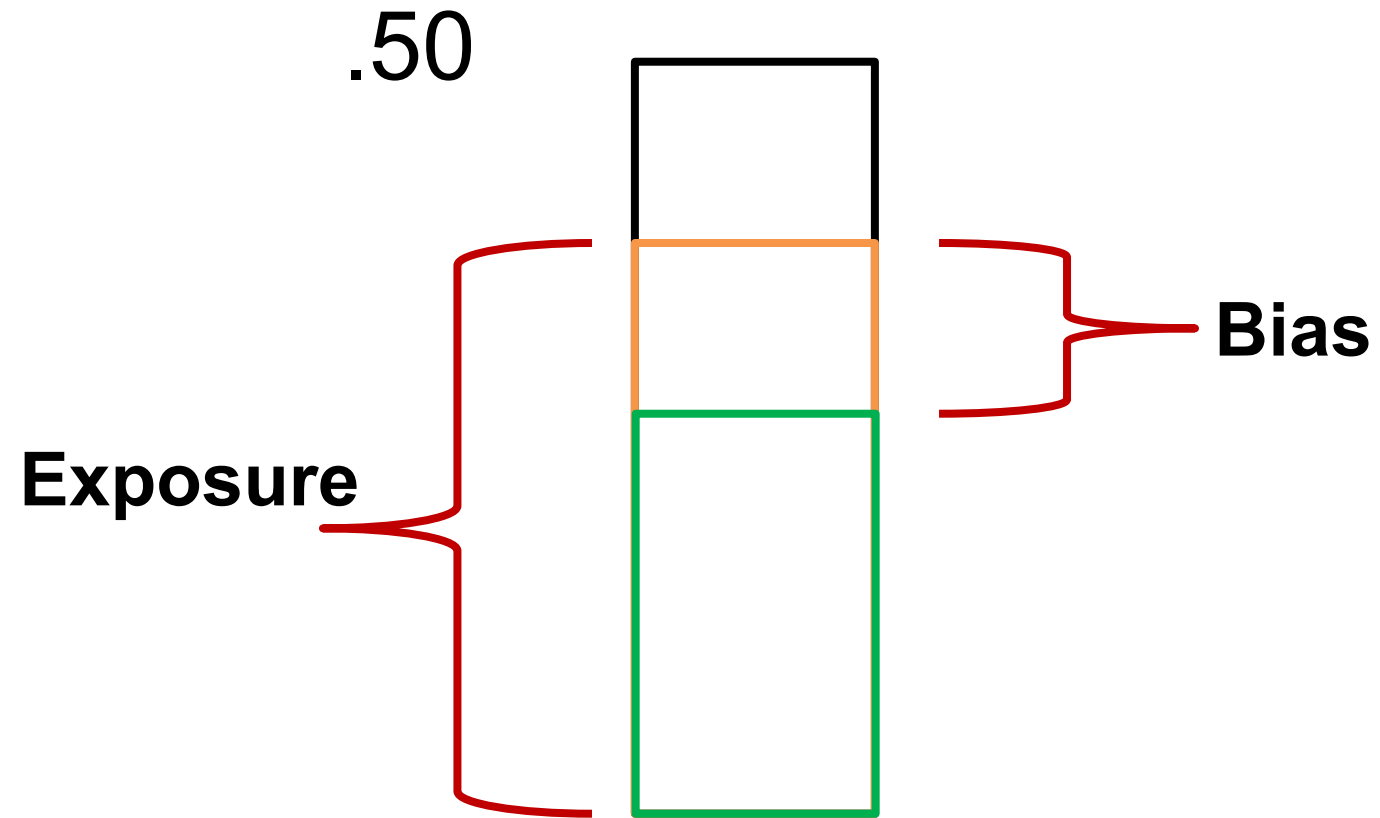
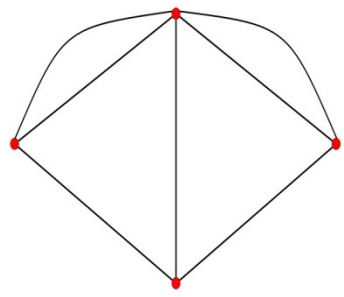
# Decomposing Economic Connectedness



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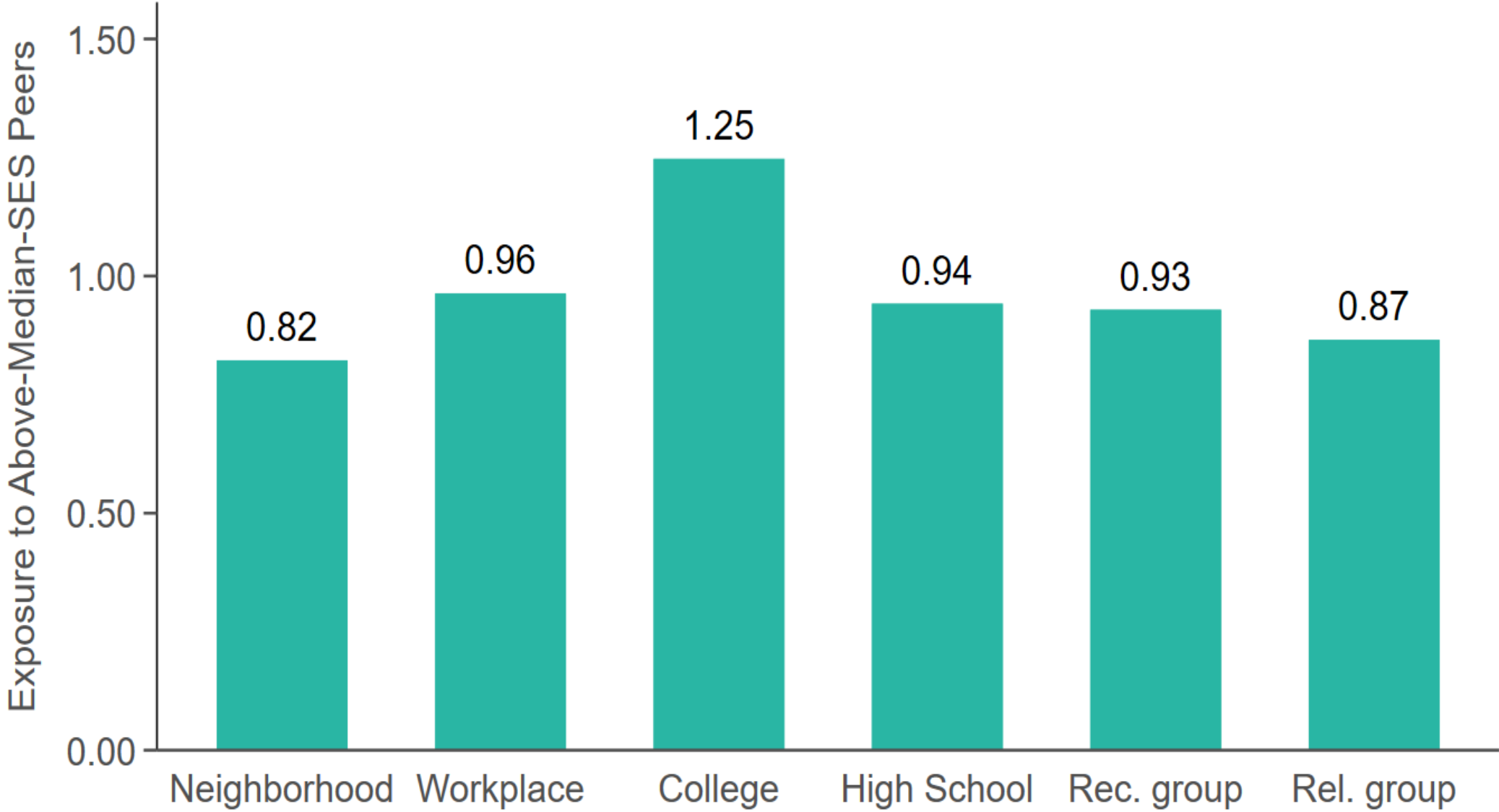


