

Table 1. Summary Statistics

Variable	Full sample	Sons	Daughters
Lifespan	72.9 (16.08)	70.2 (15.43)	76.1 (16.25)
Father's Average Lifespan	71.7 (13.55)	71.7 (13.53)	71.7 (13.58)
Mother's Average Lifespan	72.3 (15.89)	72.3 (15.84)	72.3 (15.96)
Father's birth year	1867 (14.09)	1867 (14.05)	1867 (14.15)
Mother's birth year	1872 (13.30)	1872 13.25	1872 (13.35)
Birth year	1901 (11.62)	1901 (11.62)	1901 (11.62)
White	0.99	0.99	0.99
Non-White	0.01	0.01	0.01
Northeast	0.15	0.15	0.15
Midwest	0.41	0.41	0.41
South	0.35	0.35	0.35
West	0.07	0.07	0.07
Immigrant Status	0.01	0.01	0.01
Father's Immigrant Status	0.13	0.13	0.13
Mother's Immigrant Status	0.10	0.10	0.10
Number of Siblings	2.89 (2.36)	2.87 (2.35)	2.91 (2.37)
Birth Order	2.39 (1.68)	2.39 (1.68)	2.40 (1.69)
Mother's Age at Child's Birth	29.1 (6.71)	29.1 (6.69)	29.2 (6.73)
Father's Age at Child's Birth	33.9 (8.02)	33.9 (7.99)	34.0 (8.05)
Education	9.57 (3.12)	9.45 (3.21)	9.70 (3.01)
Observations	26,134,161	13,944,386	12,189,775

*Notes:* The sample includes all individuals who were age 25 or older in one of the US censuses from 1900-1920 who were successfully matched to the tree and for whom we could compute age at death. See text for further details on sample construction and sample selection.

Table 2. Lifespan quintile transition matrix, by sex

		Mother Quintile				
		1	2	3	4	5
Daughter Quintile	1	22.42	22.20	20.31	18.55	16.41
	2	20.92	21.62	20.68	19.21	17.05
	3	20.22	20.57	20.91	20.60	19.29
	4	18.96	18.86	19.91	20.92	21.58
	5	17.47	16.73	18.18	20.70	25.65

		Father Quintile				
		1	2	3	4	5
Son Quintile	1	22.88	22.23	20.42	18.70	16.54
	2	21.31	21.49	20.61	19.37	17.38
	3	19.78	20.07	20.29	20.05	19.18
	4	18.67	18.85	19.83	20.73	21.42
	5	17.37	17.35	18.85	21.15	25.48

*Notes:* The sample for the first matrix is restricted to mothers and daughters. The sample for the bottom matrix is restricted to fathers and sons. It compares the portions of the son/father (mother/daughter) sample in a lifespan quintile given their father's/son's (mother's/daughter's) quintile N= 13,944,386 for women and 12,189,775 for men.

Table 3. IGPL for Varying Child and Parent Pairings and Specifications

Outcome: Lifespan (Years)					
Model	(1) Lifespan (Years) No Controls	(2) (1) + Parent and Child Birth Year FE	(3) (2) + Parent and Child State of Birth FE	(4) (3) + Race and birth order dummies	(5) # of Obs.
Son/Father	0.089 (0.0003)	0.090 (0.0003)	0.087 (0.0003)	0.087 (0.0003)	13,944,386
Son/Mother	0.062 (0.0003)	0.062 (0.0003)	0.059 (0.0003)	0.059 (0.0003)	13,944,386
Son/Parents' Average	0.140 (0.0004)	0.141 (0.0004)	0.137 (0.0004)	0.137 (0.0004)	13,944,386
Daughter/Father	0.075 (0.0004)	0.075 (0.0004)	0.072 (0.0004)	0.072 (0.0004)	12,189,775
Daughter/Mother	0.081 (0.0003)	0.074 (0.0003)	0.071 (0.0003)	0.071 (0.0003)	12,189,775
Daughter/Parents' Average	0.150 (0.0005)	0.142 (0.0005)	0.138 (0.0005)	0.138 (0.0005)	12,189,775

*Notes:* Each cell separately provides the estimated regression coefficient in lifespan between the two individuals indicated in the row. Errors are clustered by family. Column (1) includes no controls and regresses the child's lifespan on the parent's lifespan. Column (2) includes dummies for the parent's year of birth and for the child's year of birth. Column (3) controls for dummies indicating the state of birth of the child and the state of birth of the parent. Column 4 includes race and birth order dummies.

Table 4. IGPL for Varying Child and Parent Pairings and Measures

Model	Outcome			
	Lifespan (Years)	Percentile	Log Lifespan	# of obs.
Son/Father	0.090 (0.0003)	0.090 (0.0003)	0.076 (0.0003)	13,944,386
Son/Mother	0.062 (0.0003)	0.078 (0.0003)	0.048 (0.0003)	13,944,386
Son/Parents' Average	0.141 (0.0004)	0.162 (0.0004)	0.132 (0.0004)	13,944,386
Daughter/Father	0.075 (0.0003)	0.079 (0.0003)	0.059 (0.0004)	12,189,775
Daughter/Mother	0.074 (0.0003)	0.094 (0.0003)	0.056 (0.0003)	12,189,775
Daughter/Parents' Average	0.142 (0.0004)	0.166 (0.0004)	0.128 (0.0005)	12,189,775

*Notes:* Each cell separately provides the estimated regression coefficient in lifespan, log lifespan, or percentile lifespan between the two individuals indicated in the row. The only controls included are birth year fixed effects for child, father and mother. Errors are clustered by family.

Table 5. Sibling Correlations

Outcome	(1) Adult longevity	(2) Education	(3) Income	(4) HH Income	(5) Adult longevity	(6) Education	(7) IGPLF
Brother/Brother	0.134 (0.001) 3,664,460	0.554 (0.001) 3,664,460	0.252 (0.017) 3,664,460	0.346 (0.005) 3,664,460	0.134 (0.001) 4,126,499	0.552 (0.001) 4,126,499	0.084 (0.001) 4,680,402
Sister/Sister	0.106 (0.001) 2,402,338	0.603 (0.001) 2,402,338	0.171 (0.004) 2,402,338	0.358 (0.005) 2,402,338	0.105 (0.001) 3,102,766	0.594 (0.001) 3,102,766	0.069 (0.001) 3,693,559
Sister/Brother	0.035 (0.001) 5,747,644	0.530 (0.001) 5,747,644	-0.110 (0.002) 5,747,644	0.329 (0.002) 5,747,644	0.035 (0.0004) 6,988,569	0.526 (0.001) 6,988,569	0.077 (0.0004) 8,183,995

*Notes:* Each cell in this table is a separate regression of sibling adult longevity (or of the indicated outcome) on sibling adult longevity (or of the indicated outcome) including birth cohort fixed effects for each person. Errors are clustered by family. In the first four columns, we only use sibling pairs for which information on all four outcomes is available for both siblings. Since occupation and income are often missing for women in the 1940 census, in the next two columns we include all sibling pairs for whom both education and lifespan are available. The final column includes the IGPL between the children in the previous two columns and their fathers. The final column is restricted to people that both have a value for education (can be linked to the 1940 census) and have at least one sibling. This sample is about 13 million total. The reason these columns sum to more than that is there is overlap; sisters of sisters can also be sisters of brothers.

