

Socio-economic Status and Early Developmental Skills

Megan Kelly, Xinyi Lu, April Pereira, Mona Zhu

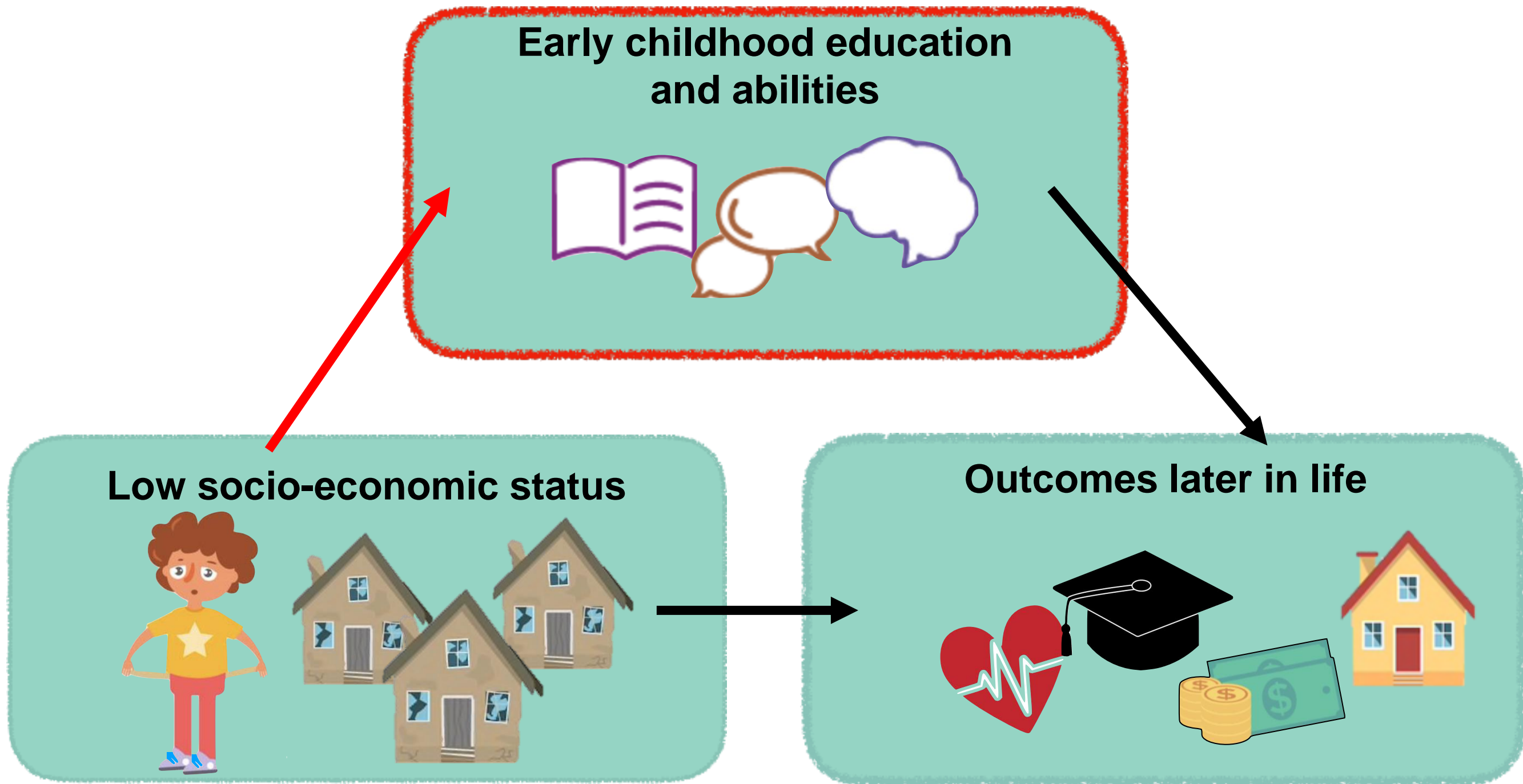




ONTARIO

The Problem

Lagging in these skills can have long-lasting effects ¹



1. Chetty, R., Hendren, N., & Katz, L. F. (2016). The effects of exposure to better neighborhoods on children: New evidence from the Moving to Opportunity experiment. *American Economic Review*, 106(4), 855-902.