# Decomposing Economic Connectedness



# Exposure to Above-Median SES Peers By Setting

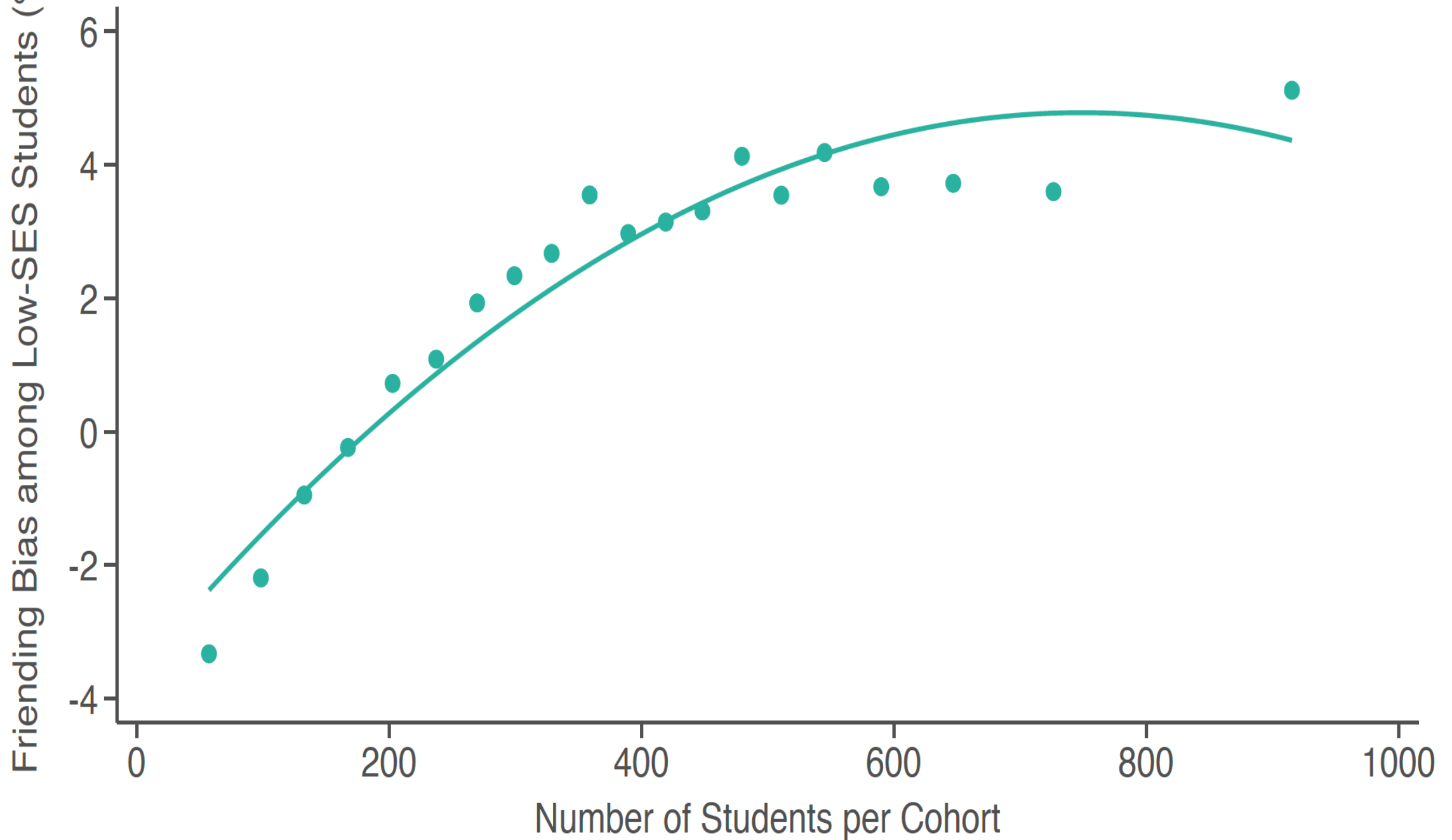
## Low-SES People



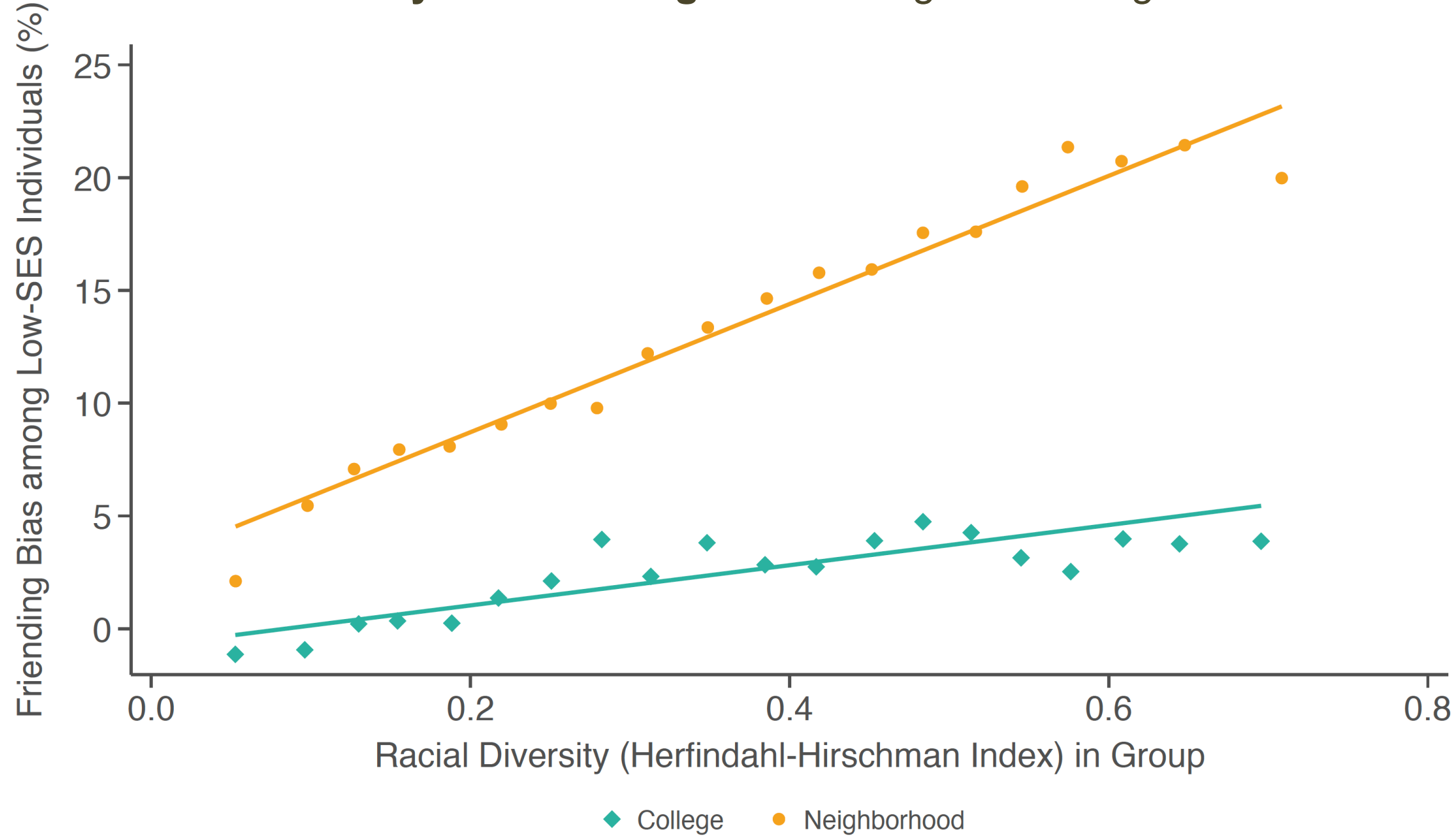
# Friending Bias, by Setting



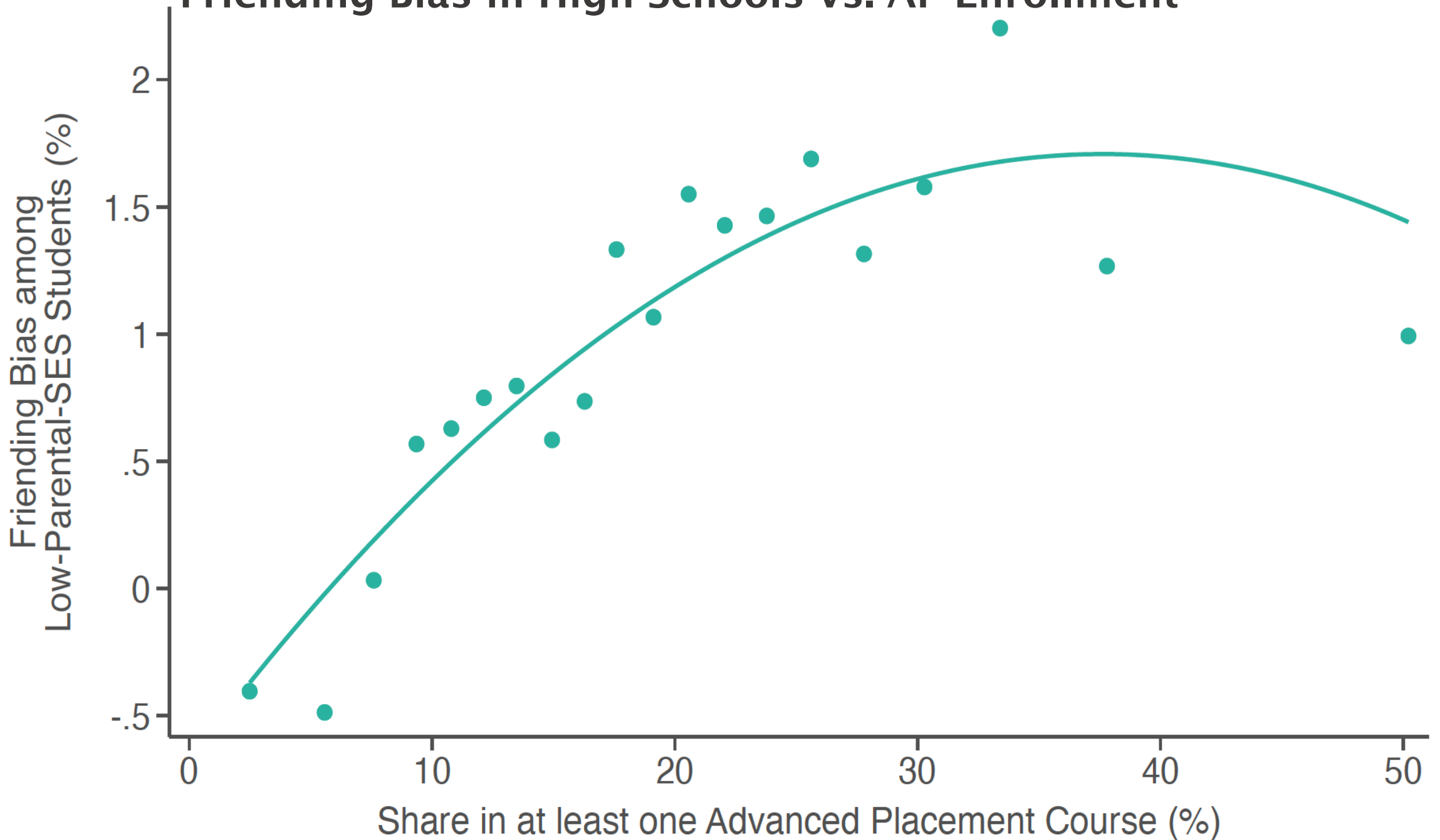
# Friending Bias in High Schools vs. School Size