Table 6. Adult longevity coefficients among siblings and twins

Outcome	Siblings		Twins	
	Adult longevity sibling coefficient	IGPLF	Adult longevity sibling coefficient	IGPLF
Brother/Brother	0.134 (0.001) 4,126,499	0.084 (0.001) 4,680,402	0.183 (0.006) 31,335	0.078 (0.004) 62,670
Sister/Sister	0.105 (0.001) 3,102,766	0.069 (0.001) 3,693,559	0.162 (0.007) 28,020	0.07 (0.004) 56,040
Sister/Brother	0.035 (0.0004) 6,988,569	0.077 (0.0004) 8,183,995	0.05 (0.005) 45,628	0.062 (0.003) 91,256

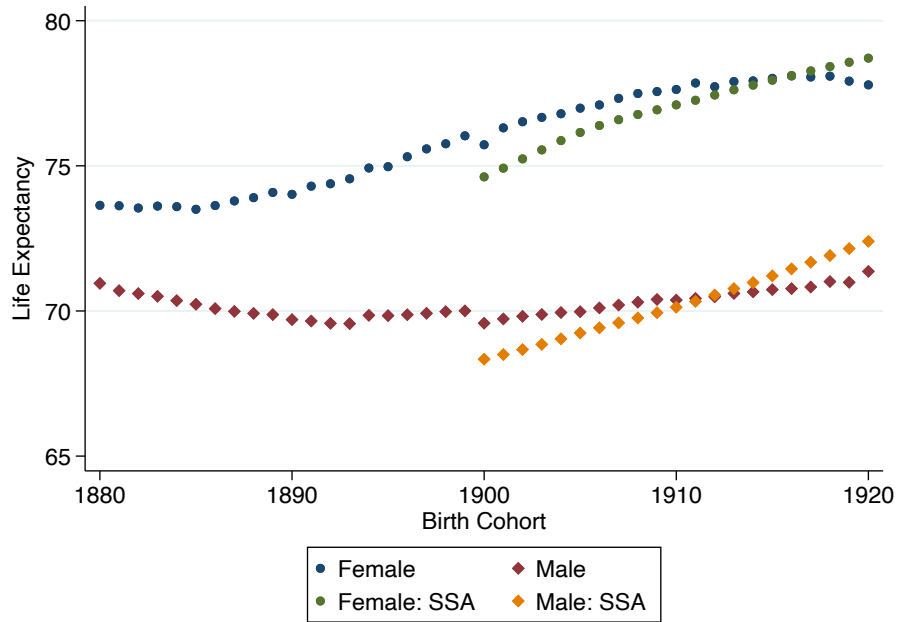
*Notes:* Each cell in this table is a separate regression. The sample of twins includes all pairs of individuals born in the same year and month within the same family. Columns 1 and 3 are the coefficients when sibling (or twin) adult longevity is regressed on sibling adult longevity, including birth cohort fixed effects for each person. Errors are clustered by family. The Columns 2 and 4 includes the IGPL between the children in the previous columns and their fathers.

Table 7. Variance Decompositions using Sibling Samples

	Adult longevity	Education
<b>Panel A: Raw sibling correlations</b>		
correlation	0.096	0.546
<b>Panel B: Regression of adult longevity, without family FE</b>		
R-squared	0.040	0.130
<b>Panel C: Regression of adult longevity, with family FE</b>		
R-squared	0.381	0.731
N	22,280,230	13,109,488

*Notes:* In this table, we combine all siblings into a single sample. Panel A simply reports that raw sibling correlations in this sample, for reference. Panel B is a regression of the outcome (row header) on covariates: birth cohort of mother FE, birth cohort of father FE, child cohort FE, place of birth FE, indicators for race, gender, number of siblings, birth order, mother and father immigrant status. The regression does not include the siblings' or the parents' longevity. Panel C adds family FE to this regression.

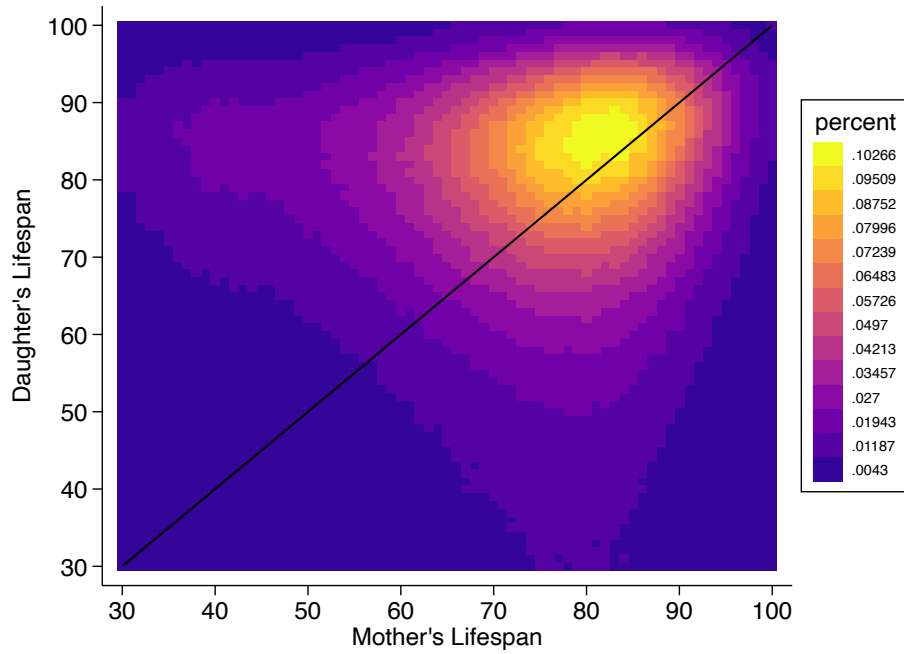
Figure 1. Trends in adult longevity, by sex