Early Developmental Skills

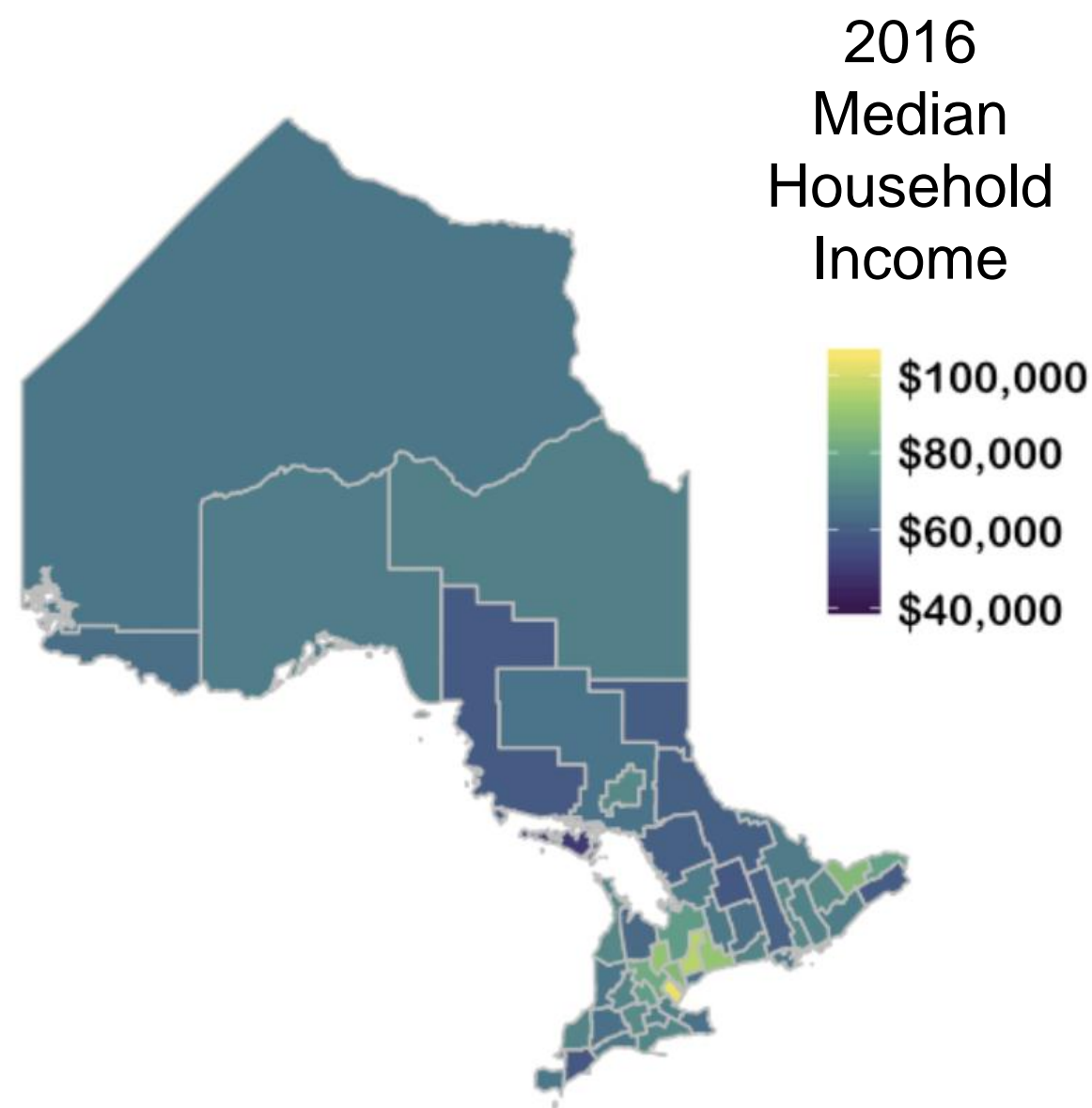
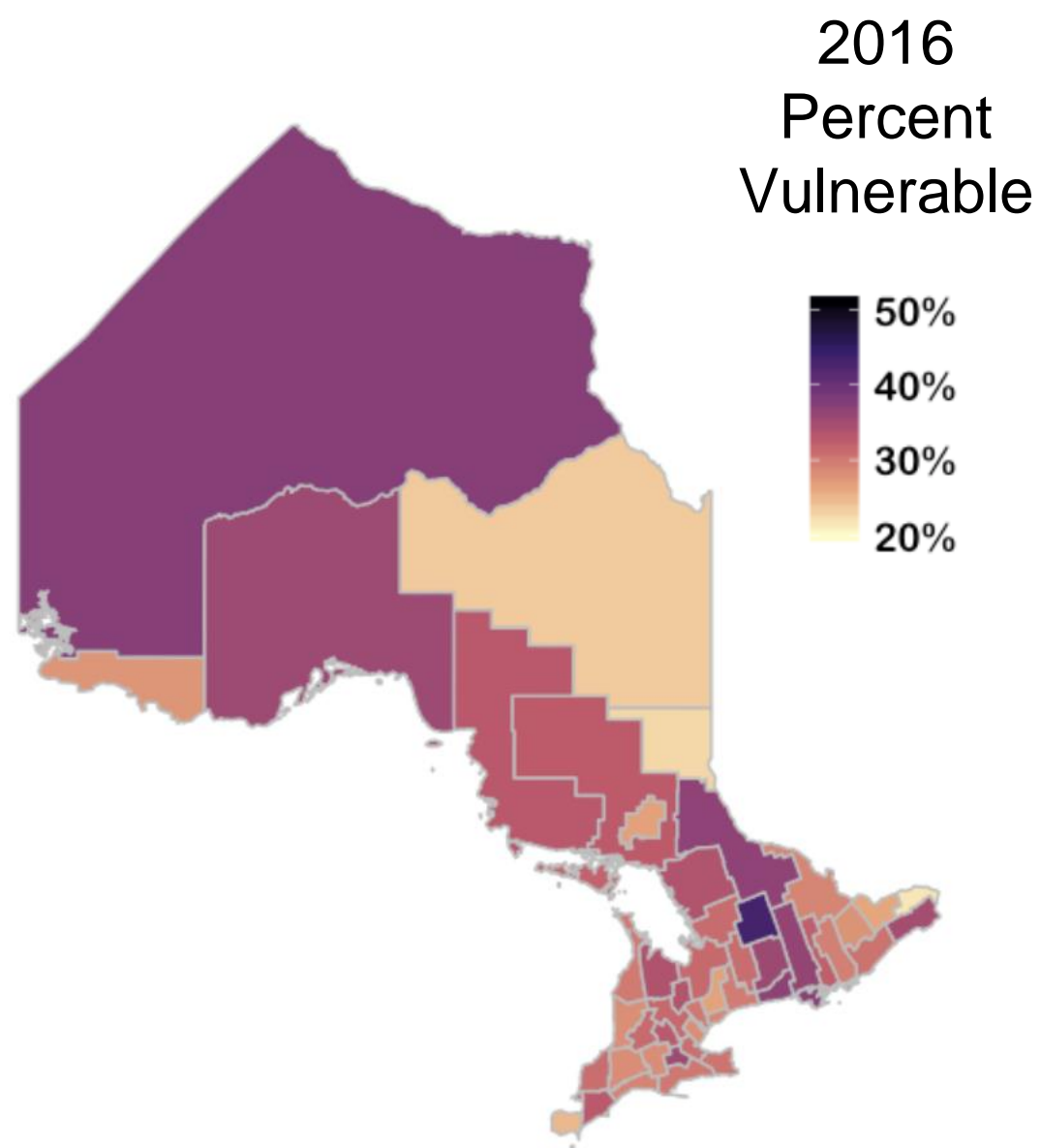
- How ready are children to learn and go to school?
- Assessed by the **Early Development Instrument (EDI)**
- **Vulnerability in School Readiness**