# Racial Diversity vs. Friending Bias Colleges and Neighborhoods

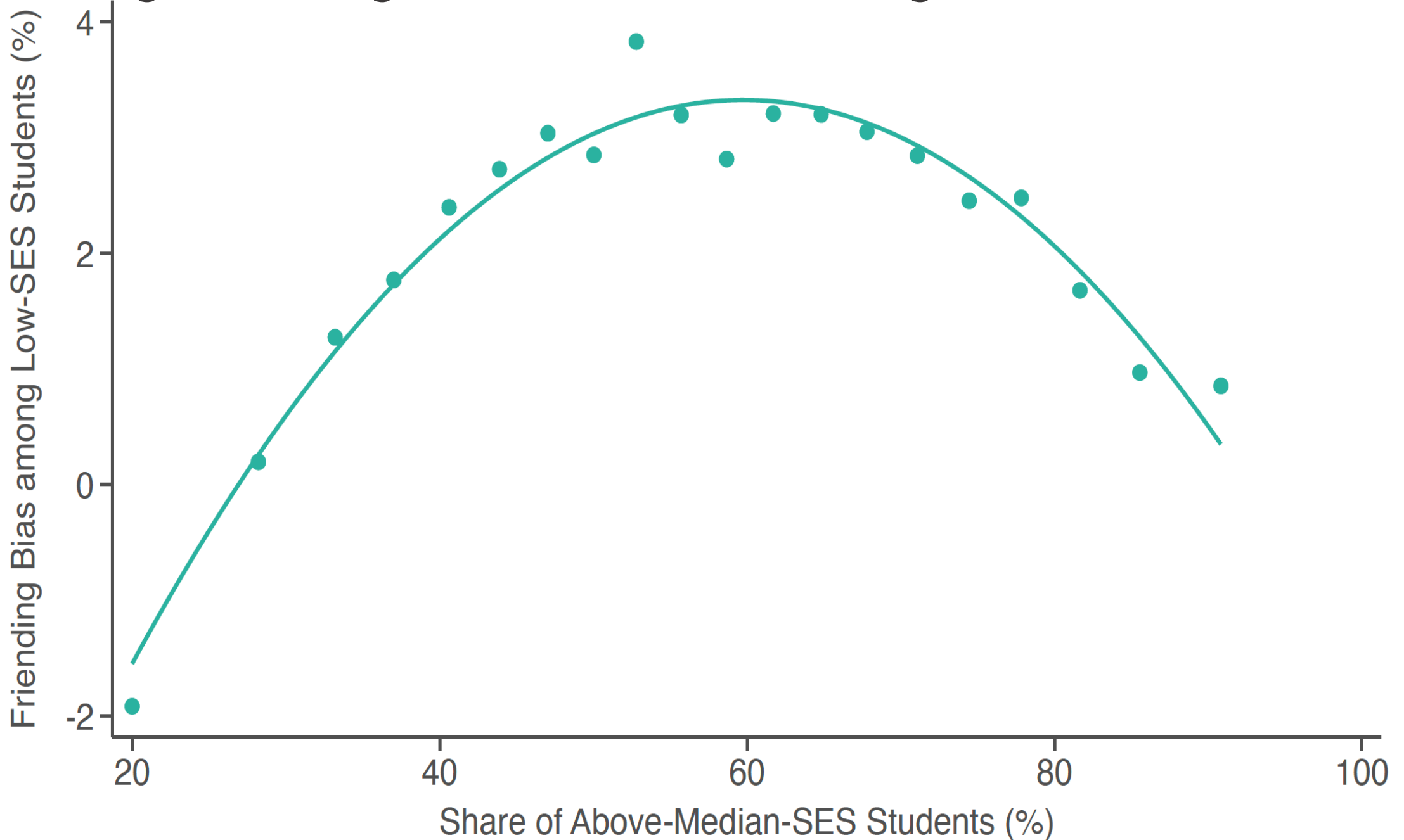


# Friending Bias in High Schools vs. AP Enrollment

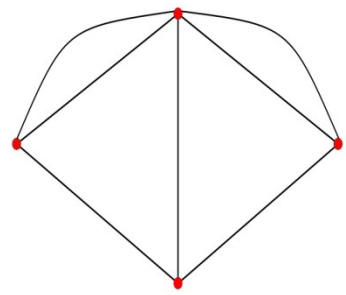




# Friending Bias in High Schools vs. Share of High-SES Students



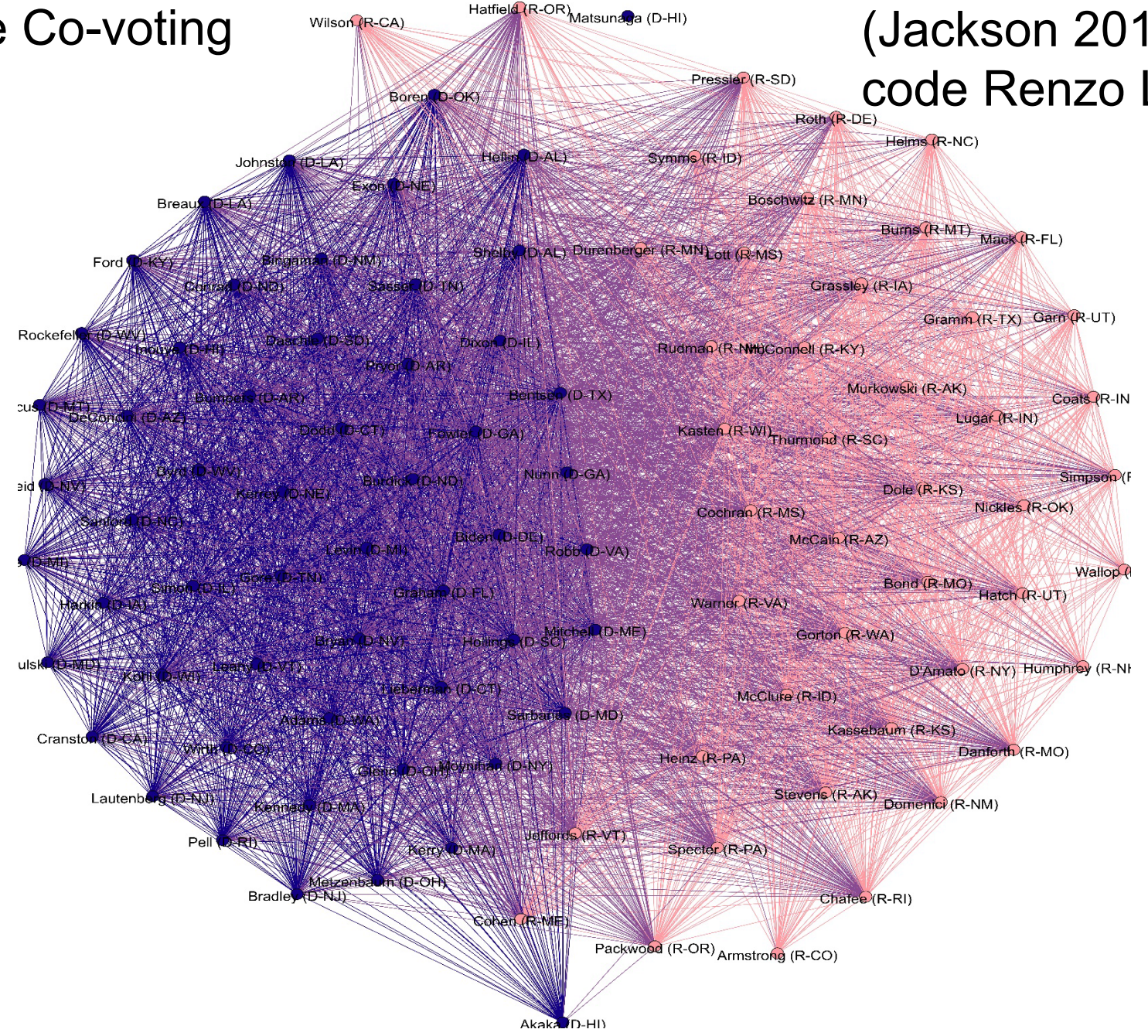
# A last question:



- Are things changing?
  - Are we more divided?
  - Is how we make friendships becoming more dependent upon technology?

# Senate Co-voting 1990

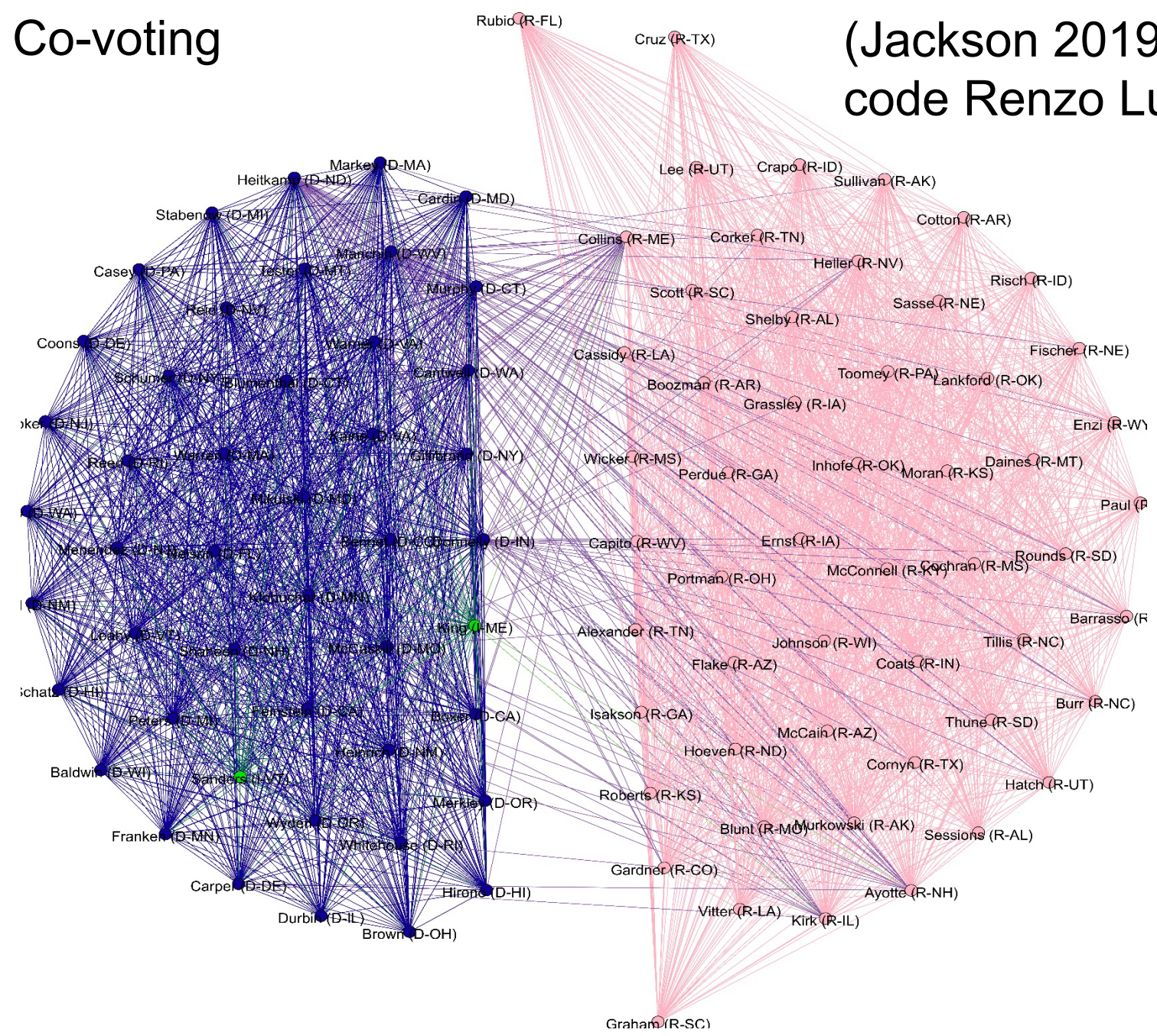
(Jackson 2019  
code Renzo Lucioni)



Connected if agreed at least  $\frac{1}{2}$  votes, 82 percent linked

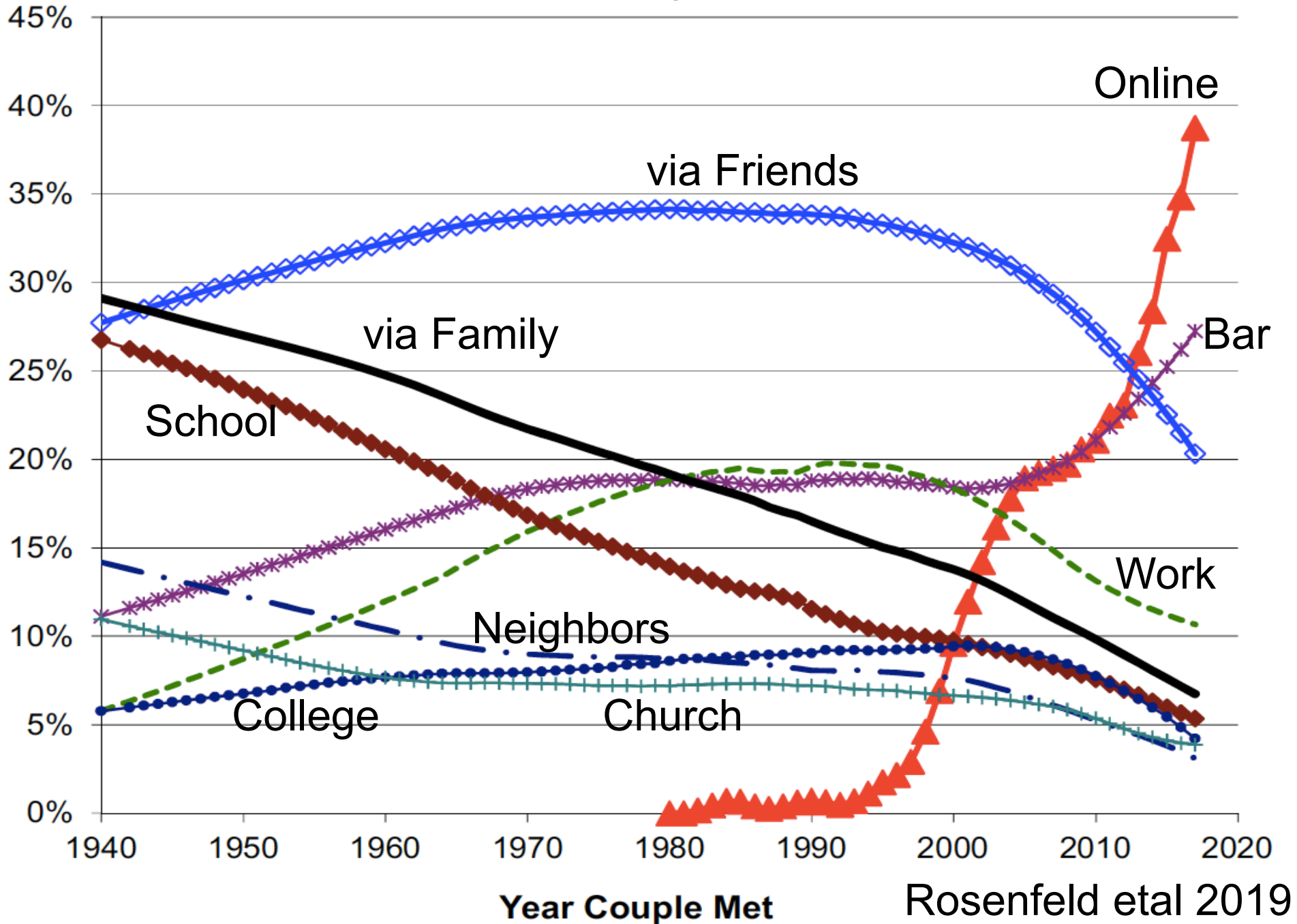
# Senate Co-voting 2015

(Jackson 2019  
code Renzo Lucioni)