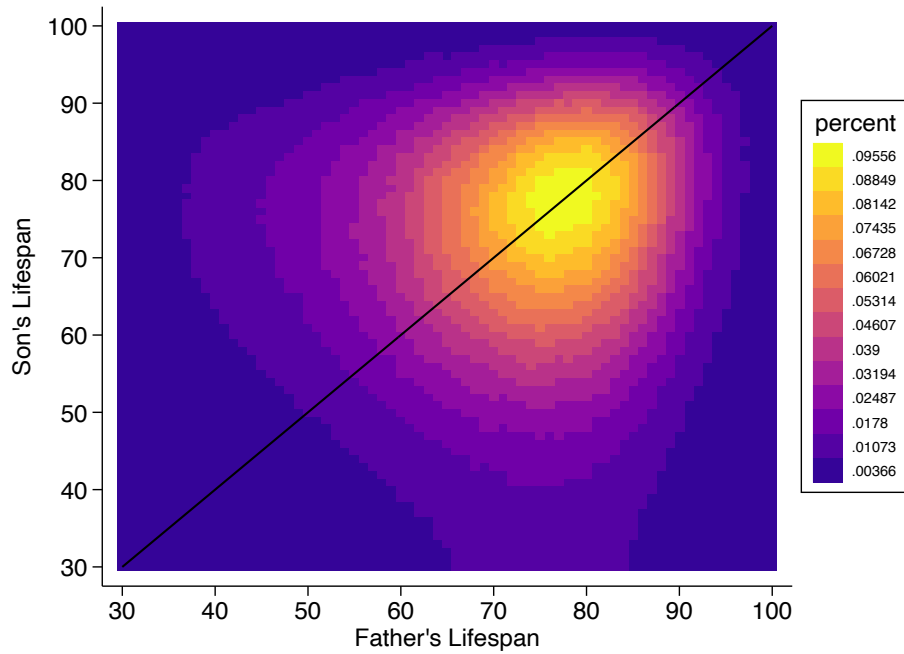
Notes: Figure a shows a cohort's adult longevity (its average/expected age at death conditional on survival to age 25) for cohorts born 1880 to 1920 who are observed in the 1900-1920 Censuses in the Census-Tree matched data and in the Social Security Administration (<https://www.ssa.gov/oact/HistEst/CohLifeTables/2020/CohLifeTables2020.html> )



Figure 2.A: Joint distribution of parent-child adult longevity by sex, for children born 1880-1920  
a. Daughter-Mother distribution of age at death



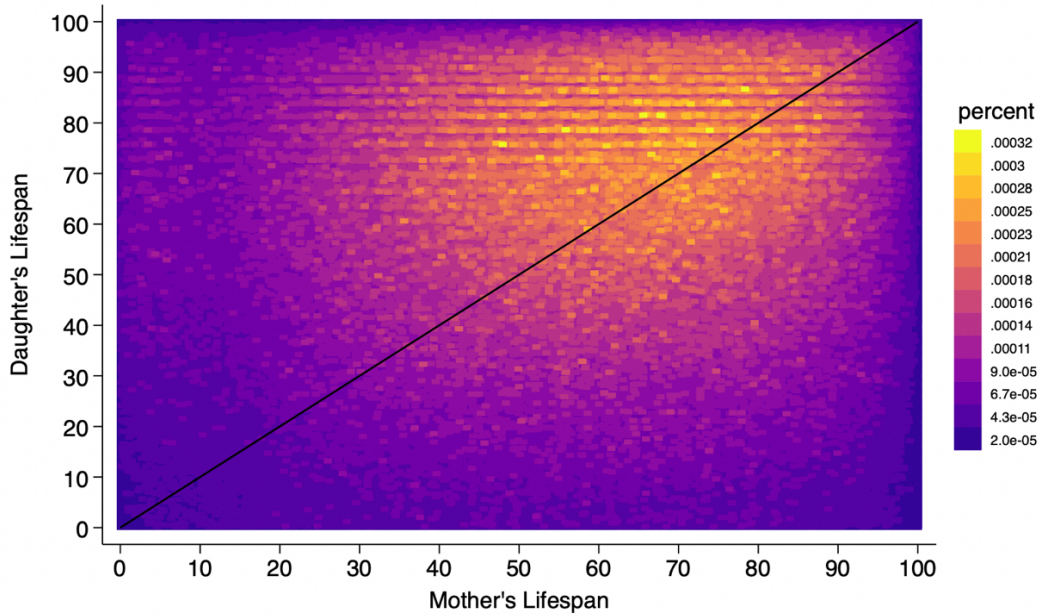
b. Son-father distribution of age at death



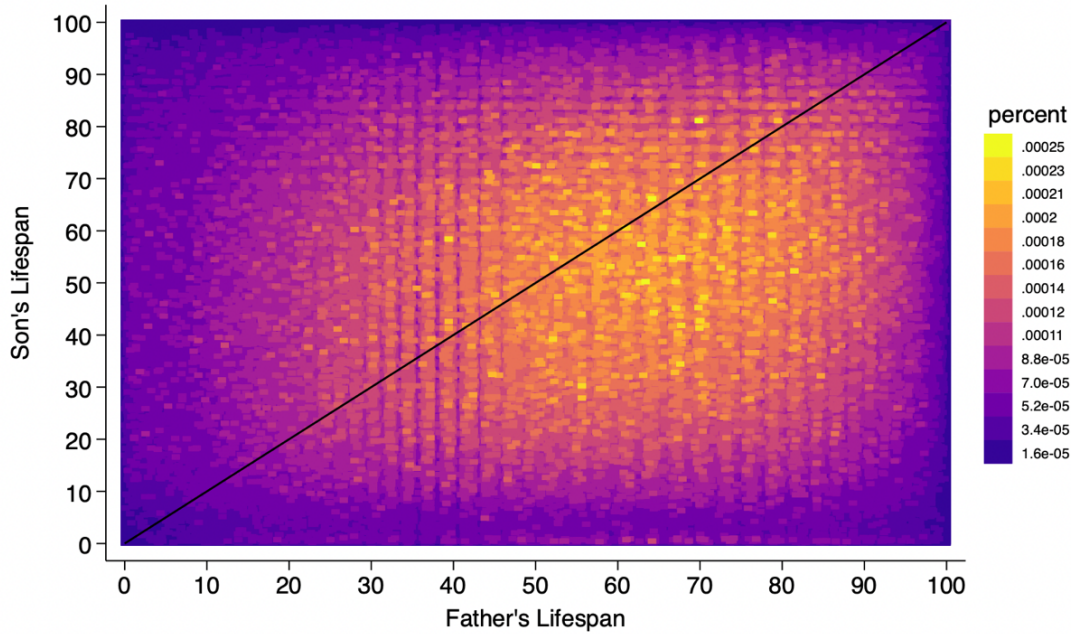
Notes: Panel a shows the distribution of the age at death among women born 1880-1920 who survived to age 25 and their mothers. Panel b shows the distribution for men and their fathers. The black line is a 45-degree line.

Figure 2.B: Joint distribution of the percentile of parent and child longevity, for children born 1880-1920