Percentage of Vulnerable Children Across Ontario Census Divisions

Median Household Income in Ontario



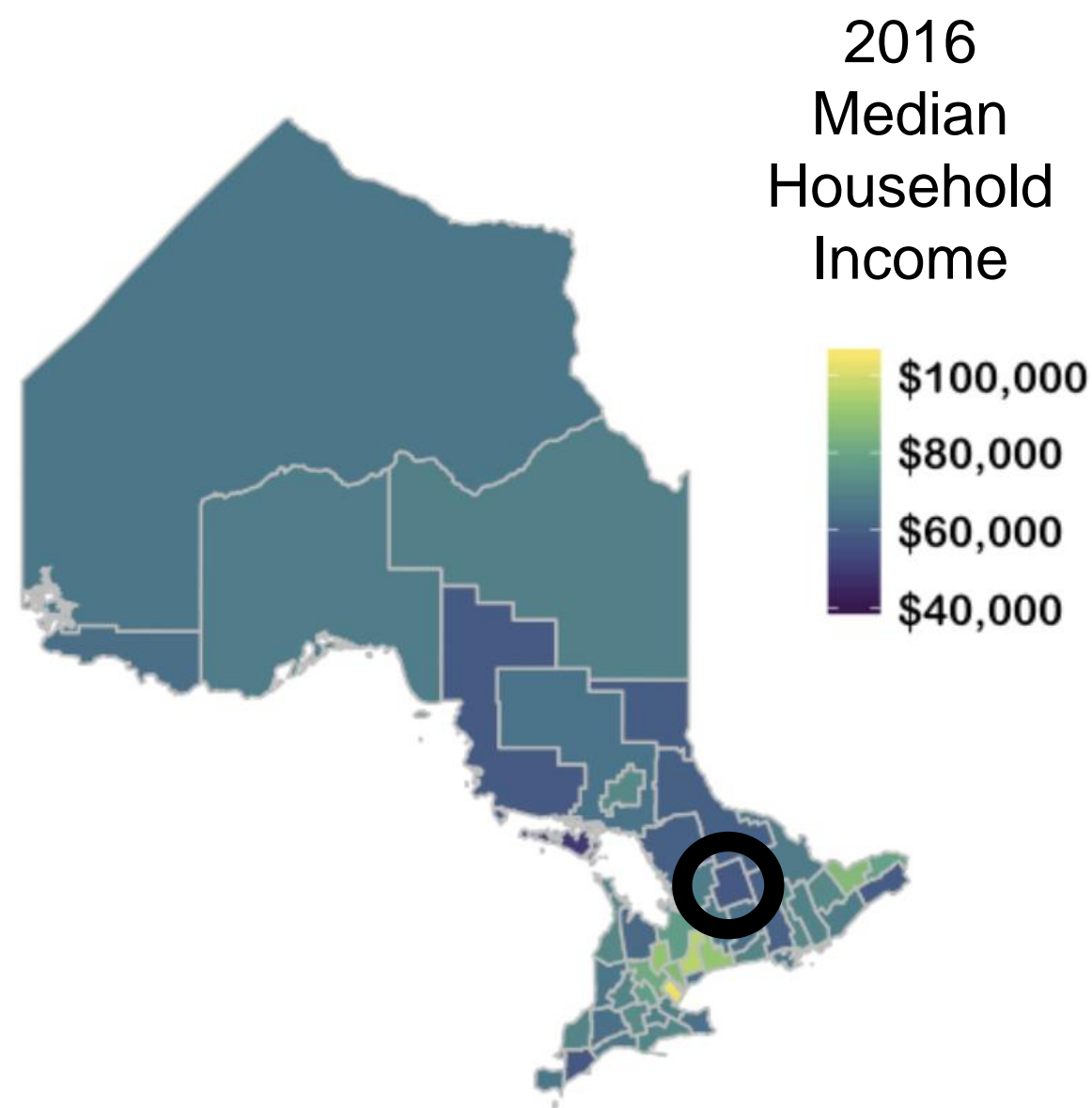
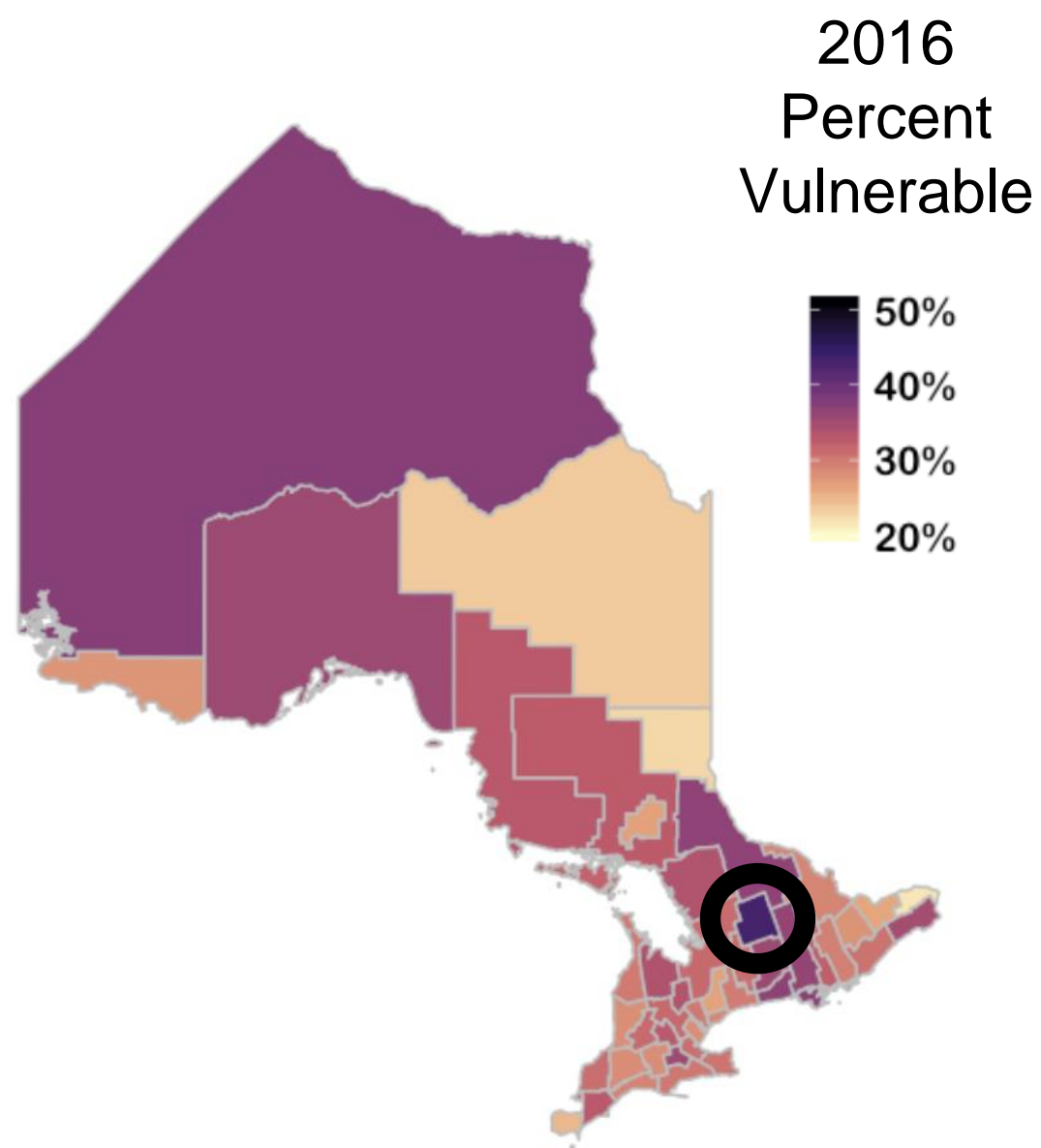
Vulnerability ← Income