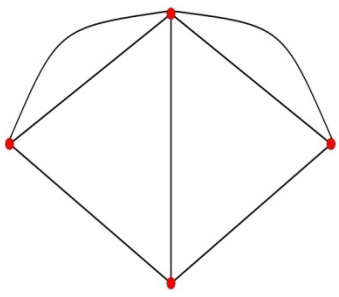


Connected if agreed at least 1/2 votes, 53 percent linked

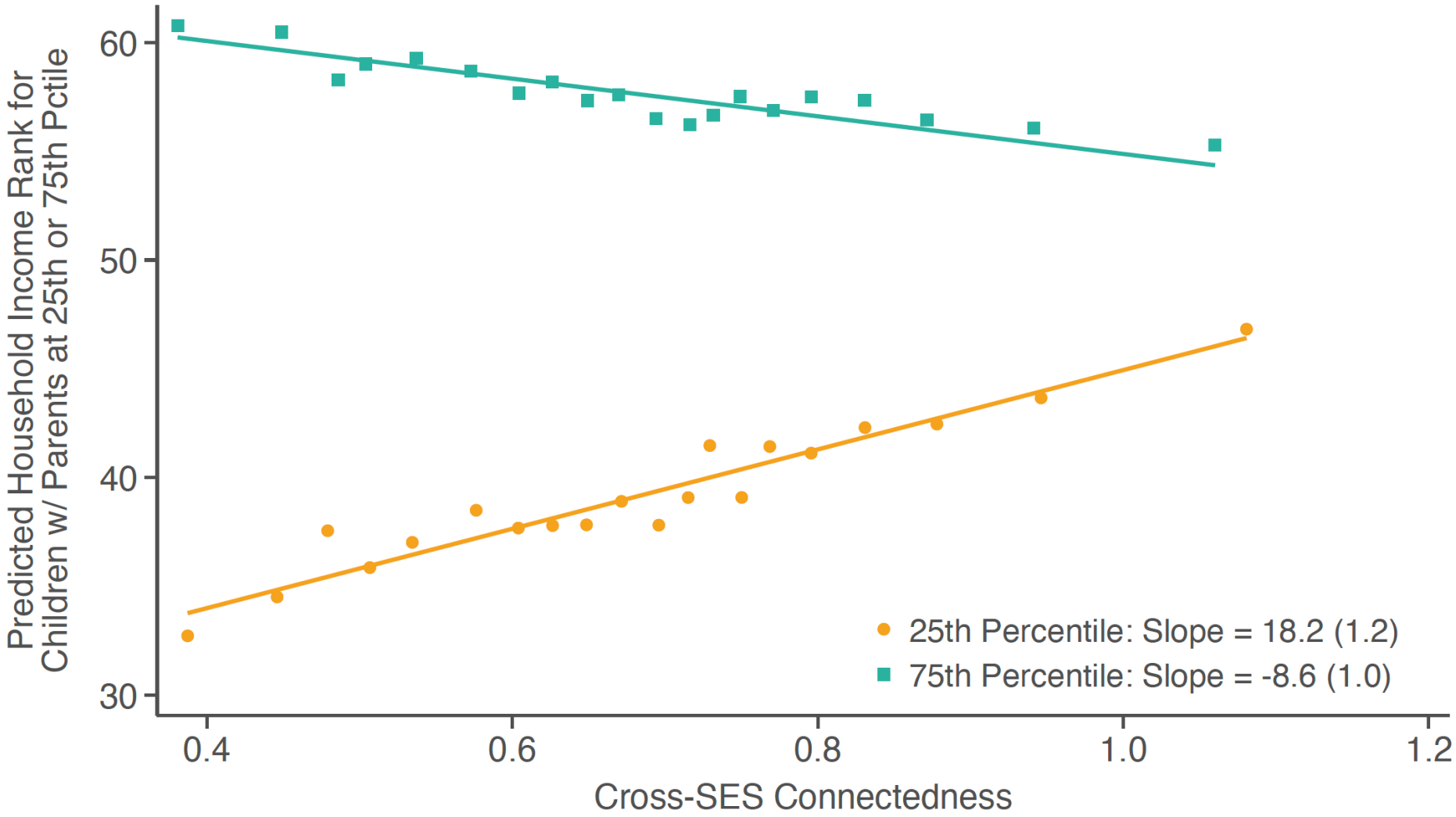
# How heterosexual couples have met



**Discussion!**

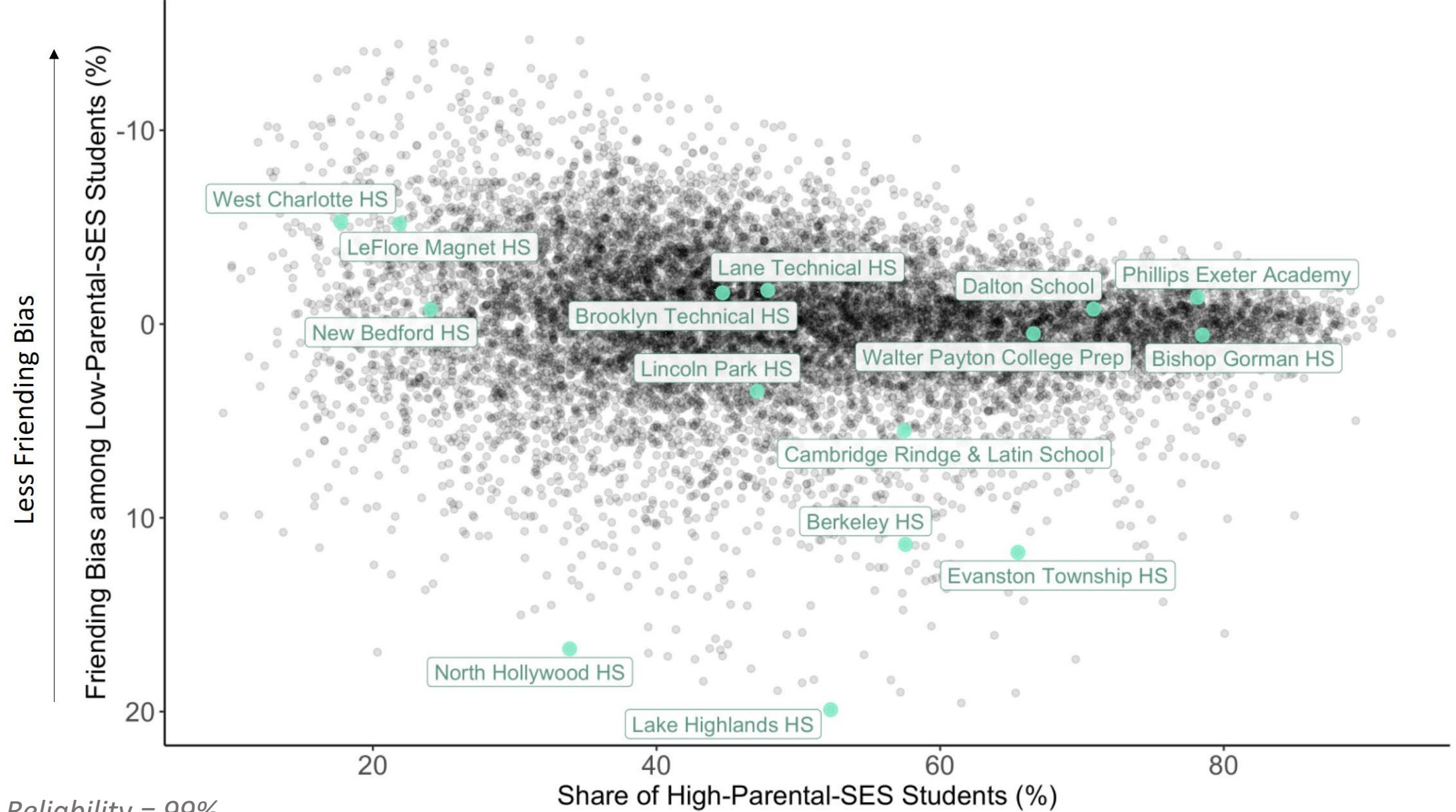


# Economic Mobility vs. Cross-SES Connectedness for Low- vs. High-SES Individuals County-Level



# Friending Bias vs. Exposure to High-SES Students, by High School

Among Low-SES Students in 1990-2000 Birth Cohorts