a. Mother-daughter distribution

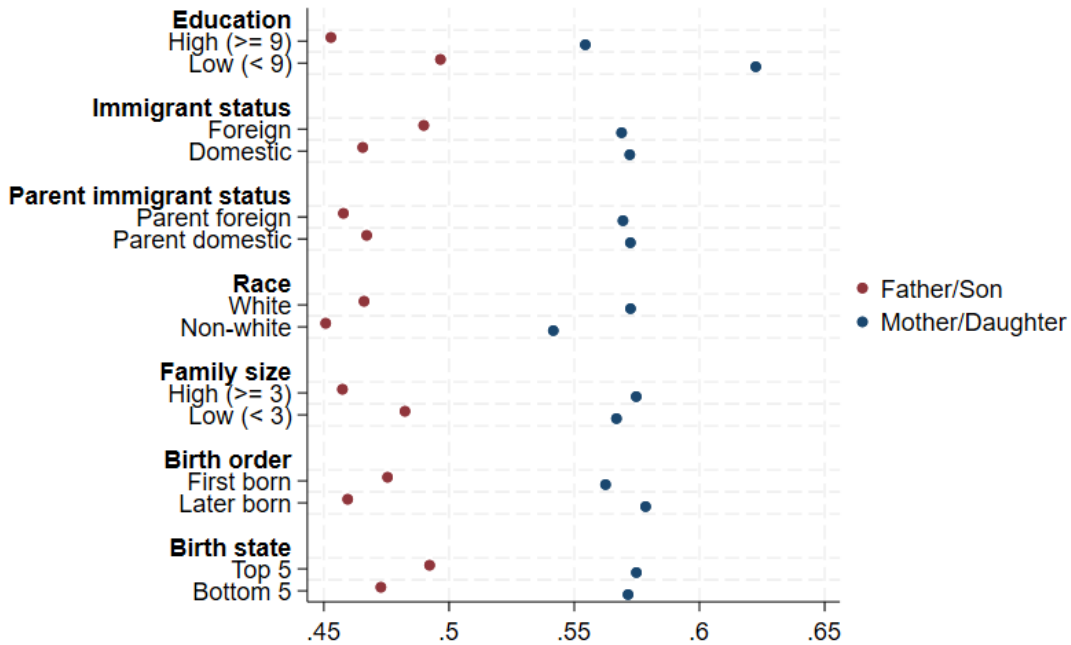


b. Father-son distribution

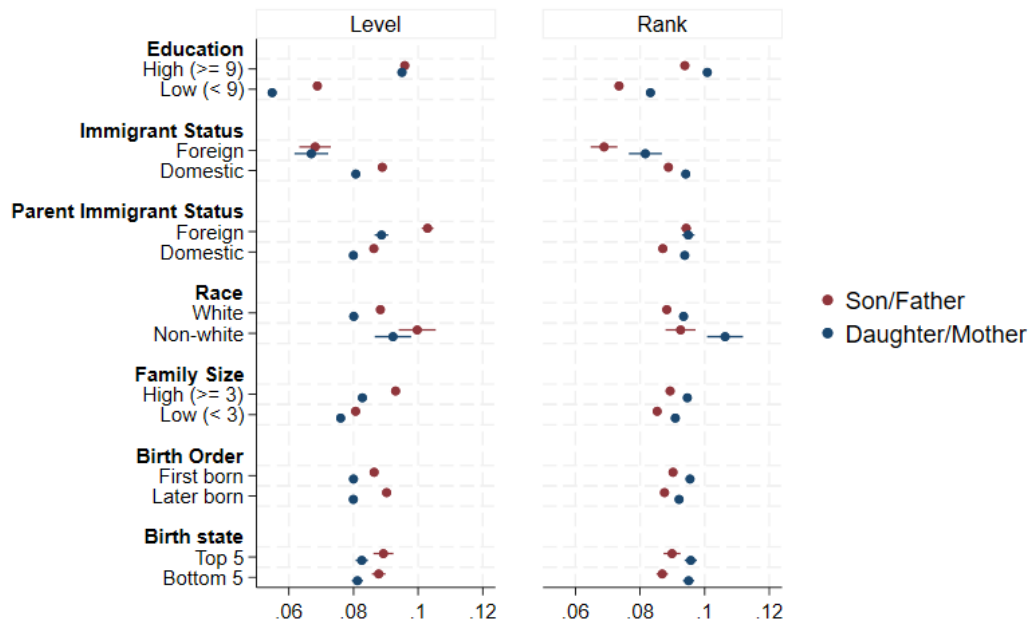


Notes: Panel a shows the distribution of the percentile of age at death among women born 1880-1920 who survived to age 25 and their mothers' percentile. The percentiles are computed relative to the cohort of the individual. Panel b shows the distribution for men and their fathers. The black line is a 45-degree line.

Figure 3: Heterogeneity in mobility in adult longevity, by sex and group  
 a. Absolute mobility