$b = -1.327e-06$, $SE = 5.628e-07$, $p = 0.0226$



Percentage of Vulnerable Children Across Ontario Census Divisions

Median Household Income in Ontario



Haliburton, ON

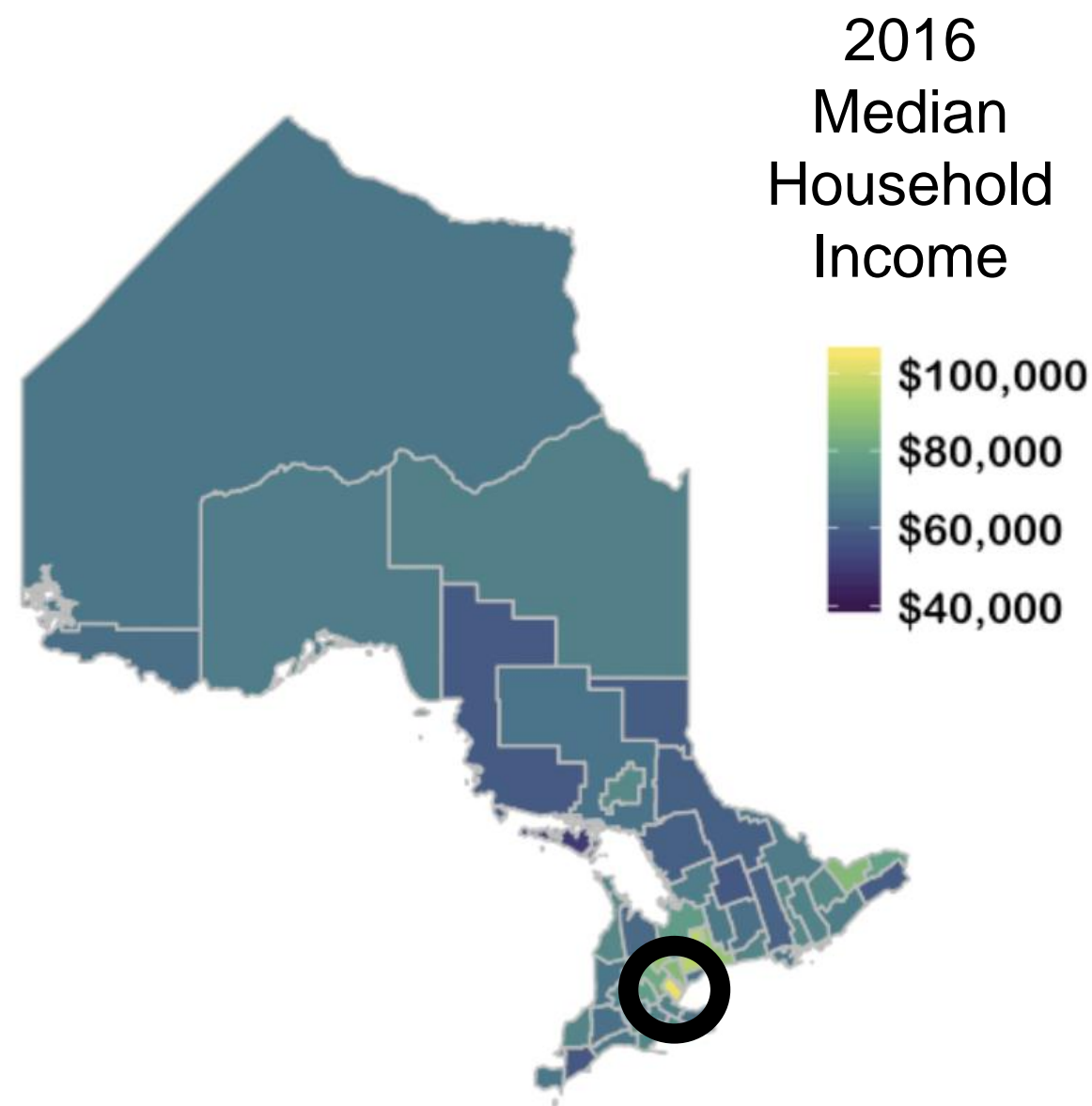
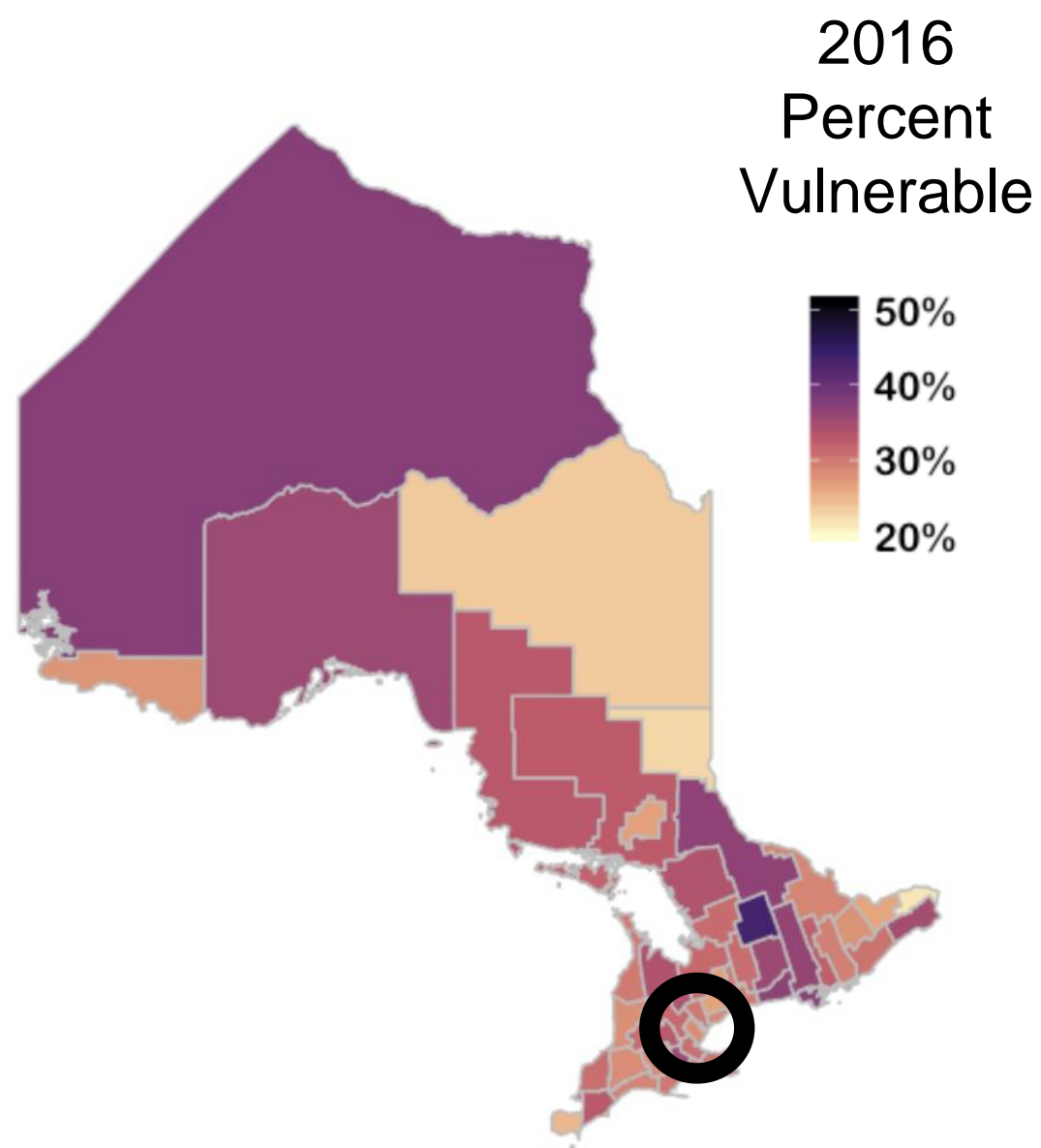
Almost a **quarter** of children living in poverty

