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Waves I, IV, and V – The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility Data User



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Add Health is supported by grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 23 other federal agencies and foundations.

Acknowledgments

Add Health is a program project directed by Kathleen Mullan Harris and designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill, and funded by grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 23 other federal agencies and foundations. Work on the contextual data linkage was supported by grants to Taylor Hargrove and Lauren Gaydosh (R21HD095448 and R24AG045061) from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, the National Institute on Aging, and the Network on Life Course Health Dynamics and Disparities. Information on how to obtain the Add Health data files is available on the Add Health website (<http://www.cpc.unc.edu/addhealth>).

Introduction

The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility, compiled by Opportunity Insights, served as the source data used in the construction of this National Longitudinal Study of Adolescent to Adult Health (Add Health) data file. This file enhances the existing Add Health contextual database through the addition of measures essential to understanding the determinants and sequelae of socioeconomic mobility. Specifically, it aims to characterize the socioeconomic mobility of Add Health participants at Wave I, IV, and V. Though the included variables report the mobility of people born from 1980 to 1991 at the U.S. tract- and county-levels and, therefore, remain constant across the waves of Add Health, the locations inhabited by respondents typically vary from wave to wave. In other words, these data provide measures of the opportunities for socioeconomic mobility for similarly aged people residing in the same tract or county as the Add Health respondent at a given wave. The timing of the mobility measures, however, remains invariant across waves.

In order to preserve privacy, we add a small amount of noise to each of our estimates of upward mobility. The variance of the noise we add is inversely proportional to the size of the cell on which the estimate is formed. So for outcomes that are estimated on a small sample (in this case, asian women born to parents around p25 in a given county) the noise can be large enough to make an already small value (which is usually the case in terms of reaching the top **1%**) **negative**.

Data Structure and Form

These contextual data files contain one observation for each respondent in the respective Add Health survey wave. The first variable is the respondent identifier (the AID), which permits merging these contextual data with other Add Health data files. Except for AID, each measure is numeric.

All supplemental data comprising the Opportunity Atlas file are measured at the tract- and county-level. Data are based on the 2010 Census geographic boundaries and, therefore, are longitudinally consistent across all waves provided. Locations measured may vary in the Wave I, IV, and V data files depending upon respondent residence at a given wave.

Variable order in the data reflects the order of presentation in the Data Dictionary.

Variable Naming Conventions

With the exception of AID, all variables in the contextual data file adhere to the following nomenclature:

1st character – Summary level of the variable.

Refers to the geographic area to which the variable corresponds. The geographic levels available in the Add

Health data include:

T = Tract

C = County

2nd and 3rd characters – Original data source.

The 2nd and 3rd characters are abbreviations representing the original source of data from which the released Add Health variables were derived. Additional detail about the Opportunity Atlas is available in the data Source Description section.

OA = Opportunity Atlas

4th and 5th characters – Year.

The next two digits refer to the years on which the data are based (2014-2015). Note that despite being identified with 2015, these data are intended to represent the context of people born between 1978 and 1983. Also, note, the year of socioeconomic mobility's measurement remains constant across the three waves of Add Health data.

6th through 8th characters – Variable number.

The last three characters report the variable number within this Add Health data file. Variable numbers range sequentially from 001 to 126.

Data Dictionary

The following table provides a list of the variables comprising this Add Health contextual database. Note that variables COA15022 through COA15063 are only measured at the county-level. A gap in variable numbering exists among the tract-level variables to maintain name consistency with their corresponding county-level variables, COA15064 to COA15126

Name	Description
T/C OA15001	Mean percentile rank in the national distribution of household income in 2014-2015, Asian female
T/C OA15002	Mean percentile rank in the national distribution of household income in 2014-2015, Asian male