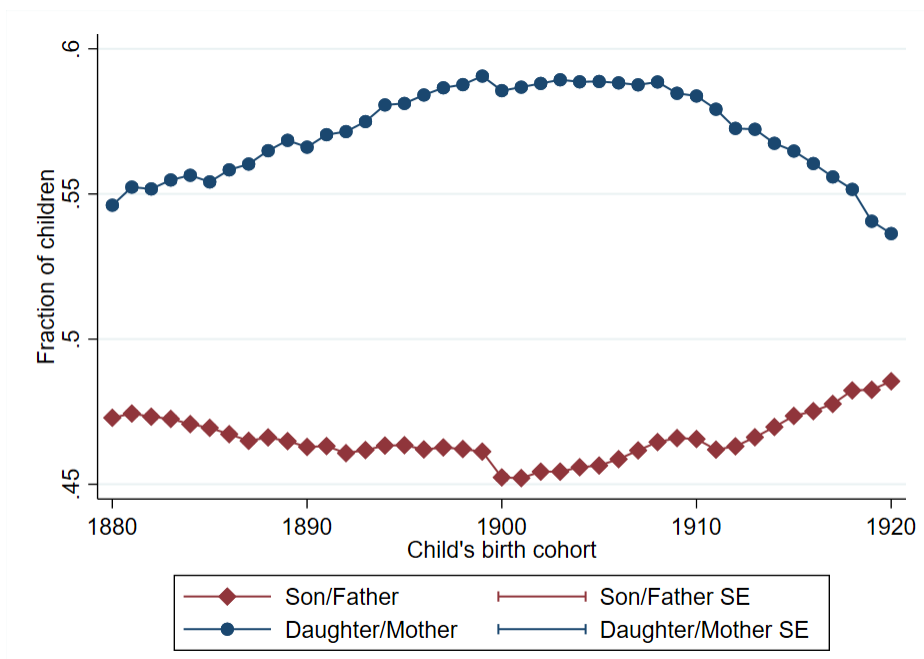


b. Relative persistence



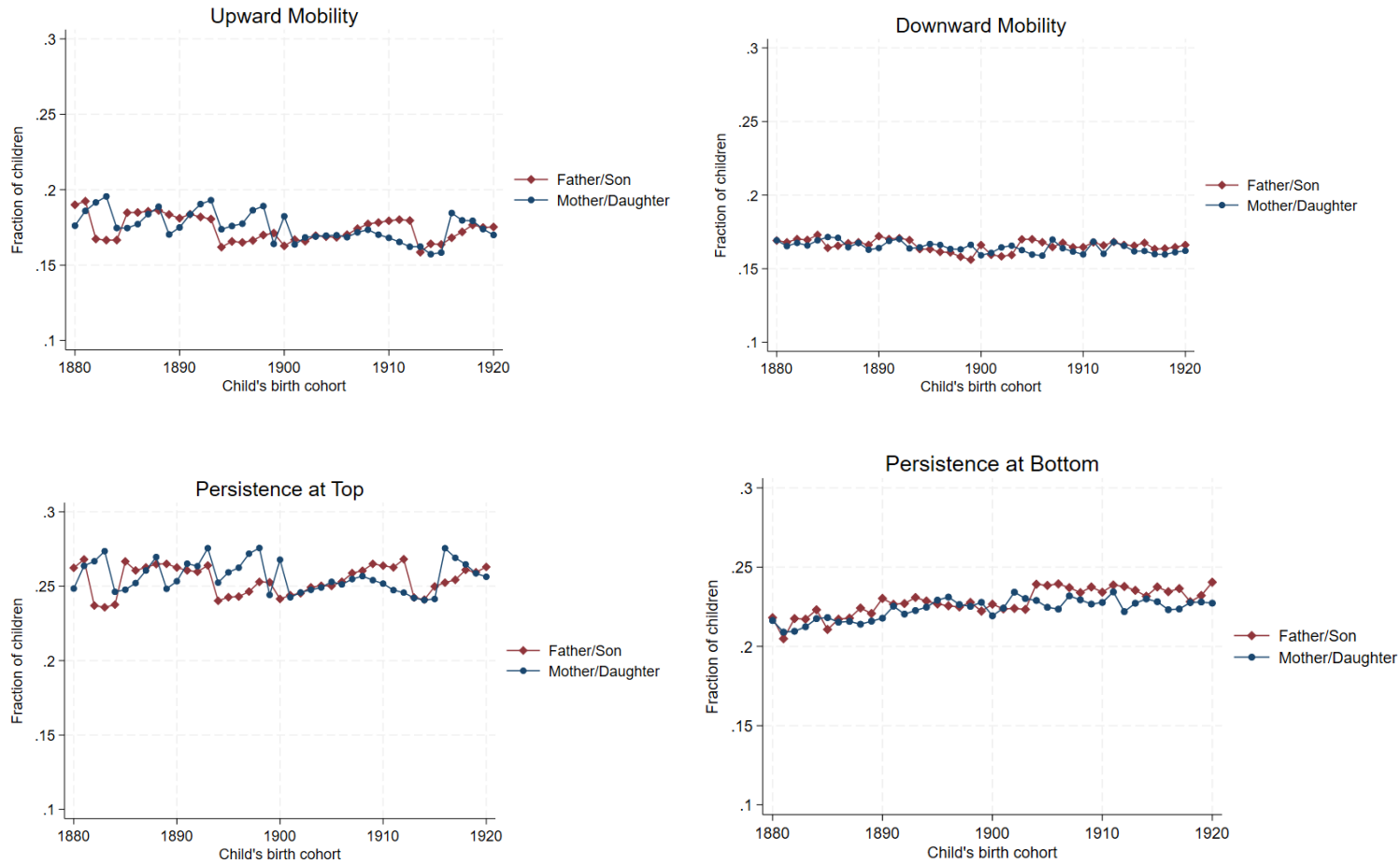
Notes: In Panel a, each circle reports the absolute mobility measure (the probability a child lives longer than their same-gender parent) for each the indicated subsamples, defined by education level, immigrant status, parental immigrant status, family size, birth order or birth state. Panel b reports the IGPL obtained from a separate regression using only the indicated subsample, defined by education level, immigrant status, parental immigrant status, family size, birth order or birth state. Each regression includes birth cohort fixed effects for each person. Standard errors are clustered at the family level.

Figure 4: Trends in absolute and relative mobility, by sex and birth cohort  
 Percent of children living longer than same-sex parent



Notes: Each dot is the fraction of children in the sample whose age at death was greater than their parent's age at death (conditional on both parents and children living to age 25).

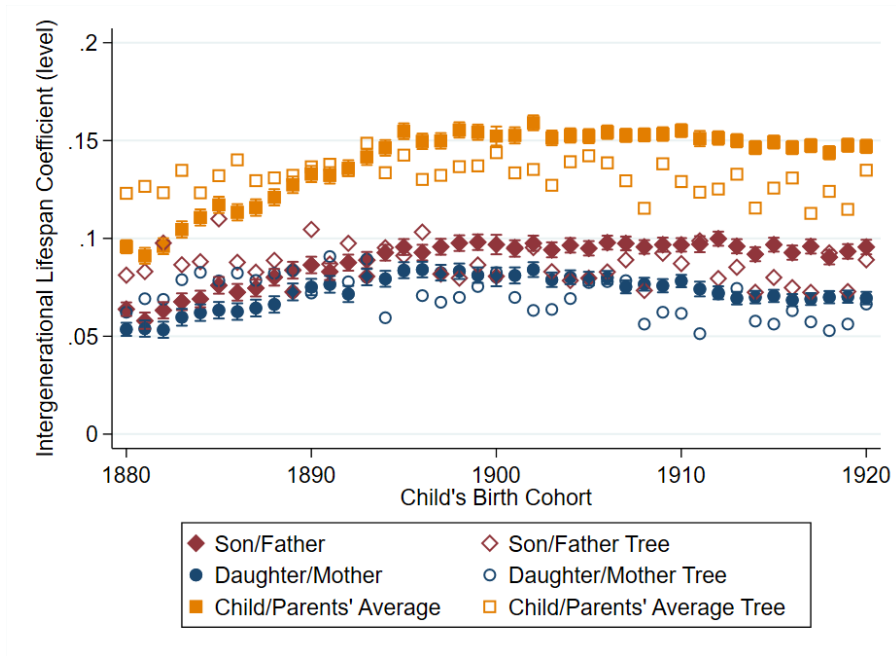
Figure 5: Trends in relative mobility measures



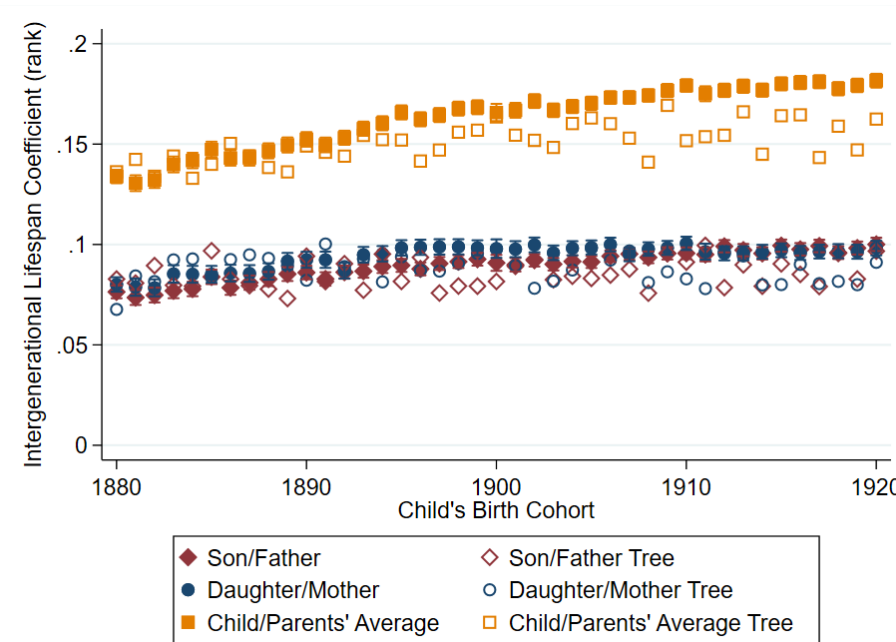
*Notes:* Upward mobility is the share of children whose parents were at the bottom 20 percent of the sex-specific adult longevity distribution who end up in the top 20 percent of the sex-specific adult longevity distribution in their cohort. Downward mobility is the share of children born to parents in the 20 percentile of the adult longevity distribution who end up in the bottom 20 percent of the sex-specific adult longevity distribution in their cohort. Persistence at the top is the share of children born to parents in the top 20 percent who also end up at the top 20 percent of the distribution. Persistence at the bottom is the share of children born to parents at the bottom 20 percent who also end up in the bottom 20 percent of the adult longevity distribution of their cohort.