Median HH income = **\$58125**



Percentage of Vulnerable Children Across Ontario Census Divisions

Median Household Income in Ontario

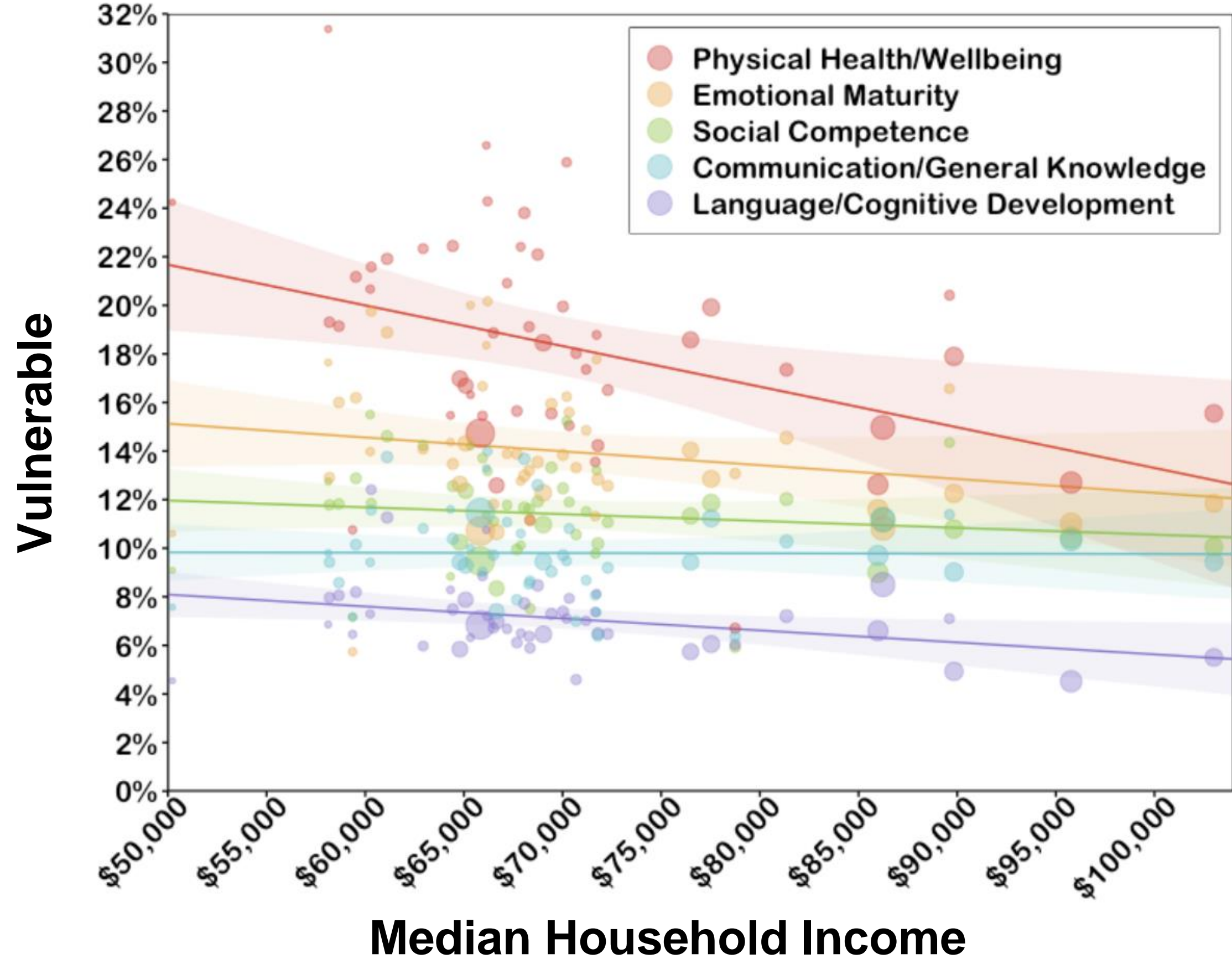


Halton, ON