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T/C OA15003	Mean percentile rank in the national distribution of household income in 2014-2015, Asian pooled
T/C OA15004	Mean percentile rank in the national distribution of household income in 2014-2015, Black female
T/C OA15005	Mean percentile rank in the national distribution of household income in 2014-2015, Black male
T/C OA15006	Mean percentile rank in the national distribution of household income in 2014-2015, Black pooled
T/C OA15007	Mean percentile rank in the national distribution of household income in 2014-2015, Hispanic female
T/C OA15008	Mean percentile rank in the national distribution of household income in 2014-2015, Hispanic male
T/C OA15009	Mean percentile rank in the national distribution of household income in 2014-2015, Hispanic pooled
T/C OA15010	Mean percentile rank in the national distribution of household income in 2014-2015, Native American female
T/C OA15011	Mean percentile rank in the national distribution of household income in 2014-2015, Native American male
T/C OA15012	Mean percentile rank in the national distribution of household income in 2014-2015, Native American pooled
T/C OA15013	Mean percentile rank in the national distribution of household income in 2014-2015, Other female
T/C OA15014	Mean percentile rank in the national distribution of household income in 2014-2015, Other male
T/C OA15015	Mean percentile rank in the national distribution of household income in 2014-2015, Other pooled
T/C OA15016	Mean percentile rank in the national distribution of household income in 2014-2015, White female
T/C OA15017	Mean percentile rank in the national distribution of household income in 2014-2015, White male
T/C OA15018	Mean percentile rank in the national distribution of household income in 2014-2015, White pooled
T/C OA15019	Mean percentile rank in the national distribution of household income in 2014-2015, Pooled female
T/C OA15020	Mean percentile rank in the national distribution of household income in 2014-2015, Pooled male
T/C OA15021	Mean percentile rank in the national distribution of household income in 2014-2015, Pooled pooled
COA15022	KFR restricted to children whose mothers immigrated to the US, Asian female
COA15023	KFR restricted to children whose mothers immigrated to the US, Asian male
COA15024	KFR restricted to children whose mothers immigrated to the US, Asian pooled
COA15025	KFR restricted to children whose mothers immigrated to the US, Black female
COA15026	KFR restricted to children whose mothers immigrated to the US, Black male
COA15027	KFR restricted to children whose mothers immigrated to the US, Black pooled
COA15028	KFR restricted to children whose mothers immigrated to the US, Hispanic female
COA15029	KFR restricted to children whose mothers immigrated to the US, Hispanic male

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COA15030	KFR restricted to children whose mothers immigrated to the US, Hispanic pooled
COA15031	KFR restricted to children whose mothers immigrated to the US, Native American female
COA15032	KFR restricted to children whose mothers immigrated to the US, Native American male
COA15033	KFR restricted to children whose mothers immigrated to the US, Native American pooled
COA15034	KFR restricted to children whose mothers immigrated to the US, Other female
COA15035	KFR restricted to children whose mothers immigrated to the US, Other male
COA15036	KFR restricted to children whose mothers immigrated to the US, Other pooled
COA15037	KFR restricted to children whose mothers immigrated to the US, White female
COA15038	KFR restricted to children whose mothers immigrated to the US, White male
COA15039	KFR restricted to children whose mothers immigrated to the US, White pooled
COA15040	KFR restricted to children whose mothers immigrated to the US, Pooled female
COA15041	KFR restricted to children whose mothers immigrated to the US, Pooled male
COA15042	KFR restricted to children whose mothers immigrated to the US, Pooled pooled
COA15043	KFR restricted to children whose mothers were born in the US, Asian female
COA15044	KFR restricted to children whose mothers were born in the US, Asian male
COA15045	KFR restricted to children whose mothers were born in the US, Asian pooled
COA15046	KFR restricted to children whose mothers were born in the US, Black female
COA15047	KFR restricted to children whose mothers were born in the US, Black male
COA15048	KFR restricted to children whose mothers were born in the US, Black pooled
COA15049	KFR restricted to children whose mothers were born in the US, Hispanic female
COA15050	KFR restricted to children whose mothers were born in the US, Hispanic male
COA15051	KFR restricted to children whose mothers were born in the US, Hispanic pooled
COA15052	KFR restricted to children whose mothers were born in the US, Native American female
COA15053	KFR restricted to children whose mothers were born in the US, Native American male
COA15054	KFR restricted to children whose mothers were born in the US, Native American pooled
COA15055	KFR restricted to children whose mothers were born in the US, Other female
COA15056	KFR restricted to children whose mothers were born in the US, Other male
COA15057	KFR restricted to children whose mothers were born in the US, Other pooled
COA15058	KFR restricted to children whose mothers were born in the US, White female
COA15059	KFR restricted to children whose mothers were born in the US, White male
COA15060	KFR restricted to children whose mothers were born in the US, White pooled
COA15061	KFR restricted to children whose mothers were born in the US, Pooled female
COA15062	KFR restricted to children whose mothers were born in the US, Pooled male