Figure 6. Changes in the IGPL Over Time by Level and Rank  
 Census-Tree data for children born 1880-1920

a. Level

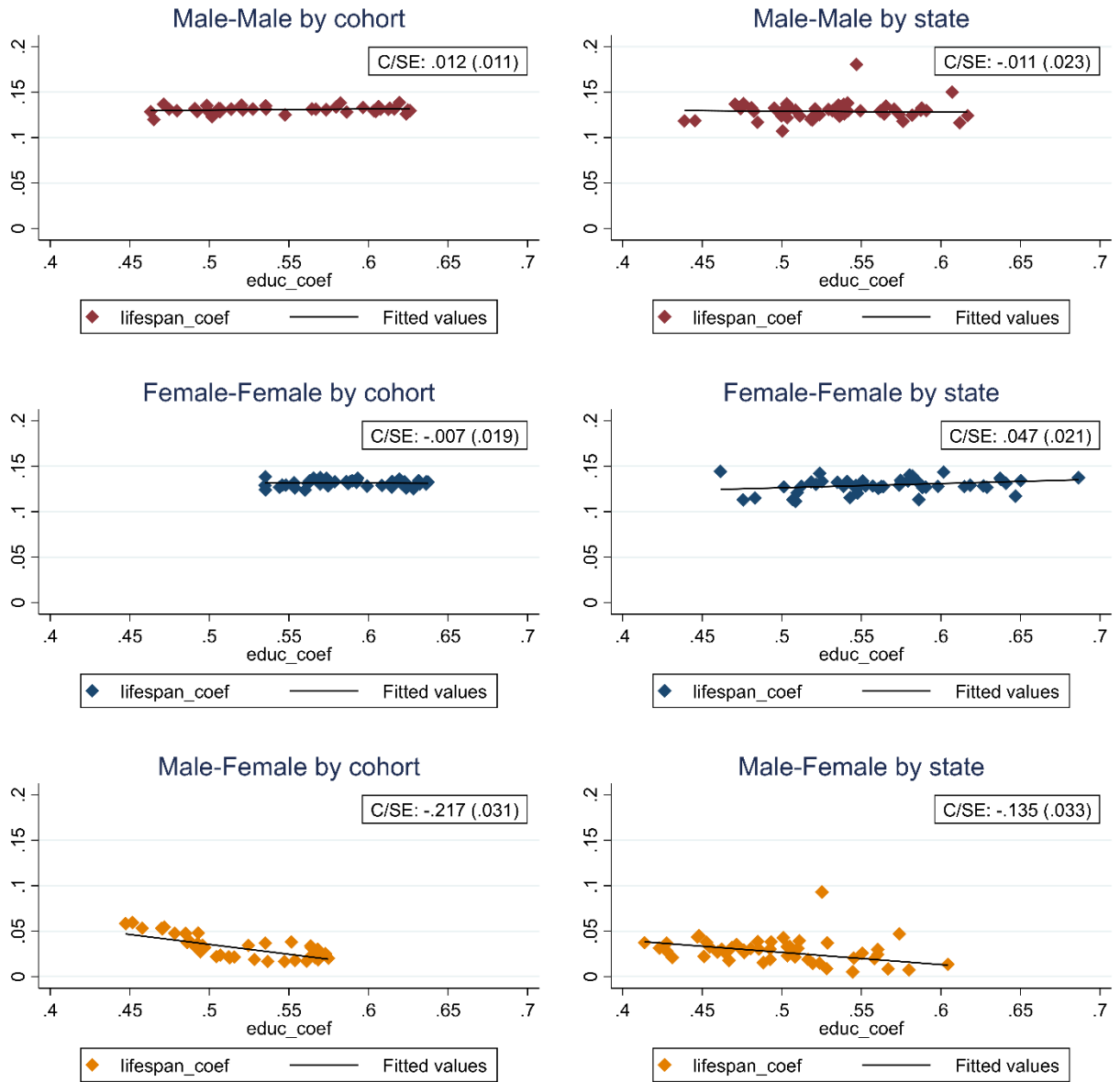


b. Rank



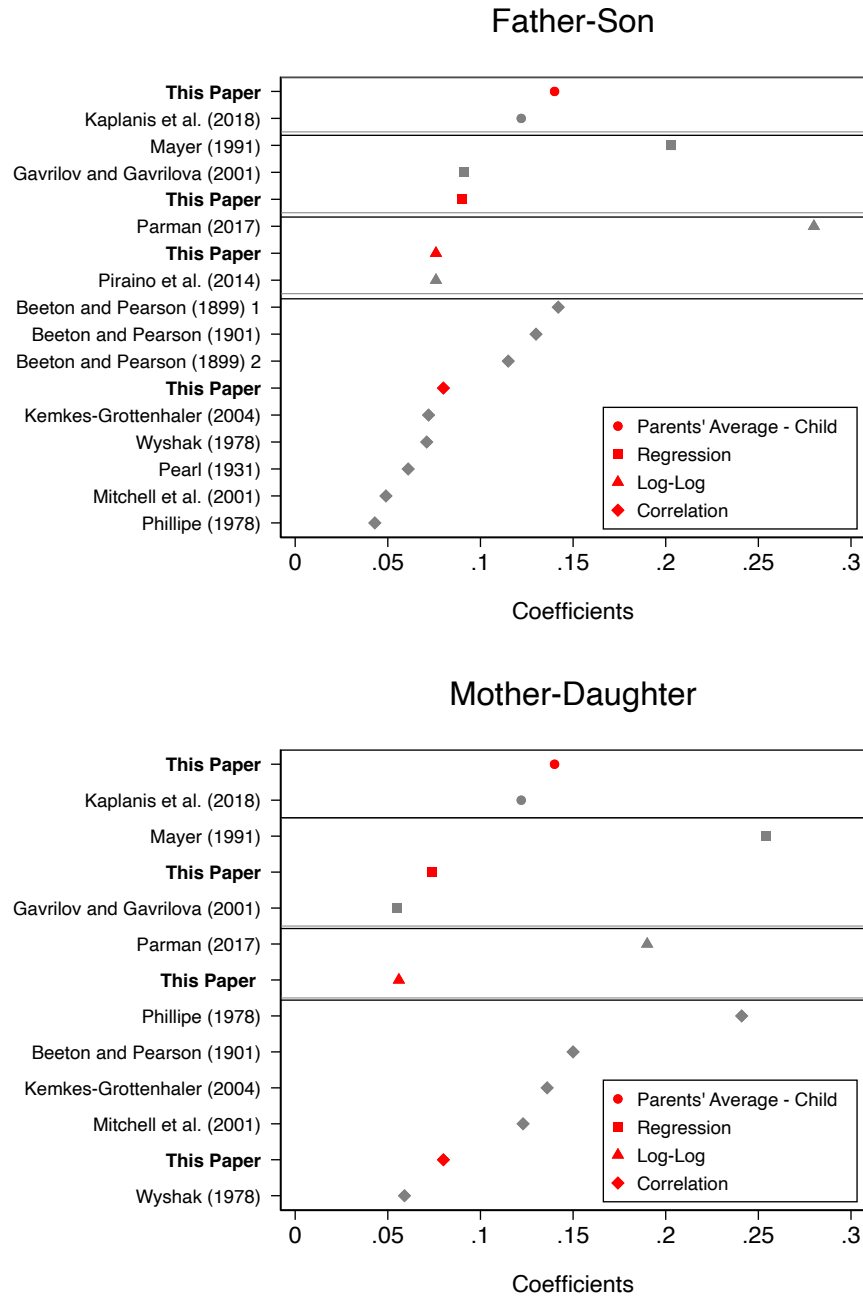
*Notes:* In this figure, for each birth cohort, we estimate the intergenerational coefficient of lifespan for son/father pairs, daughter/mother pairs, and the correlation between the child's lifespan and the average lifespan of both parents. Each point corresponds to the regression coefficient of a regression of the sons' lifespan on the father's lifespan controlling for birth cohort fixed effects for the parent. We estimate the regression separately for each birth cohort. The solid markers correspond to the results using the data that was matched to the censuses (our primary sample) and the hollow markers correspond to the results we obtain using the entire family tree. Intergenerational lifespan coefficients are estimated using those observations in our dataset in which both parents and children lived to at least age 25.