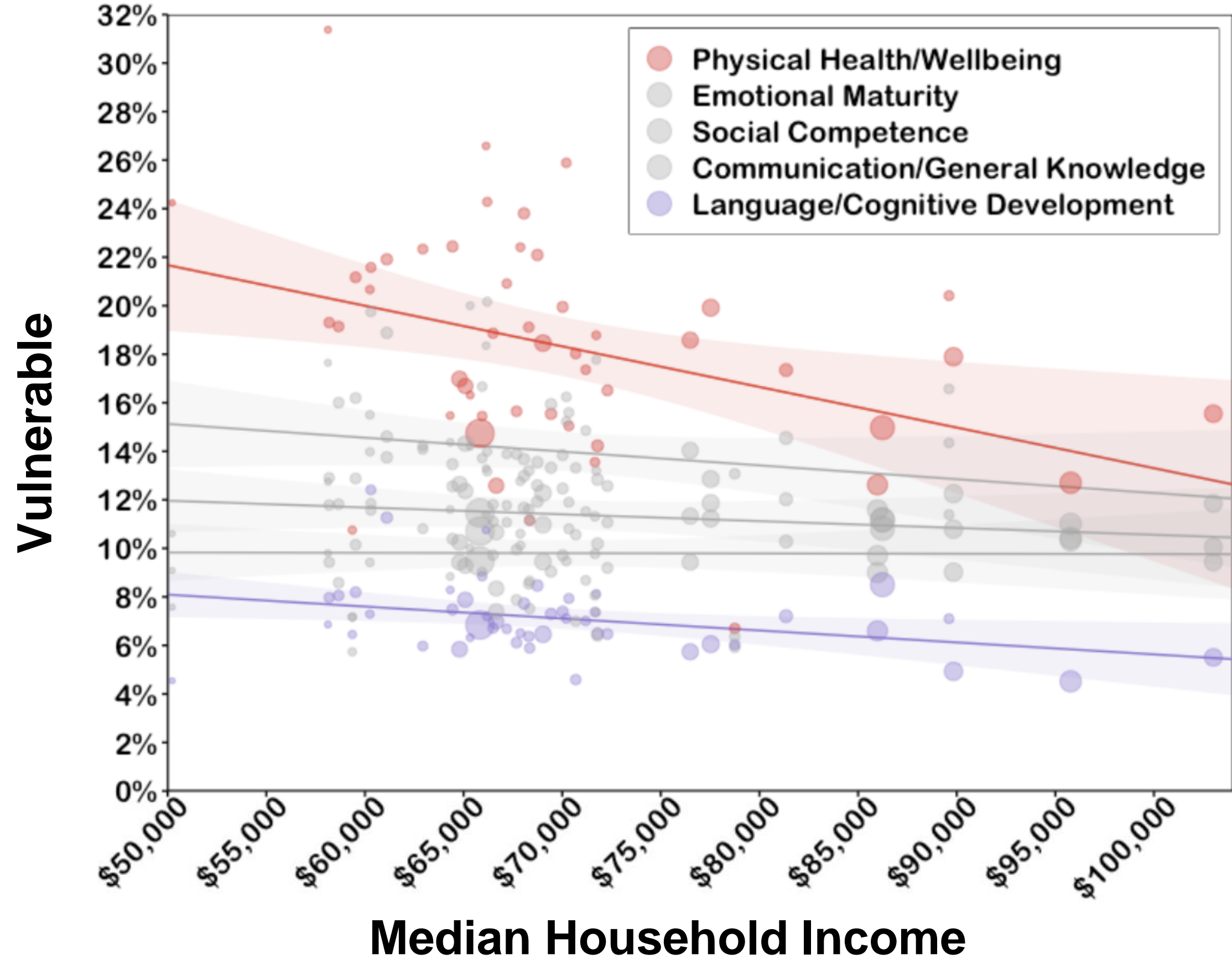
Ranked **one of the best** places to live in Canada

Median HH income = **\$103009**

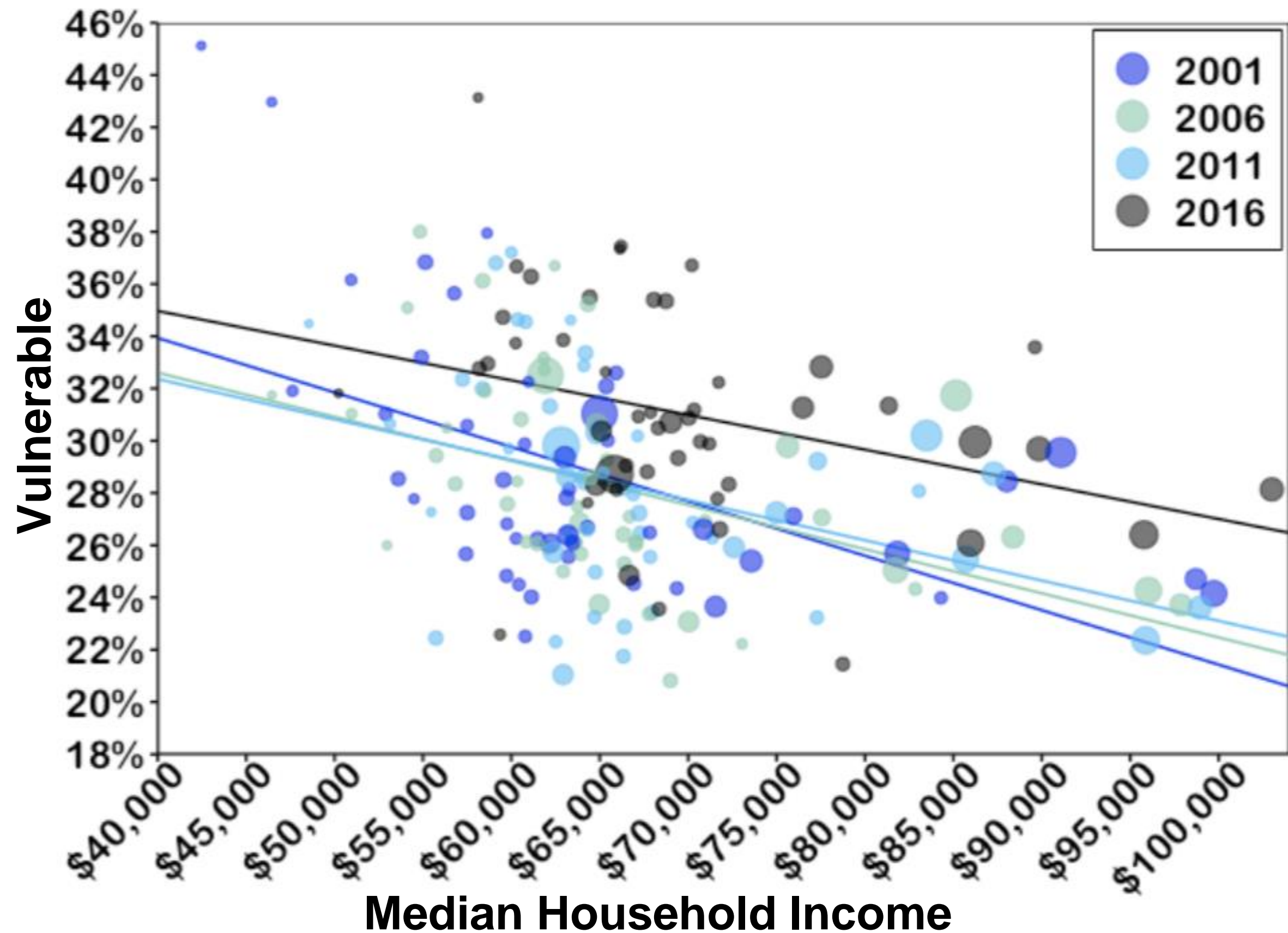
Household Incomes and Percent Vulnerable