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COA15063	KFR restricted to children whose mothers were born in the US, Pooled pooled
T/C OA15064	Probability of reaching top 1% of the national household income distribution in 2014-15, Asian female
T/C OA15065	Probability of reaching top 1% of the national household income distribution in 2014-15, Asian male
T/C OA15066	Probability of reaching top 1% of the national household income distribution in 2014-15, Asian pooled
T/C OA15067	Probability of reaching top 1% of the national household income distribution in 2014-15, Black female
T/C OA15068	Probability of reaching top 1% of the national household income distribution in 2014-15, Black male
T/C OA15069	Probability of reaching top 1% of the national household income distribution in 2014-15, Black pooled
T/C OA15070	Probability of reaching top 1% of the national household income distribution in 2014-15, Hispanic female
T/C OA15071	Probability of reaching top 1% of the national household income distribution in 2014-15, Hispanic male
T/C OA15072	Probability of reaching top 1% of the national household income distribution in 2014-15, Hispanic pooled
T/C OA15073	Probability of reaching top 1% of the national household income distribution in 2014-15, Native American female
T/C OA15074	Probability of reaching top 1% of the national household income distribution in 2014-15, Native American male
T/C OA15075	Probability of reaching top 1% of the national household income distribution in 2014-15, Native American pooled
T/C OA15076	Probability of reaching top 1% of the national household income distribution in 2014-15, Other female
T/C OA15077	Probability of reaching top 1% of the national household income distribution in 2014-15, Other male
T/C OA15078	Probability of reaching top 1% of the national household income distribution in 2014-15, Other pooled
T/C OA15079	Probability of reaching top 1% of the national household income distribution in 2014-15, White female
T/C OA15080	Probability of reaching top 1% of the national household income distribution in 2014-15, White male
T/C OA15081	Probability of reaching top 1% of the national household income distribution in 2014-15, White pooled
T/C OA15082	Probability of reaching top 1% of the national household income distribution in 2014-15, Pooled female
T/C OA15083	Probability of reaching top 1% of the national household income distribution in 2014-15, Pooled male
T/C OA15084	Probability of reaching top 1% of the national household income distribution in 2014-15, Pooled pooled
T/C OA15085	Probability of reaching top 20% of the national household income distribution in 2014-15, Asian female
T/C OA15086	Probability of reaching top 20% of the national household income distribution in 2014-15, Asian male

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T/C OA15087	Probability of reaching top 20% of the national household income distribution in 2014-15, Asian pooled
T/C OA15088	Probability of reaching top 20% of the national household income distribution in 2014-15, Black female
T/C OA15089	Probability of reaching top 20% of the national household income distribution in 2014-15, Black male
T/C OA15090	Probability of reaching top 20% of the national household income distribution in 2014-15, Black pooled
T/C OA15091	Probability of reaching top 20% of the national household income distribution in 2014-15, Hispanic female
T/C OA15092	Probability of reaching top 20% of the national household income distribution in 2014-15, Hispanic male
T/C OA15093	Probability of reaching top 20% of the national household income distribution in 2014-15, Hispanic pooled
T/C OA15094	Probability of reaching top 20% of the national household income distribution in 2014-15, Native American female
T/C OA15095	Probability of reaching top 20% of the national household income distribution in 2014-15, Native American male
T/C OA15096	Probability of reaching top 20% of the national household income distribution in 2014-15, Native American pooled
T/C OA15097	Probability of reaching top 20% of the national household income distribution in 2014-15, Other female
T/C OA15098	Probability of reaching top 20% of the national household income distribution in 2014-15, Other male
T/C OA15099	Probability of reaching top 20% of the national household income distribution in 2014-15, Other pooled
T/C OA15100	Probability of reaching top 20% of the national household income distribution in 2014-15, White female
T/C OA15101	Probability of reaching top 20% of the national household income distribution in 2014-15, White male
T/C OA15102	Probability of reaching top 20% of the national household income distribution in 2014-15, White pooled
T/C OA15103	Probability of reaching top 20% of the national household income distribution in 2014-15, Pooled female
T/C OA15104	Probability of reaching top 20% of the national household income distribution in 2014-15, Pooled male
T/C OA15105	Probability of reaching top 20% of the national household income distribution in 2014-15, Pooled pooled
T/C OA15106	Probability of living in Census tract with poverty rate <10% in adulthood, Asian female
T/C OA15107	Probability of living in Census tract with poverty rate <10% in adulthood, Asian male
T/C OA15108	Probability of living in Census tract with poverty rate <10% in adulthood, Asian pooled
T/C OA15109	Probability of living in Census tract with poverty rate <10% in adulthood, Black female