Figure 7. Correlations Across Cohorts and States in the Sibling Associations in Adult Longevity and the Sibling Associations in Education



Notes: These figures plot the sibling regression coefficients in longevity on the y-axis against the sibling coefficient in education on the x-axis for a given cohort or state. Fitted lines are weighted by in-sample population of state or cohort respectively. Lifespans are conditional on living to age 60.

Figure 8: Comparison to Previous Estimates of IGPL



*Notes:* The figure reports the estimates from various publications. The estimates from this paper come from Table 4 and Appendix Table 3 and refer to correlations/coefficients that do not control for any covariates to make them most comparable to previous estimates. We also report the coefficients that are derived from the age 25+ sample. Estimates from other papers were chosen to be as close as possible as the ones reported here, in terms of the age restrictions and method. Several papers listed in Appendix Table A1 provide estimates that are not directly comparable and are not included here as a result. Next, we specify the exact location of each estimate in the original publication.

- Father-Son (Mother-Daughter) correlation for Mayer (1991) is calculated in Page 53 (Page 53), which use cohorts of immigrants from England born between 1650 and 1874, without any age restriction.



- Father-Son (Mother-Daughter) correlation for Gavrilov and Gavrilova (2001) is from Table 5 (Table 6), which uses 11613 (5025) pairs drawn from European aristocracies born 1800-1880, with the age restriction of surviving until 30.
- Father-Son (Mother-Daughter) correlation for Parman (2017) is from Table 11 (Table 11), which uses 585 (424) pairs drawn from cohorts from Mecklenburg County, North Carolina who died between 1934-1975, without the age restriction.
- Father-Son correlation for Piraino et al. (2014) is calculated in Page 112, which uses 6059 pairs drawn from cohorts born 1652-1850 in Cape Colony, South Africa, with the age restriction of surviving until 15.
- First estimate for Father-Son correlation for Beeton and Pearson (1899) is calculated in Page 297, which uses 1000 pairs drawn from European aristocracies (“Landed Gentry”) cohorts, with the age restriction of surviving until 25.
- Second estimate for Father-Son correlation for Beeton and Pearson (1899) is calculated in Page 297, which uses 1000 pairs drawn from European aristocracies (“Peerage”) cohorts, with the age restriction of surviving until 20.
- Father-Son (Mother-Daughter) correlation for Beeton and Pearson (1901) is from Table A (Table A), which uses 1000 (1064) pairs drawn from cohorts from Britain (“Society of Friends”, with the age restriction of surviving until 20.
- Father-Son (Mother-Daughter) correlation for Kemkes-Grottenhaler (2004) is from Table 6 (Table 6), which uses 4442 (3885) pairs drawn from cohorts born between 1650 and 1927 in Germany, without the age restriction.
- Father-Son (Mother-Daughter) correlation for Wyshak (1978) is from Table 2 (Table 2), which uses 6343 (3125) pairs drawn from cohorts born before 1850 in Salt Lake City, Utah, without the age restriction.
- Father-Son correlation for Pearl (1931) is from Table 11, which uses 4407 pairs drawn from cohorts born between 1649 and 1921 in New England, without the age restriction.
- Father-Son (Mother-Daughter) correlation for Mitchell et al. (2001) is from Table 3 (Table 3), which uses 709 (586) pairs drawn from cohorts born between 1749 and 1890 in Lancaster County, Pennsylvania, with the age restriction of surviving until 30.
- Father-Son (Mother-Daughter) correlation for Phillipe (1978) is from Table 4 (Table 4), which uses 46 (57) pairs drawn from cohorts with parents married between 1820-1899 in Isle-aux-Coudres, Quebec, Canada, with the age at death of offspring before age 20 years.
- The correlation for Kaplanis et al. (2018) is from Supplementary Materials page 13, which uses about 130,000 trios of parent-child. It is calculated using parents' average and child longevity and they do not report the correlations for Mother-Daughter and Father-Son pairs. The data come from [Geni.com](https://www.geni.com) where individual users can upload family tree information.

## Appendix Tables and Figures

Table A1: Previous estimates of the intergenerational correlations in lifespan

Paper	IGPL Estimate	SE	Sample size	Population	Cohort
<b>Panel A: Parent Child correlations</b>					
Beeton and Pearson (1899)	Father-Son (“Peerage”): 0.115 Father-Son (“Landed Gentry”): 0.142	Father-Son (“Peerage”): 0.021 Father-Son (“Landed Gentry”): 0.021	Father-Son: 1,000 pairs (Peerage) and 1000 pairs (Landed Gentry)	European aristocracies (“Peerage” and “Landed Gentry”)	
Beeton and Pearson (1901)	Father-Son: 0.13 Father-Daughter: 0.13 Mother-Son: 0.13 Mother-Daughter: 0.15	Father-Son: 0.02 Father-Daughter: 0.02 Mother-Son: 0.02 Mother-Daughter: 0.02	Father-Son: 1000 pairs Father-Daughter: 1156 pairs Mother-Son: 1220 pairs Mother-Daughter: 1064 pairs	"Society of Friends" from Britain	
Pearl (1931)	Father-Son: 0.061 Father-Daughter: 0.047	Father-Son: 0.01 Father-Daughter: 0.011	Father-Son: 4407 pairs Father-Daughter: 3689 pairs	New England	1649-1921
Wyshak (1978)	Father-Son: 0.071 Father-Daughter: 0.064 Mother-Son: 0.08 Mother-Daughter: 0.059		Father-Son: 6343 pairs Father-Daughter: 3420 pairs Mother-Son: 5505 pairs Mother-Daughter: 3125 pairs	Salt Lake City, Utah	18th and 19th centuries, but born before 1850
Phillipe (1978)	Father-Son: 0.043-0.129 Father-Daughter: -0.116-0.190 Mother-Son: -0.010-0.194		Father-Son: 128 pairs Father-Daughter: 114 pairs Mother-Son: 134 pairs Mother-Daughter: 132 pairs	Isle-aux-Coudres, Quebec, Canada	parents married 1820-1899