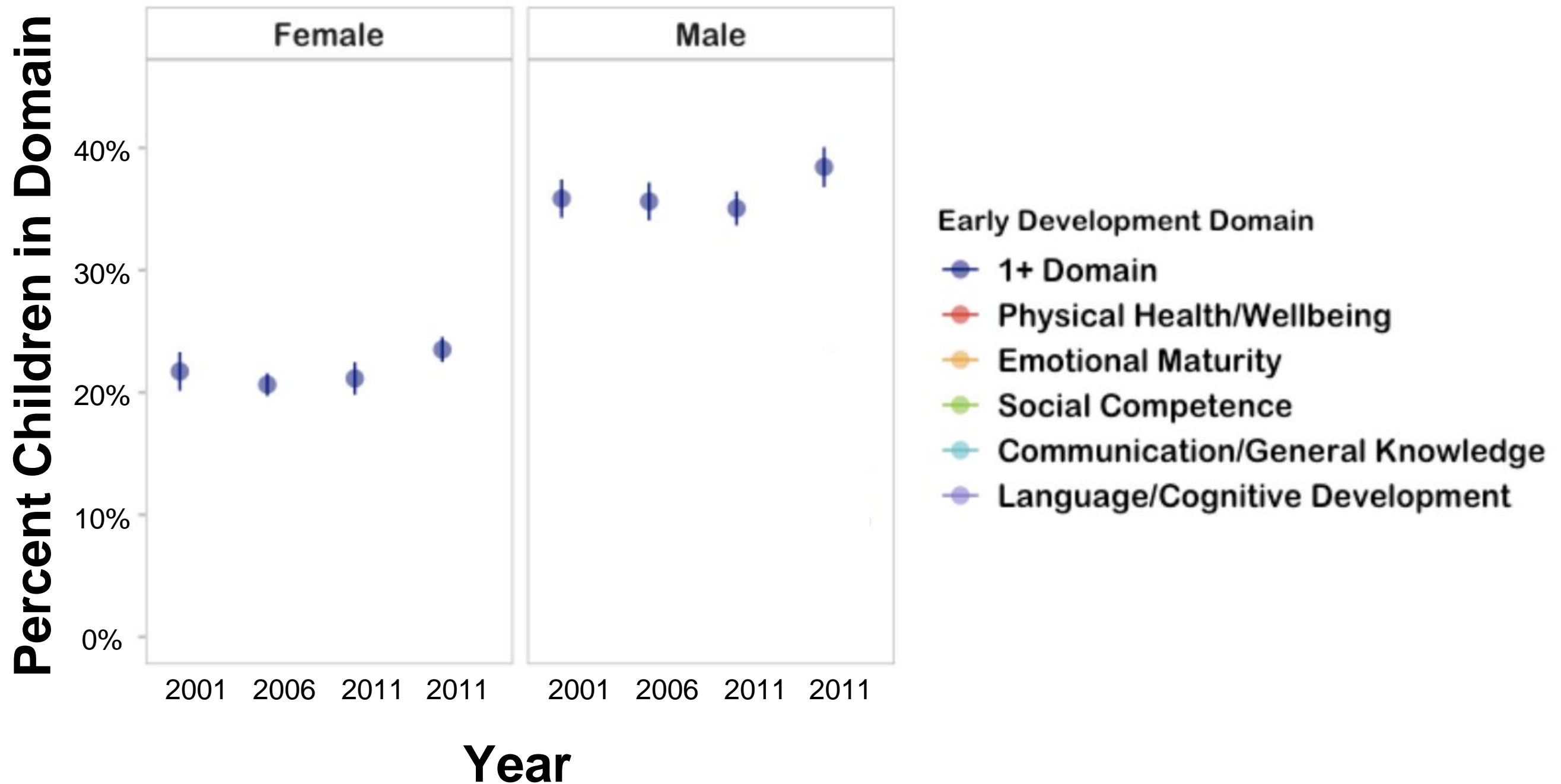
Household Incomes and Percent Vulnerable



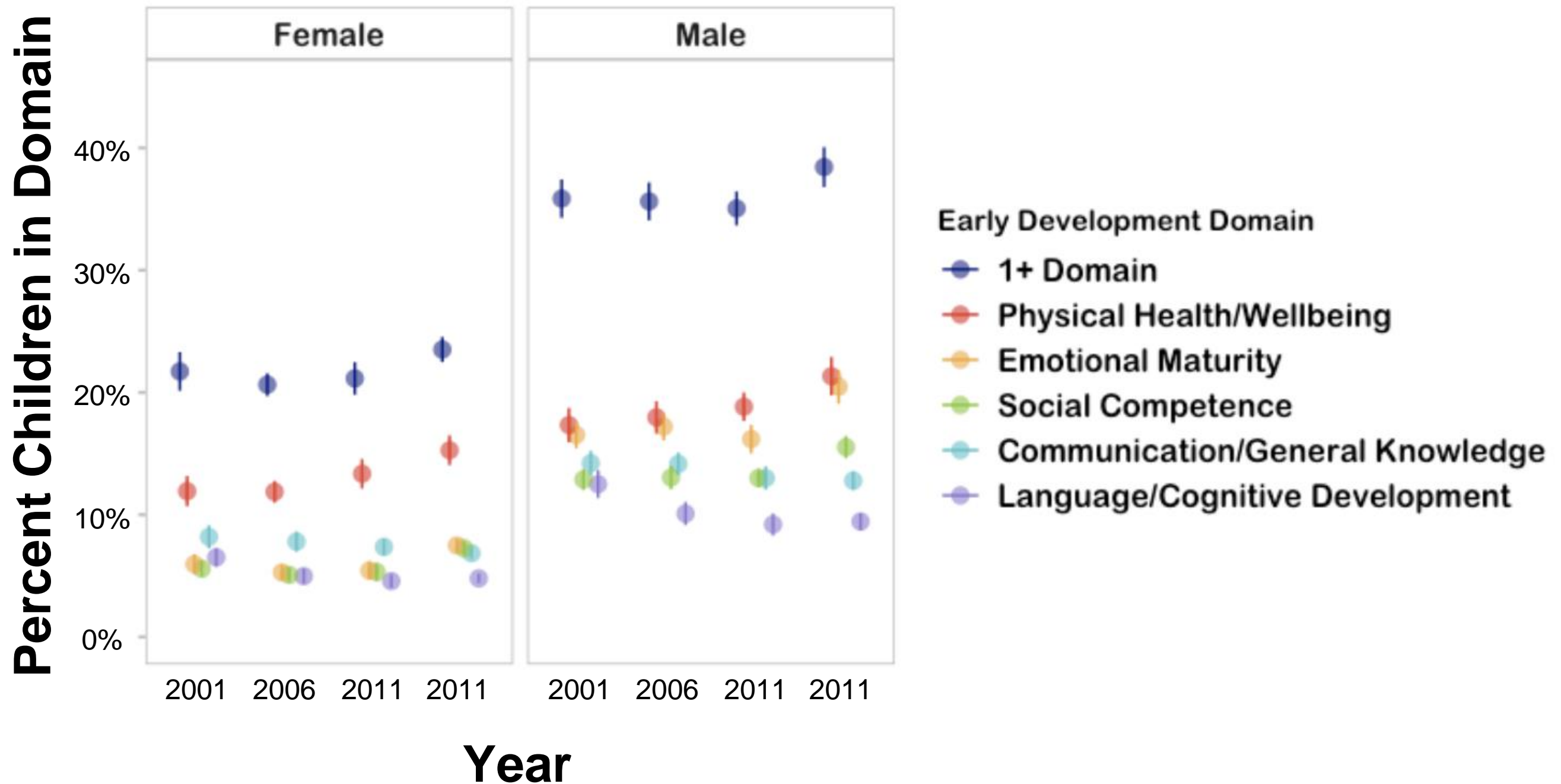
Household Incomes and Percent Vulnerable



