

Are Connections the Way to Get Ahead?

Social Capital, Student Achievement, Friendships, and Social Mobility

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Question

- What is more important for relative, inter-generational social mobility for those from low SES backgrounds?
 1. Cross-class friendships (bridging capital)?
- OR
2. Family and community capital plus student achievement?

Chetty et al. find:
Bridging capital (Cross-class friendships) to be key:

“the share of high SES friends among low SES people . . . is strongly associated with upward income mobility, whereas other forms of social capital are not. Areas with higher . . . [shares of such friendships] have large positive causal effects on children’s prospects for upward mobility.

Chetty et al. (2023, p. 120) (hereinafter Chetty):

Enthusiastically Received

“an expansive new study, based on billions of social media connections, . . . helps explain why certain places offer a path out of poverty. For poor children, living in an area where people have more friendships that cut across class lines significantly increases how much they earn in adulthood.”

New York Times, 2022.



More enthusiasm

- “Findings . . . certain to have a profound impact on discussions of economic mobility. . . . At the community level, cross-class connections boost social mobility *more than anything else*, including racial segregation, economic inequality, educational outcomes, and family structure”
Brookings Institution, 2022.

Motivation for Second Opinion

- Chetty makes causal claims with descriptive data.
- Study has major policy implications:
 - Preparation for adulthood should focus on building cross-class friendships rather than personal capacities.
 - Concern that Chetty's results are the result of endogeneity.
 - Chetty excludes or downplays key variables

Limitations to our study

- Descriptive analysis.
- Mobility as defined by Chetty
- County-level data.
- Our purpose not to “prove” causal relationship but to show credible alternative model with different policy implications.
- Like Chetty, but to a lesser extent, we assume social capital is “sticky”

Chetty measure of Inter-generational mobility (relative, not absolute)

- Percentile of income distribution of those born between 1978 and 1983 of parents at the 25th percentile of the socio-economic distribution.
- Chetty does not provide county-level information on absolute mobility

Inter-generational mobility varies across U. S. counties

Percentile ranking in income distribution of younger adults (ages 25 to 44) born into households at or below 25 percentile of SES distribution

County Mean : 41st percentile



Range: 30 percentile points (31st to 61st)

Standard Deviation: 4 percentile points

Our findings

1. Families, communities and student achievement contribute to social mobility.
2. Cross-class friendships less important than other factors.

Key Chetty Limitations

Assumes adult-bridging capital is exogenous to social mobility

Does not include state fixed effects

Is the relationship exogenous?

Chetty's argument

- School-bridging capital also shows correlation with mobility and clearly is an antecedent variable.
 - But....why not use school bridging capital in the OLS equation?
- Bridging-mobility correlation observed in both predominantly white and predominantly black counties
 - But...that only shows relationship not driven by racial separation
- Bridging-mobility correlation observed among those who do not move from birth county.
 - But.... bridging-capital is measured in 2022, not early in life.

State fixed effects?

- Disadvantage: Reduces the amount of variation to be explained. (But half of variation is within states.)
- Advantage: Excludes non-observable between-state variation, such as regional differences between North and South and between older settled states and those settled more recently
- Robustness check provided.

Social Capital Theory

- **Family** (parenting) (Coleman, 1988)
- **Community**: organizational density (Putnam, 2000; Joint Economic Committee [JEC, 2017])
- **Political** (trust/participation in government) (Penn State, 2010; JEC, 2017).
- **Achievement**: test scores, Stanford Data Education Archives (SEDA)
- **Bridging** (cross-class share of friendships) (Granovetter, 1973; Chetty, 2002)
 - **School** , high school friendships of Facebook users
 - **Adult** , Facebook friendships

Chetty Data

- Chetty shares county-level data:
 - County-level rates of relative social mobility
cohorts born 1978-83, observed as adults in 2015 tax records
 - Adult Bridging Capital: cross-class friendships (among those aged 25-44), as indicated by Facebook (2022)
 - High school bridging capital: cross-class friendships (as indicated on Facebook in 2022)
 - Control variables (various years)

Chetty's control variables (county-level)

Median household income

Racial segregation

Gini coefficient

% black

3rd grade math (we use 3-8 math)

% single parent (we use family capital index)

Weighted data (though results remain substantively unchanged when unweighted data is used)