*Exposure Reliability = 99%*

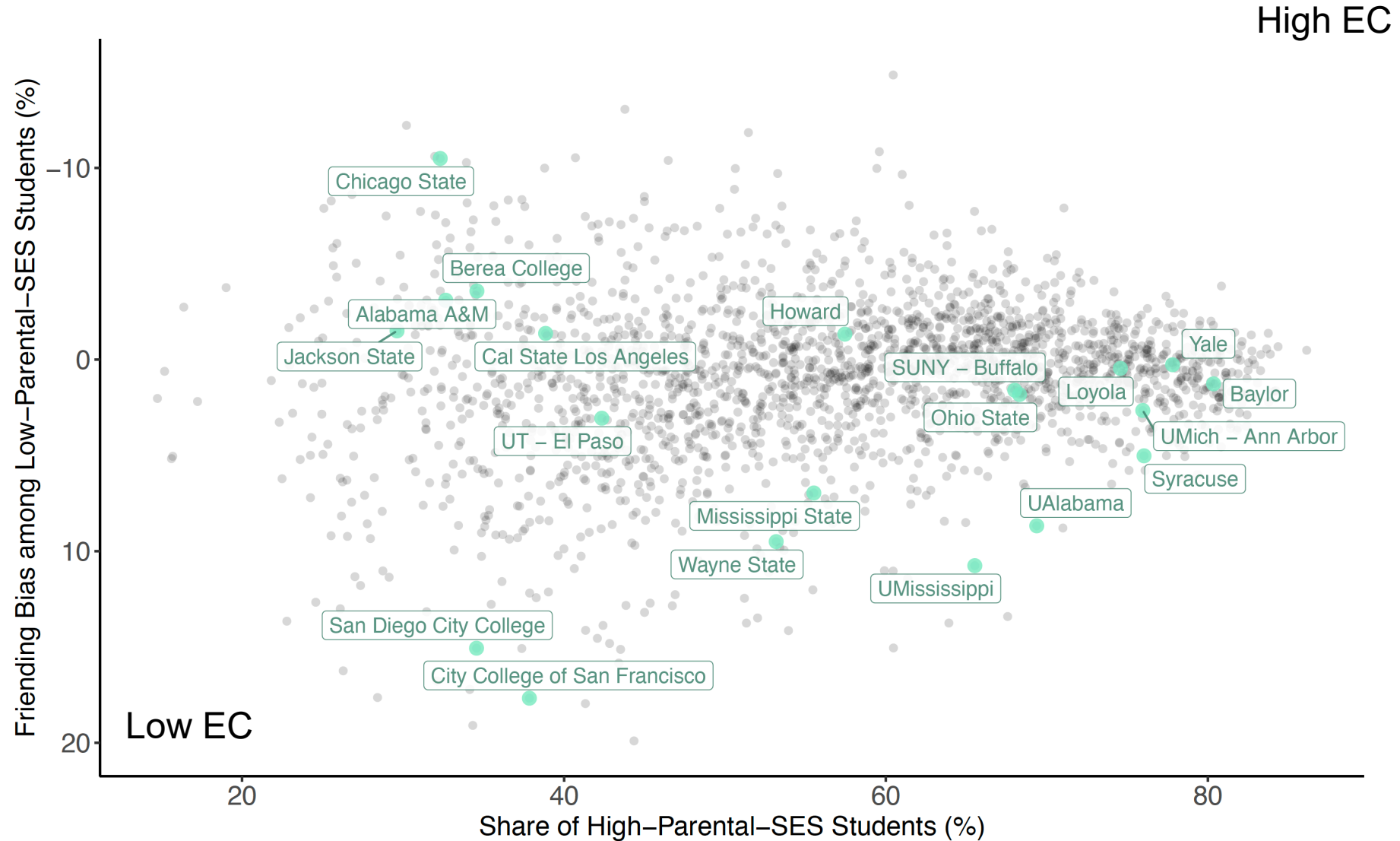
*Friend Bias Reliability = 58%*

More Exposure



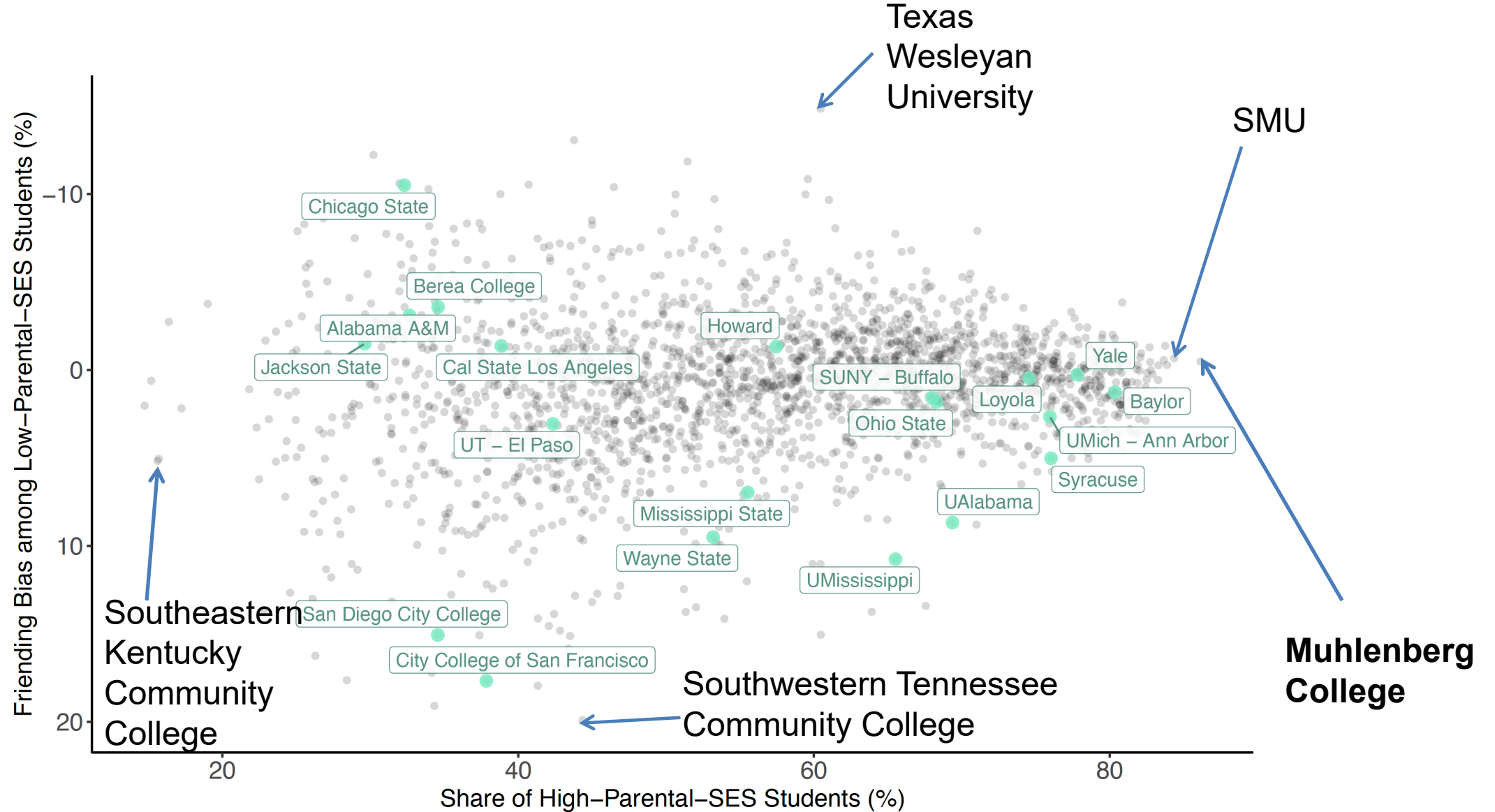
# Friending Bias vs. Exposure to High-SES Students, by College

Among Low-SES Students in 1990-2000 Birth Cohorts



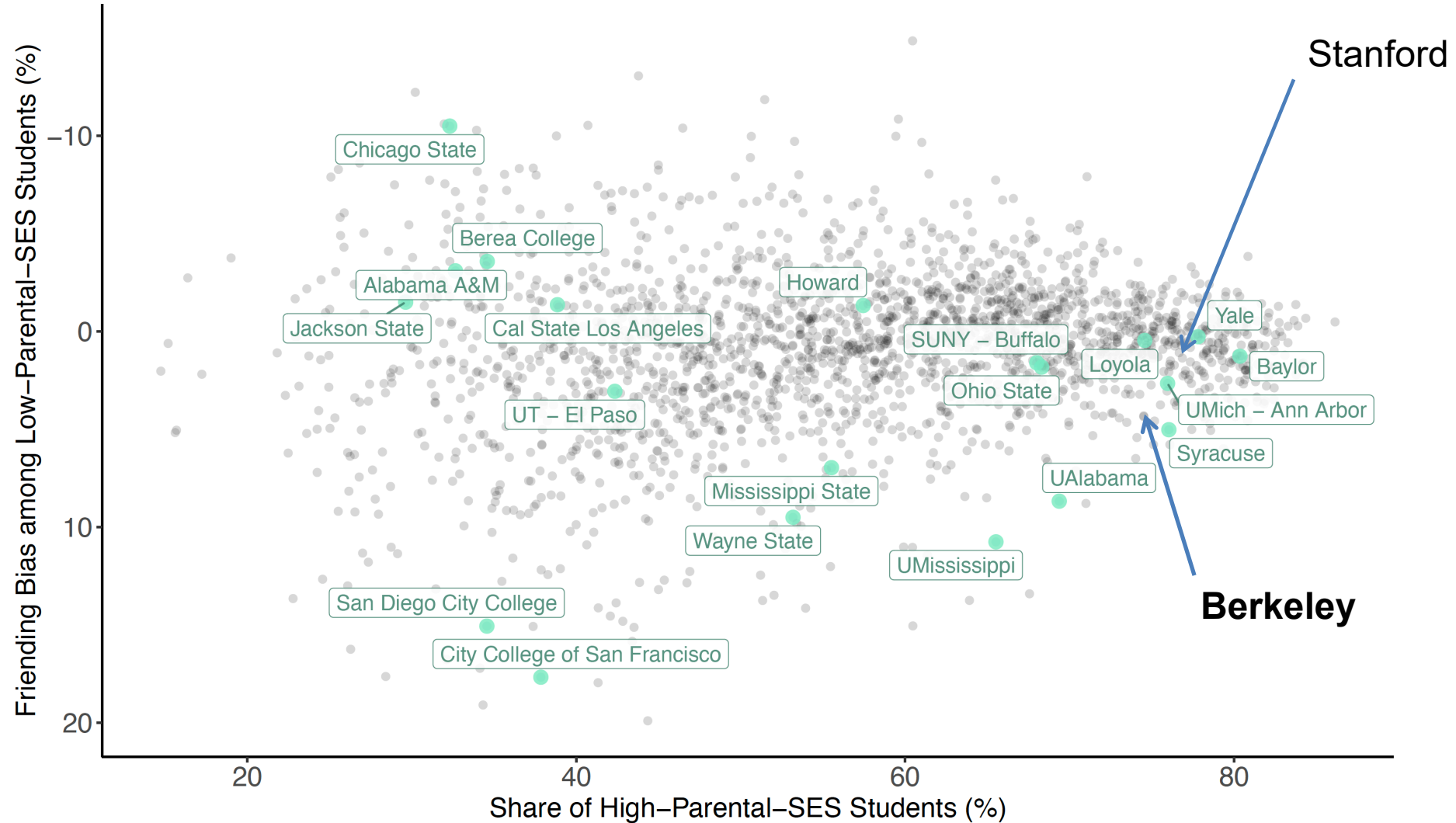
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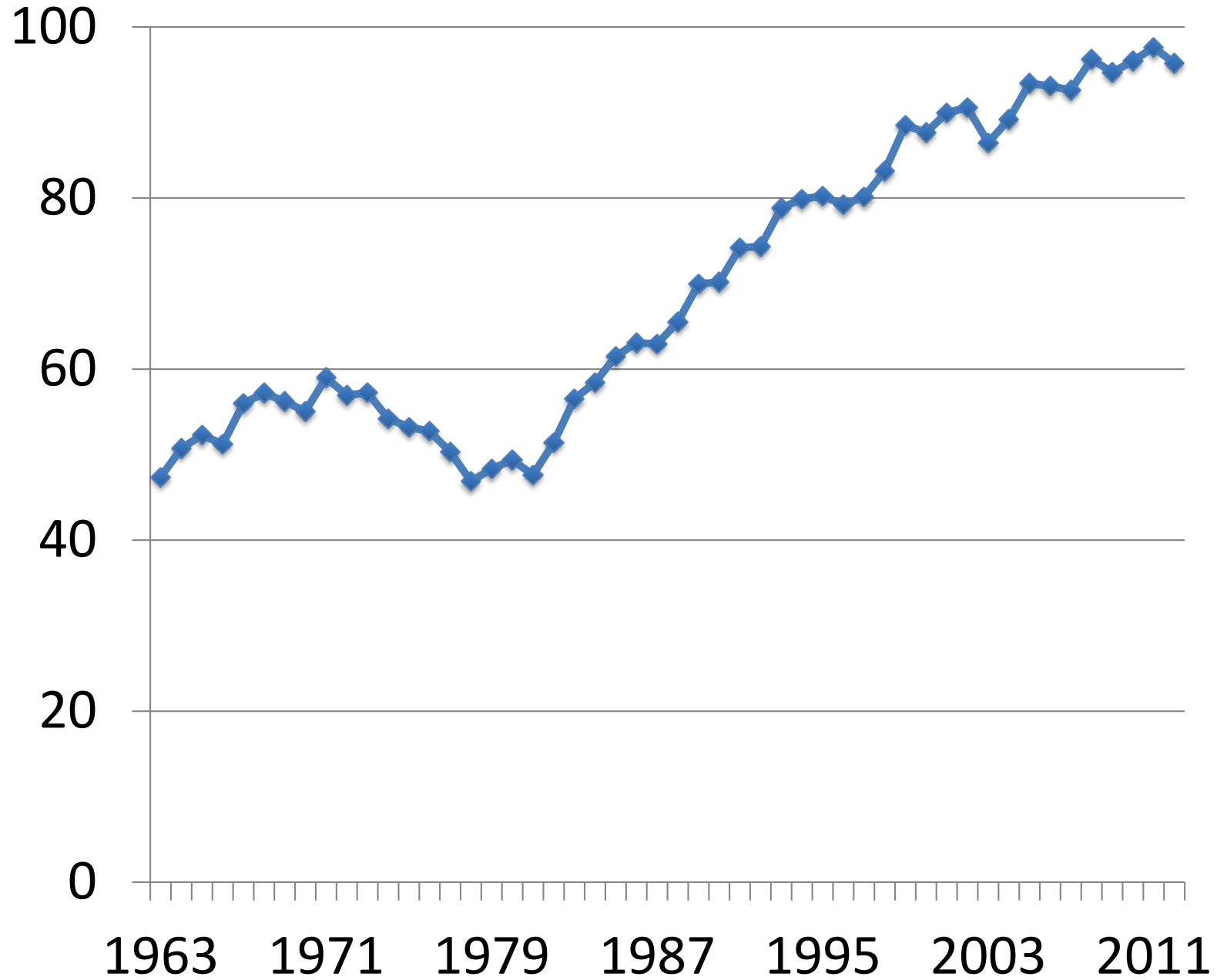