Is a certain group more vulnerable?



Is a certain group more vulnerable?



Full Model

Linear mixed-effects model with census division as a random effect

	Vulnerable %		
<i>Predictors</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	6.01	-2.46 – 14.49	0.164
Income.Adj	0	-0.00 – -0.00	0.026
Year	0	-0.01 – 0.00	0.188
sex (M)	0.14	0.14 – 0.15	<0.001
Income.Adj * Year	0	0.00 – 0.00	0.028
Marginal/Conditional R ²	0.726 / 0.815		

Confidence Intervals are 95% Wald confidence intervals

Education Policy Recommendations

Expand public education to pre-school aged children



↑ Increase participation



↑ Increase quality of classroom experience

↑ Increase curriculum standards

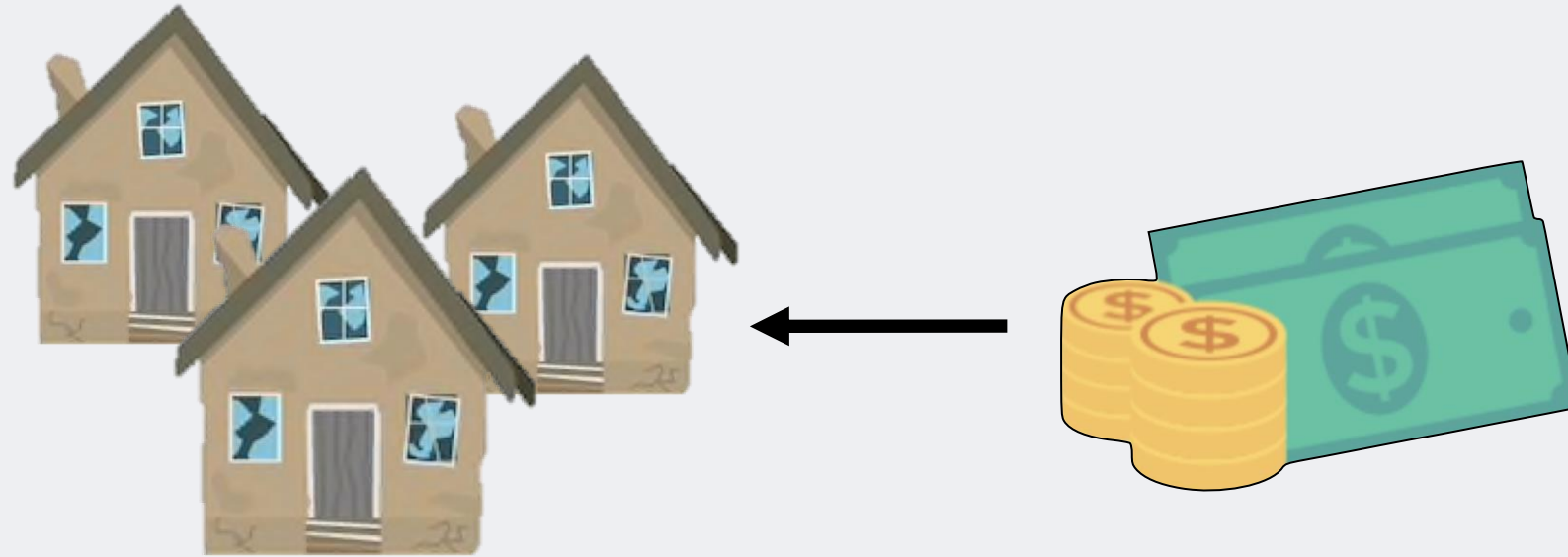


Economic Policy Recommendations

Investing in early education pays off down the road



Economic Policy Recommendations



1. Invest in poor neighbourhoods
2. Create affordable housing

Limitations



Limitations

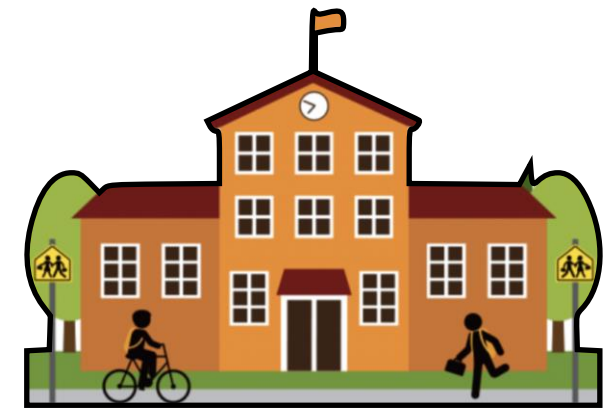
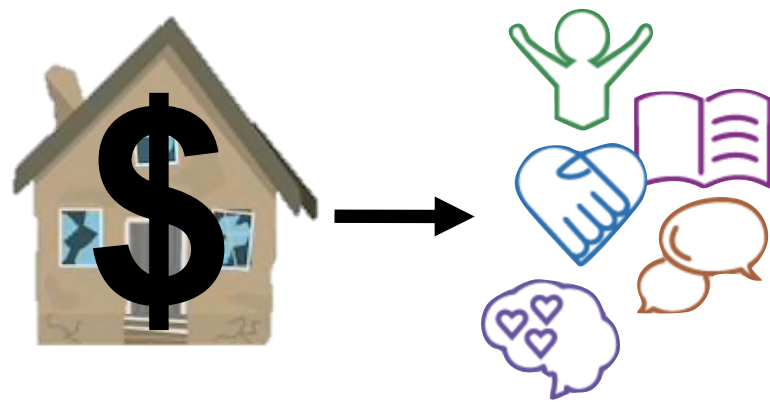


Low resolution of data



Difficult to assess some domains

Take Home Message



THANK YOU