Substituted & Added County-level Data

Family capital, circa 1980

density of two-parent household indicators (in lieu of % single parent)

Community capital (circa 1990)

community organization, religious congregations, volunteering

Political capital (circa 1990)

On-line census rate; voter participation rates

Student achievement in math and reading, 3-8 (2009-2018)

(instead of 3rd grade math)

Model

- $income\ mobility_{is} = \beta_1 adult\ bridging_{is} + \beta_2 school\ bridging_{is} + \beta_3 achievement_{is} + \beta_4 family_{is} + \beta_5 community_{is} + \beta_6 political_{is} + X'\gamma + c_s + \varepsilon_{is}$
- X = control variables
- c = state fixed effects
- Our preferred model deletes the endogenous “adult-bridging” variable, but we show results both without and with this term.

Chetty and our approaches

Similarities:

- Same dependent variable: inter-generational, relative social mobility,
- Same control variables, measured the same way:
 - Descriptive OLS regression model,
 - Similar subset of counties (smaller ones not included)

Differences:

We add family, community, political, & school bridging capital plus student achievement : include adult-bridging in robustness check

State fixed effects . No weights.

Chetty does not include state fixed effects: weights by size of disadvantaged pop.

The Sticky Assumption

Social Capital is sticky:

In Italy, social capital in 17th Century affects social, economic and political developments in 20th Century (Putnam).

Decline in social capital in recent past expected to affect opportunity in coming decades.

Implications:

Suggests county-level measures are appropriate:

Moderately large geographical category that captures spill-overs across zip codes or other small units.

Social Capital Indexes (County)

Family: Density of two-parent families

Community: Density of civic organization & religious congregations; volunteering, civic participation

Political: Voting rates; census mail-in rate;

Achievement: student proficiency in reading and math

Cross-class bridging:

School: Percentage of friendships in high school that are cross-class, as reported on Facebook

Adult: Percentage of current friendships that are cross-class, as reported on Facebook

Date of Social Capital Indicators

- Cohorts born 1978-83; income observed (1993-2015)
- Family 1980-1982 (early childhood)
- Community: 1990 (adolescence)
- Political , 1998-1996 (adolescence)
- Achievement: 2009 (also, 2009-18) (*later than preferred*)
- School Bridging, 1993-2012
- Adult Bridging (friendships), 2022

Student achievement

County average math achievement level for years 2009-2018 for all students.

(No difference for reading or for just disadvantaged students.)

Data from state standardized tests available from
Stanford Education Data Archives (SEDA)

Predictors of social mobility

Variable	Estimate
School-bridging	0.11***
Family	0.44**
Community	0.07**
Political	0.03
Achievement (09-18)	0.19**
R-squared	0.82

Predictors of adult-bridging capital

R-squared	0.85
Variable	Estimate
Family	0.09**
Community	0.01
Political	0.01
Achievement	0.34**
School Bridging	0.46***

Predictors of social mobility, including adult-bridging capital

Variable	Estimate
Adult-bridging	0.31***
School-bridging	-0.03
Family	0.41***
Community	0.06***
Political	0.03
Achievement	0.08***
R-squared	0.84

Policy Implications

- If inter-generational mobility is dependent primarily on . . . cross-class friendships, then schools, to create equal educational opportunity,
 - should abolish separate learning tracks based on ability,
 - eliminate merit based entrance requirements for high schools,
 - and end merit-based college admissions.
- **But if families, communities and achievement are key to mobility, then equal opportunities policies should**
 - **sustain dual-parent families,**
 - **Support community and religious institutions, and**
 - **provide quality learning opportunities in school.**

Conclusion

Very likely, it's not who you know, but who you have come to be, that counts most of all.

The End

Predictors of social mobility (weighted data)

Variable	Estimate
School-bridging	-0.12**
Family	0.26***
Community	0.03
Political	-0.08**
Achievement	0.35***
R-squared	0.81

Predictors of social mobility adult bridging included (weighted data)

Variable	Estimate
Adult bridging	0.32**
School-bridging	-0.22***
Family	0.31***
Community	--0.03
Political	-0.08**
Achievement	0.19***
R-squared	0.81

Predictors of social mobility (no state fixed effects)

Variables	Average of estimates
School-bridging	0.43***
Family	0.31***
Community	-0.01
Political	0.20***
Achievement	0.05
R-squared	0.61