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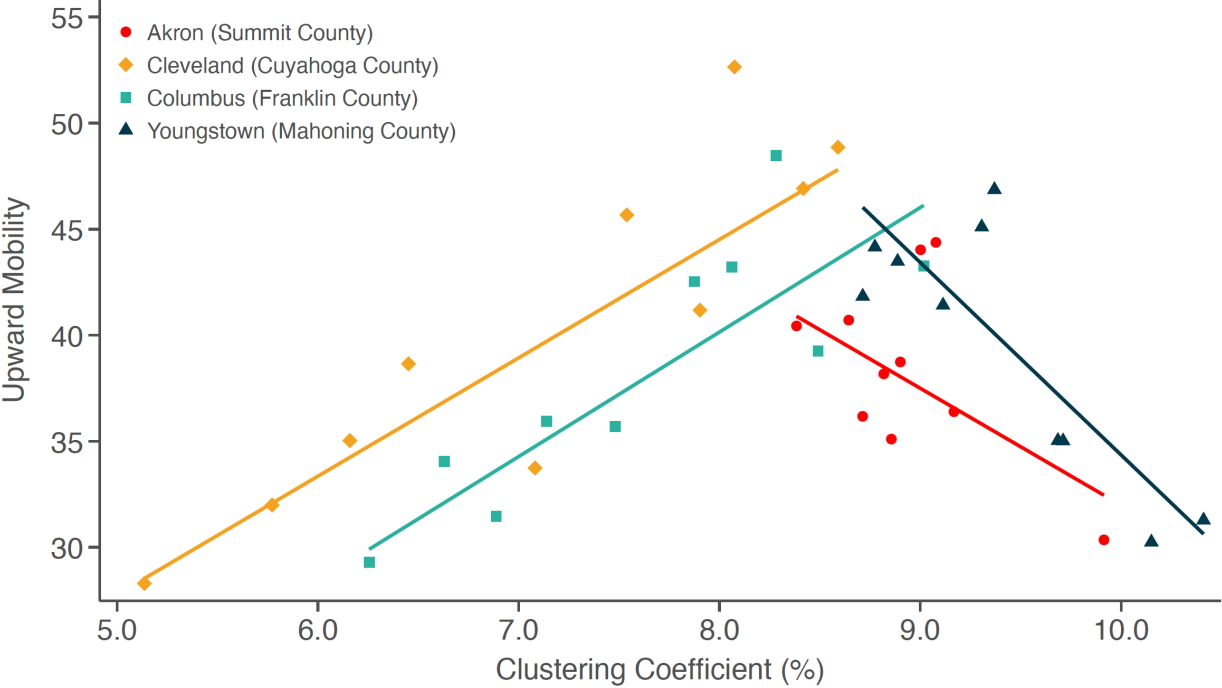


# College Wage Premium



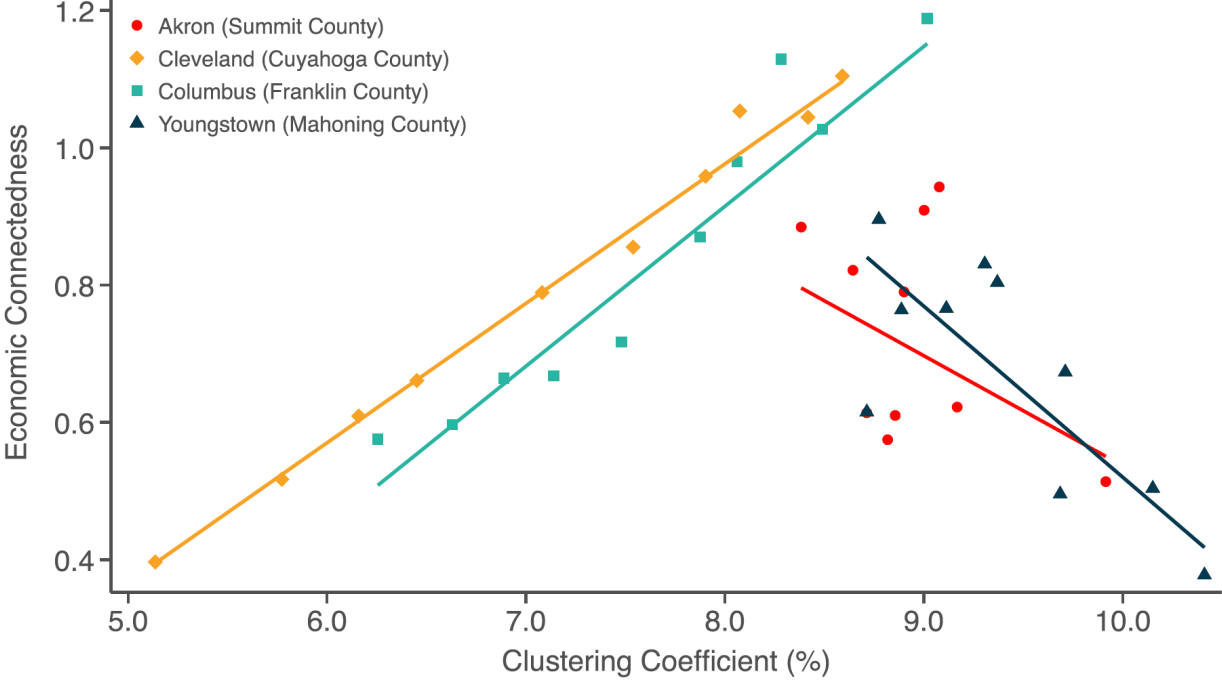
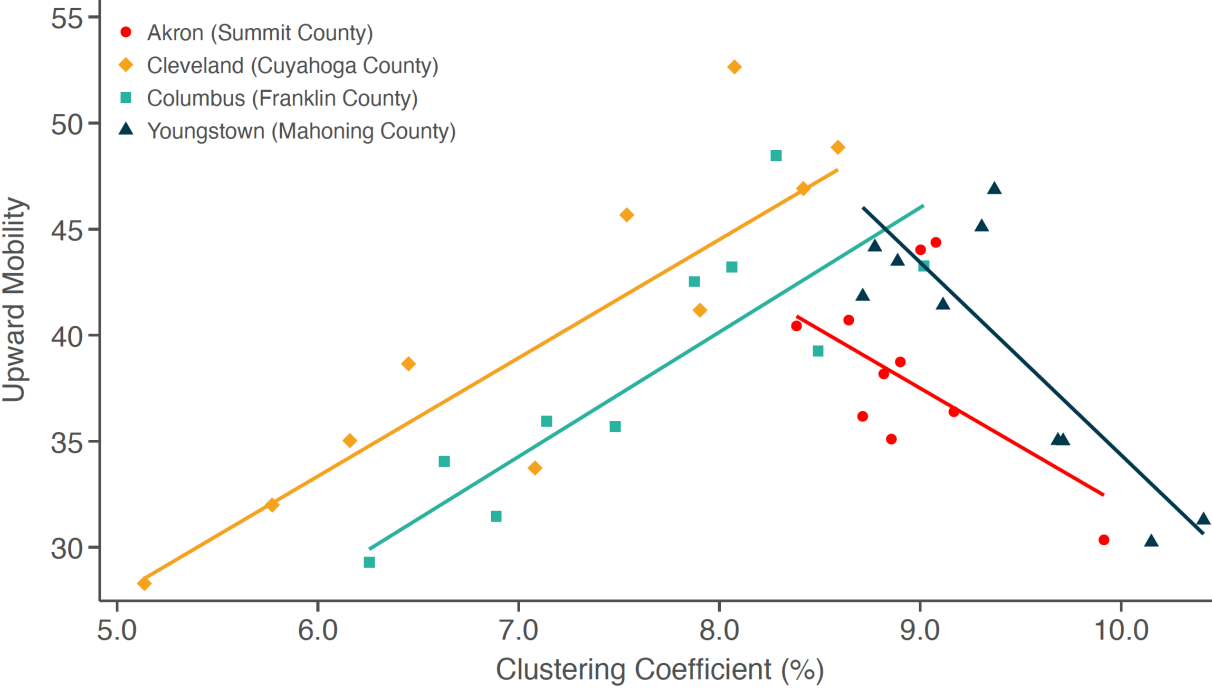
# Relationship between Clustering and Upward Mobility

ZIP-level, selected cities



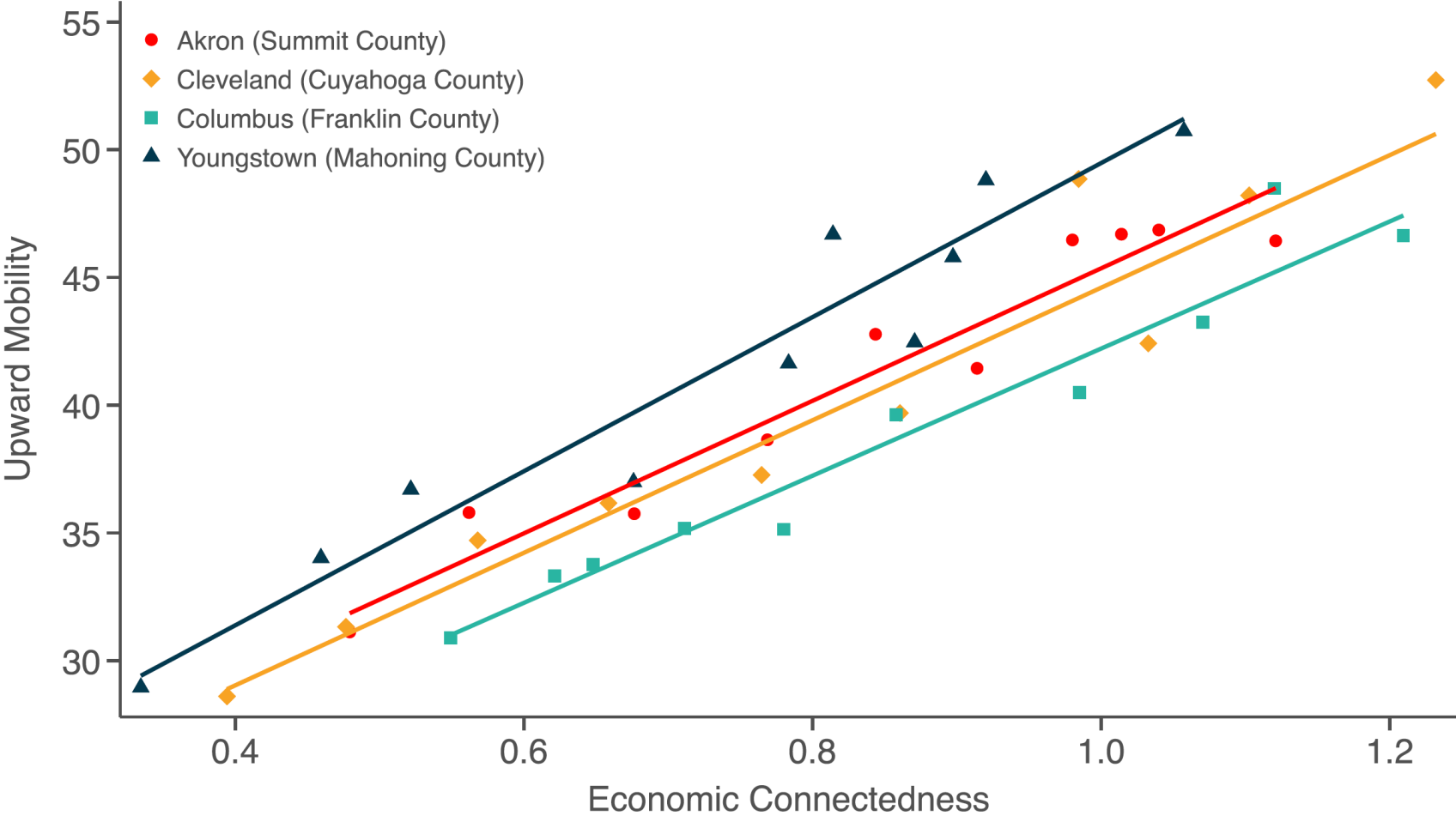
# Relationship between Clustering, Upward Mobility, and EC