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T/C OA15110	Probability of living in Census tract with poverty rate <10% in adulthood, Black male
T/C OA15111	Probability of living in Census tract with poverty rate <10% in adulthood, Black pooled
T/C OA15112	Probability of living in Census tract with poverty rate <10% in adulthood, Hispanic female
T/C OA15113	Probability of living in Census tract with poverty rate <10% in adulthood, Hispanic male
T/C OA15114	Probability of living in Census tract with poverty rate <10% in adulthood, Hispanic pooled
T/C OA15115	Probability of living in Census tract with poverty rate <10% in adulthood, Native American female
T/C OA15116	Probability of living in Census tract with poverty rate <10% in adulthood, Native American male
T/C OA15117	Probability of living in Census tract with poverty rate <10% in adulthood, Native American pooled
T/C OA15118	Probability of living in Census tract with poverty rate <10% in adulthood, Other female
T/C OA15119	Probability of living in Census tract with poverty rate <10% in adulthood, Other male
T/C OA15120	Probability of living in Census tract with poverty rate <10% in adulthood, Other pooled
T/C OA15121	Probability of living in Census tract with poverty rate <10% in adulthood, White female
T/C OA15122	Probability of living in Census tract with poverty rate <10% in adulthood, White male
T/C OA15123	Probability of living in Census tract with poverty rate <10% in adulthood, White pooled
T/C OA15124	Probability of living in Census tract with poverty rate <10% in adulthood, Pooled female
T/C OA15125	Probability of living in Census tract with poverty rate <10% in adulthood, Pooled male
T/C OA15126	Probability of living in Census tract with poverty rate <10% in adulthood, Pooled pooled

Missing codes

Two missing data codes are used in the Wave I contextual files. They are as follows:

Value	Reason for missing data
96	Missing in the source data
98	Geocode missing

The replacement code of 96 indicates that data were not available in the original source data for that particular variable or summary level. Some variables measured at the county-level were not measured at the tract-level and, consequently, are populated with missing codes exclusively. A value of 98 indicates that the geocode is missing for that respondent at that Wave of Add Health.

Source Description

OA The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility

Opportunity Insights constructed the measures of mobility reported in The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility. This project is organized by economist Raj Chetty and colleagues to examine inequality in the United States. These data combine federal income tax data to provide information on the degree to which one's childhood place of residence and college attended facilitate income mobility. The secondary data to be linked are based on incomes of over 40 million children and parents between 1996 and 2012. Specifically, a base dataset of children was created, which consisted of all individuals who have a valid Social Security Number or Individual Taxpayer Identification Number, were born between 1980-1991, and are US citizens as of 2013. Parents of these children are then identified as the first tax filers (between 1996-2012) who claim the child as a dependent and were between the ages of 15 and 40 when the child was born. The core sample consists of all children from the base dataset who are born in the 1980-82 birth cohorts, for whom parents were identified, and whose mean parent income between 1996-2000 was strictly positive (about 1.2% of children were excluded based on these criteria).

Mean household income rank (sometimes labeled KFR) refers to children whose parents were at the 25th percentile of the national income distribution. Incomes for children were measured as mean earnings in 2014-2015 when they were between the ages 31-37. Household income is defined as the sum of own and spouse's income. Race is either Pooled, White, Black or Hispanic. Data on additional races can be found in full set of county level outcomes. Gender is one of pooled, male or female.

Notes

Chetty, R., Friedman, J. N., Saez, E., Turner, N. & Yagan, D. Mobility Report Cards: The Role of Colleges in Intergenerational Mobility. (2017).

Chetty, R. & Hendren, N. The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects. (2016).

Chetty, R. & Hendren, N. The Impacts of Neighborhoods on Intergenerational Mobility II: County-Level Estimates. (2016).

Chetty, R., Hendren, N., Kline, P. & Saez, E. Where is the land of Opportunity? The Geography of Intergenerational Mobility in the United States *. Q. J. Econ. 129, 1553–1623 (2014).