ZIP-level, selected cities

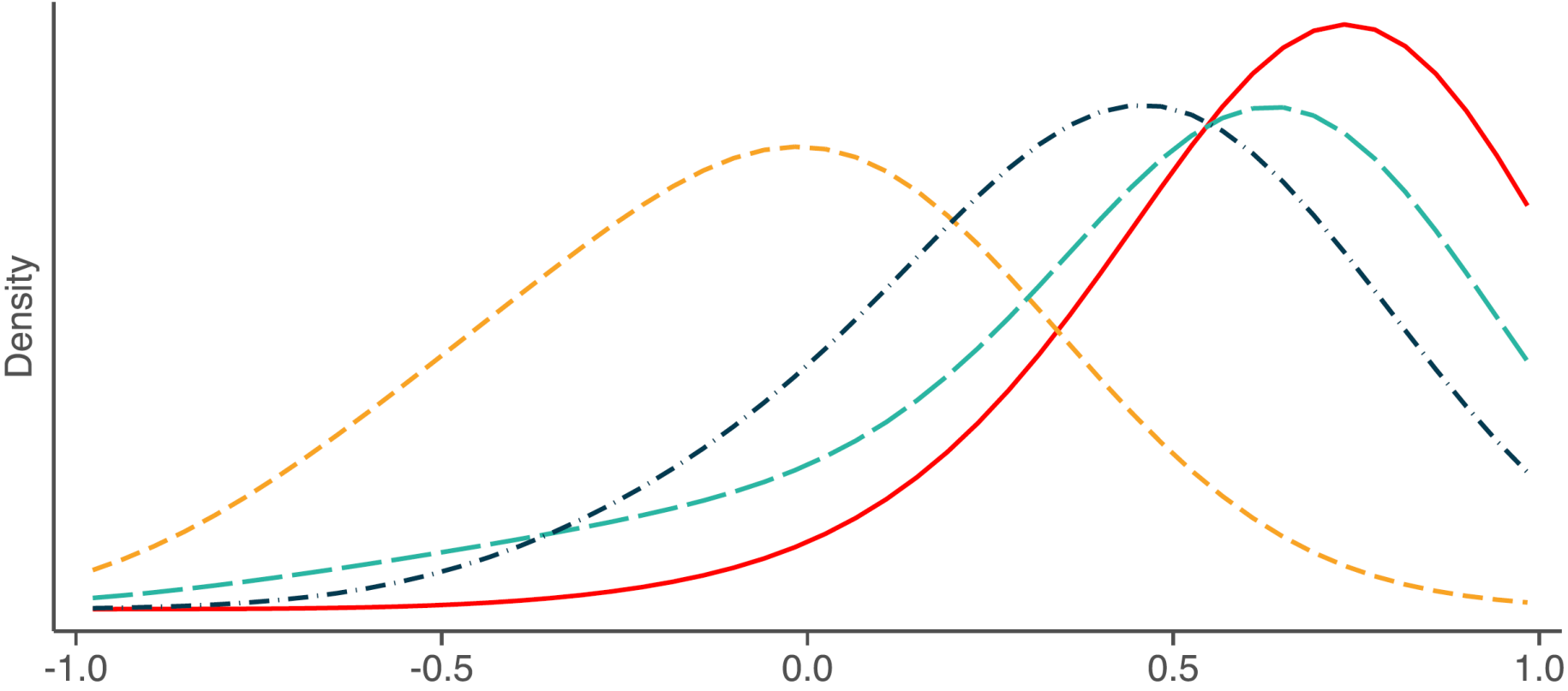


# Relationship between Upward Mobility and Economic Connectedness

ZIP-level, selected cities



# Distributions of ZIP Code-Level Correlations between Upward Mobility and Social Capital Measures across Counties



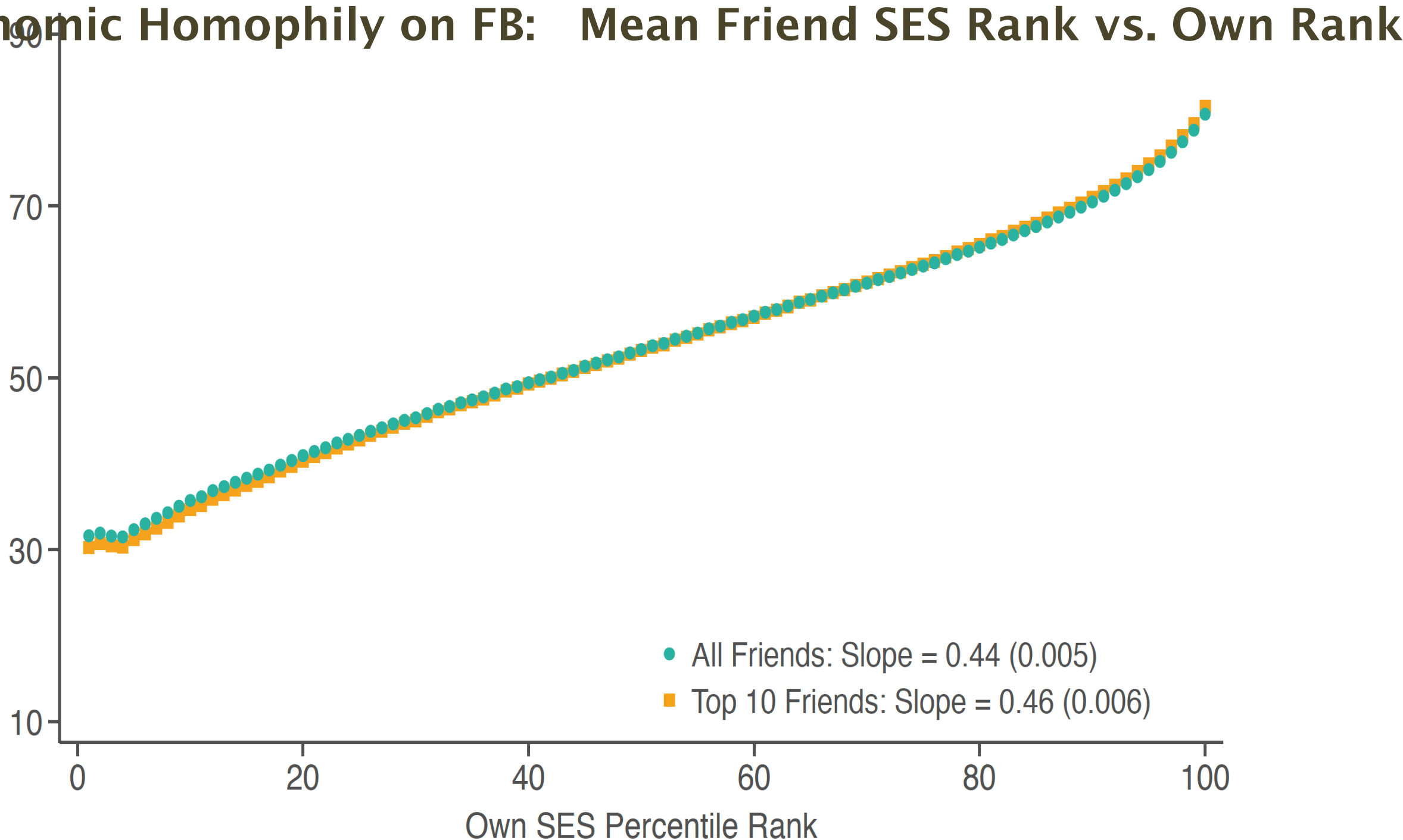
County-Level Weighted Correlation Coefficient across ZIP Codes

- Support Ratio
- Economic Connectedness
- Clustering
- Volunteering Rate



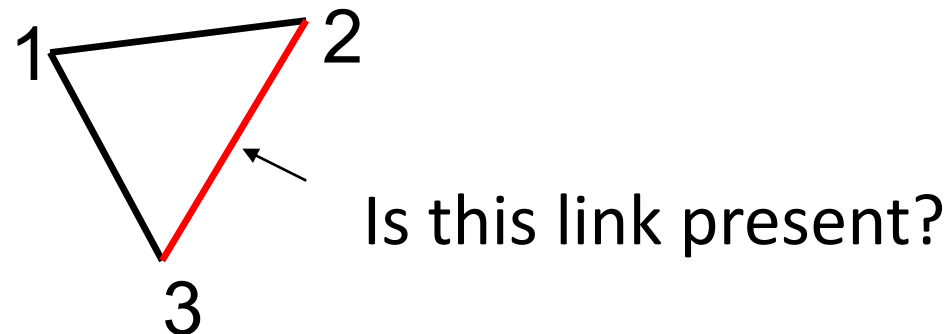
# Economic Homophily on FB: Mean Friend SES Rank vs. Own Rank

Mean SES Rank of Friends

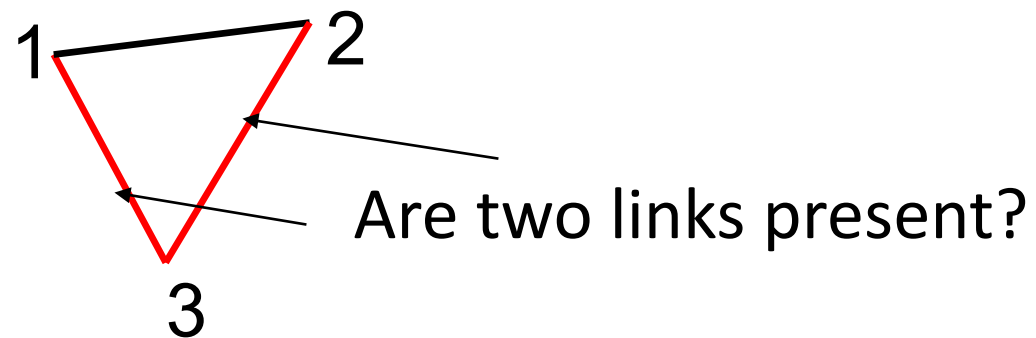


# Clustering & Support

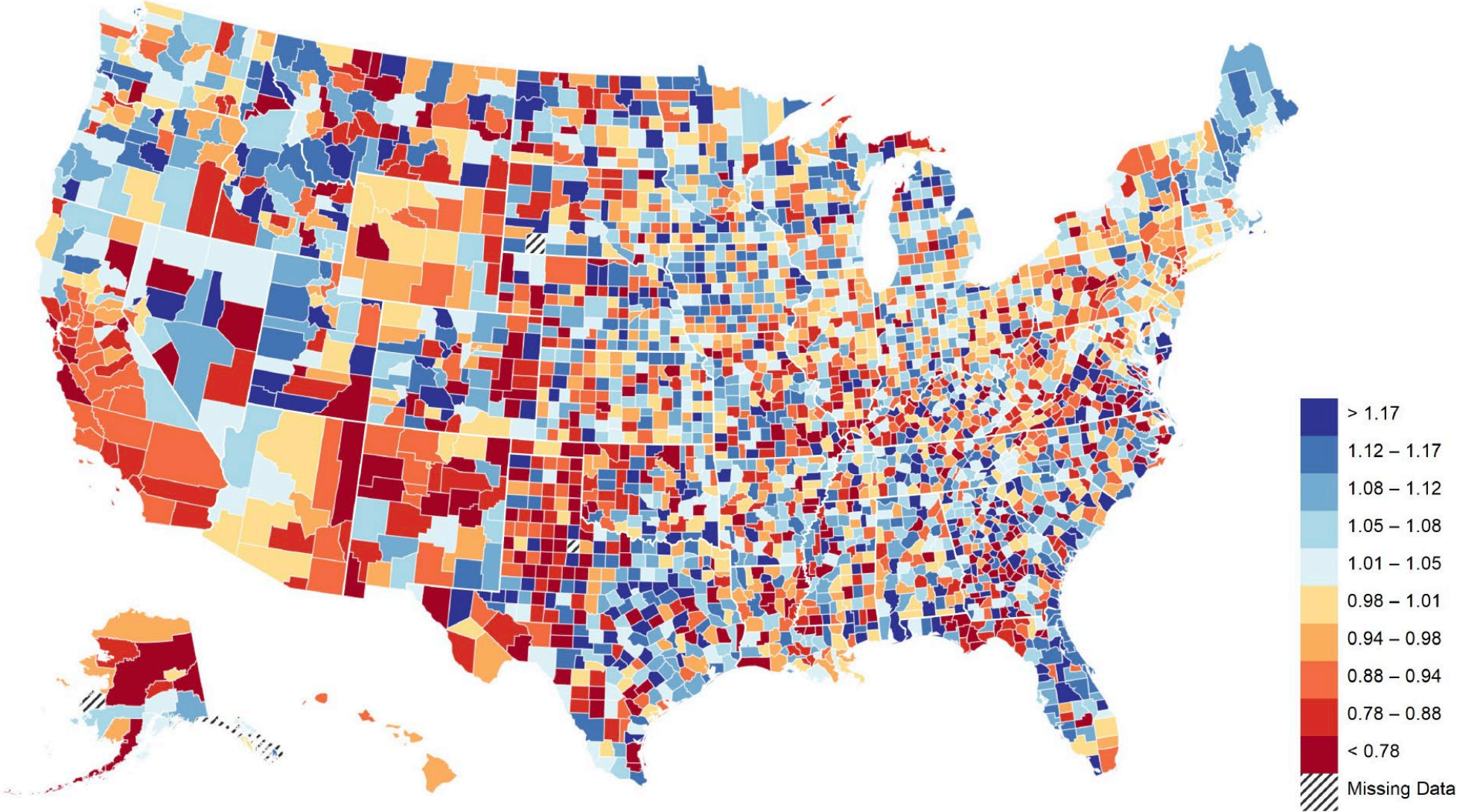
- Clustering – closure, transitivity:

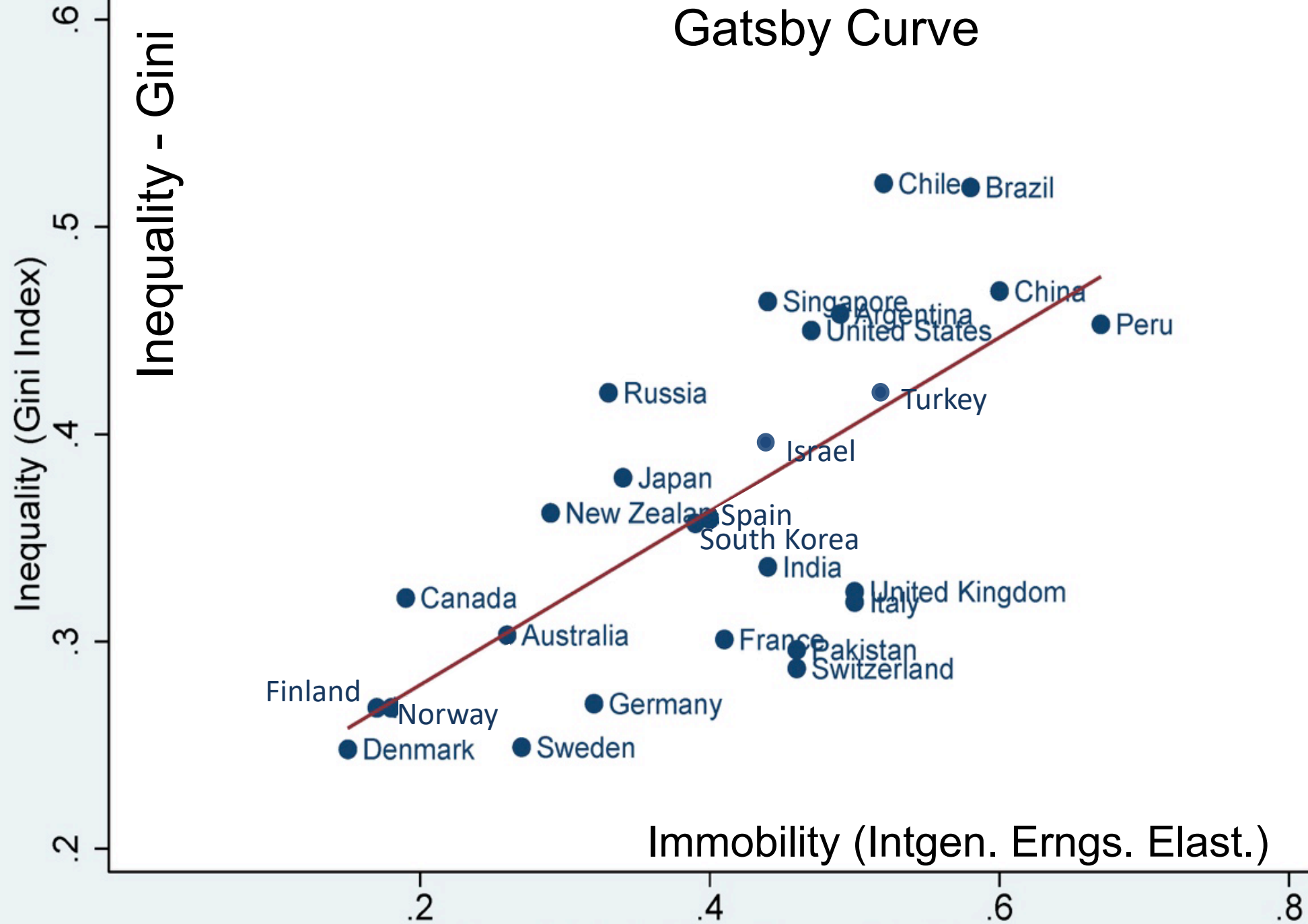


- Support – friend in common:



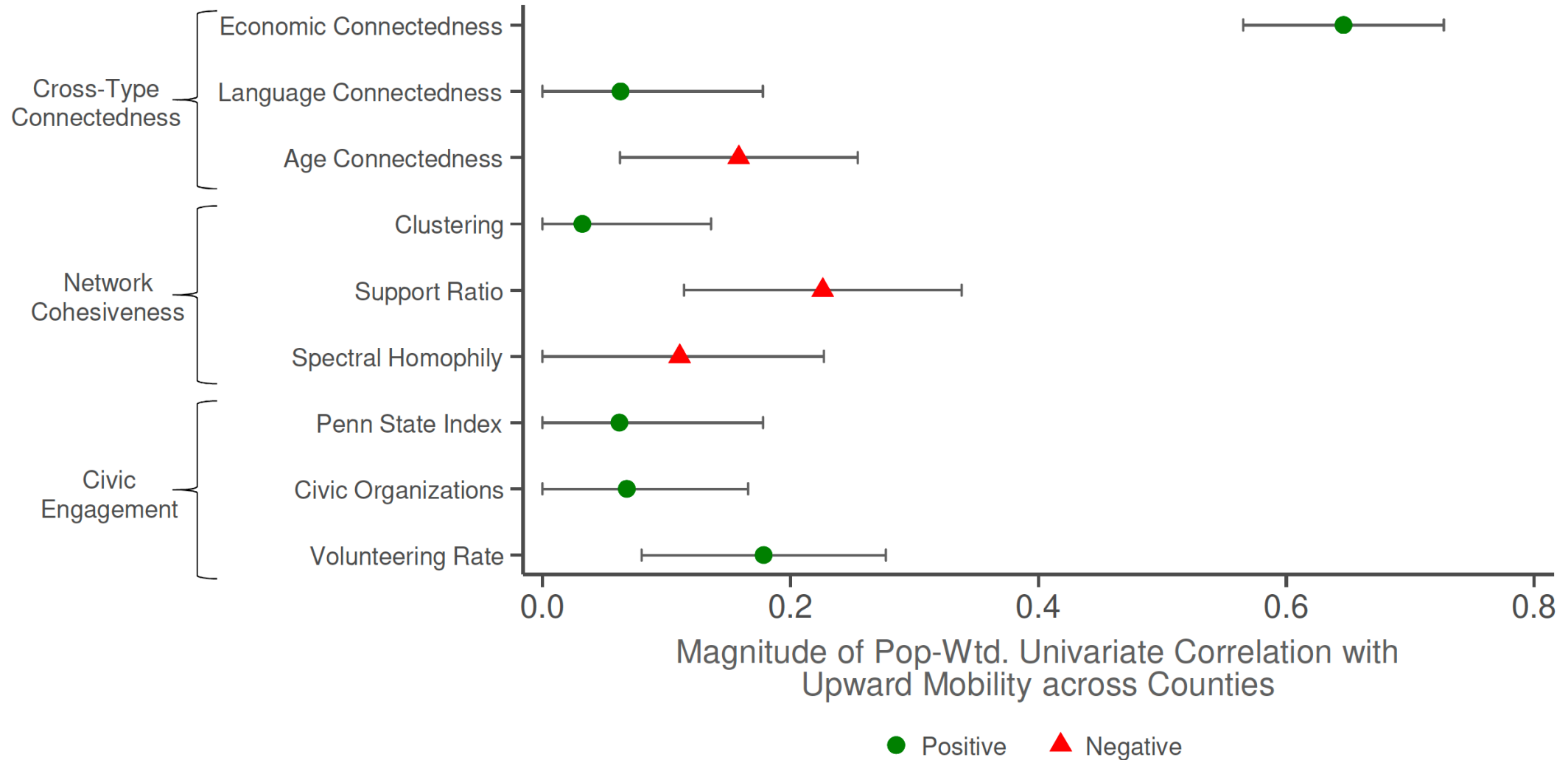
# Relative Geographic Coverage of Facebook Data





# Correlations between Upward Mobility and Measures of Social Capital

## County-level Univariate Correlations



# Correlations between Social Capital and Life Expectancy at Age 40 for Bottom-Income-Quartile Men

## Univariate County-level Correlations