	Mother-Daughter: 0.106-0.241				
Mayer (1991)	Father-Son: 0.1- 0.3 Father-Daughter: -0.12-0.21 Mother-Son: -0.13-0.32 Mother-Daughter: 0.17-0.21 (shows full 95% CI of estimates)		13,656 individuals	6 New England families who are white, Anglo-Saxon and Protestant immigrants from England	1650-1874
Kerber et al (2001)	Parent-offspring correlation: 0.074		19,575 pairs	Utah	1870-1907
Mitchell et al (2001)	Father-Son: 0.049 Father-Daughter: 0.106 Mother-Son: 0.099 Mother-Daughter: 0.123		Father-Son: 709 pairs Father-Daughter: 610 pairs Mother-Son: 614 pairs Mother-Daughter: 586 pairs	Amish (Lancaster County, Pennsylvania)	1749-1890
Gavrilov and Gavrilova (2001)	Father-Sons: 0.09-0.17 Father-Daughter: 0.06-0.295 Mother-Son: 0.035-0.11 Mother-Daughter: 0.055-0.114	Father-Son:0.01-0.05 Father-Daughter:0.02-0.07 Mother-Son: 0.01-0.05 Mother-Daughter: 0.01-0.07	Father-Son: 11,613 pairs Father-Daughter: 5,025 pairs Mother-Son: 11,613 pairs Mother-Daughter: 5,025 pairs	European aristocracies	1800-1880

Kemkes-Grottenhaler (2004)	Father-Son: 0.051-0.072 Father-Daughter: 0.066-0.13 Mother-Son: 0.059-0.131 Mother-Daughter: 0.103-0.136		Father-Son: 4442 pairs (1015 if 50+) Father-Daughter: 3910 pairs (945 if 50+) Mother-Son: 4404 pairs (1021 if 50+) Mother-Daughter: 3885 pairs (948 if 50+)	Germany	1650-1927
Piraino et al (2014)	Father-Son: 0.173 (0.076 if conditioned on child's survival post 15) Father-Daughter: 0.165 for daughter-father pairs (0.075 if conditioned on child's survival post 15)		Father-Son: 6059 pairs Father-Daughter: 3995 pairs	Cape Colony, South Africa	Born between 1652 - 1850
Parman (2017)	Father-Son: 0.20-0.36 Mother-Daughter: 0.19-0.32	Father-Son: 0.06-0.12 Mother-Daughter: 0.06-0.12	Father-Son: 585 pairs Father-Daughter: 424 pairs	Meckelenburg county, North Carolina	Deaths in 1934-1975 (parents from censuses 1860-1910)
Kaplanis et al (2018)	Parent-child: 0.122	Parent-child: 0.004	Parent-child: 130,000 pairs	US	parents born 1650-1850
Mourits et al (2020)	Offspring of top 10% lived fathers have a survival advantage of 17%, of top 10% of mothers have advantage of 20% and of both parents have 25%		101,577 individuals (16,905 families) Parent-Son: 52367 pairs Parent-Daughter: 49210 pairs	Zeeland province, Netherlands	1812-1886 for children, 1741-1844 for parents

**Panel B: Sibling correlations**

Beeton and Pearson (1899)	Brother-Brother: 0.26	Brother-Brother: 0.02	Brother-Brother: 1000 pairs ("Foster's Peerage" group)	European aristocracies	
Beeton and Pearson (1901)	Brother-Brother: 0.28 Brother-Sister: 0.23 Sister-Sister: 0.33	Brother-Brother: 0.02 Brother-Sister: 0.01 Sister-Sister: 0.02	Brother-Brother: 1000 pairs Brother-Sister: 1947 pairs Sister-Sister: 1050 pairs	"Society of Friends" from Britain	
Kerber et al (2001)	Sibling-sibling: 0.107		42,812 pairs	Utah	1870-1907
Phillipe (1978)	Brother-Brother: -0.001-0.263 Brother-Sister: 0.139 Sister-Sister: 0.161-0.315		Brother-Brother: 125 pairs Brother-Sister: 176 pairs Sister-Sister: 110 pairs	Isle-aux-Coudres, Quebec, Canada	parents married 1820-1899
Piraino et al (2014)	Brother-Brother: 0.153 (0.08 if conditioned on survival post 15) Sister-Sister: 0.193 (0.151 if conditioned on survival post 15) Sibling-Sibling: 0.171 (0.086 if conditioned on survival post 15)		122,766	Cape Colony, South Africa	1652 - 1850
Wyshak (1978)	Brother-Brother: 0.077 Sister-Sister: 0.101		Brother-Brother: 5584 pairs Sister-Sister: 2614 pairs	Salt Lake City, Utah	18th and 19th centuries, but born before 1850

Mitchell et al (2001)	Brother-Brother: 0.142 Brother-Sister: 0.082 Sister-Sister: 0.056		Brother-Brother: 700 pairs Brother-Sister: 1416 pairs Sister-Sister: 709 pairs	Amish (Lancaster County, Pennsylvania)	1749-1890
<b>Panel C: Twin correlations</b>					
Herskind et al. (1996)	Male-male twin: 0.26 Female-female twin: 0.23		Male-male MZ twin pairs: 513 Male-male DZ twin pairs: 895 Female-female MZ twin pairs: 520 Female-female DZ twin pairs: 944	Danish same sex twin pairs	1870-1900
Ljunquist et al. (1998)	Male-male MZ twin pairs: 0.33 (reared together), 0.01 (reared apart) Male-male DZ twin pairs: 0.11 (reared together), 0.08 (reared apart) Female-female MZ twin pairs: 0.28 (reared together), 0.15 (reared apart) Female-female DZ twin pairs : 0.12 (reared together), 0.01 (reared apart)	CI: Male-male MZ twin pairs: 0.26-0.39 (reared together), -0.11-0.23 (reared apart) Male-male DZ twin pairs: 0.06-0.15 (reared together), -0.11-0.27 (reared apart) Female-female MZ twin pairs: 0.22-0.34 (reared together), 0.06-0.23 (reared apart) Female-female DZ twin pairs : 0.08-0.15 (reared together), -0.05-0.07 (reared apart)	Male-male MZ twin pairs: 1567 (reared together), 82 (reared apart) Male-male DZ twin pairs: 2814 (reared together), 169 (reared apart) Female-female MZ twin pairs: 1910 (reared together), 97 (reared apart) Female-female DZ twin pairs : 3589 (reared together), 277 (reared apart)	Swedish Twin Pairs	1886-1925

<p>Hjelmborg et al. (2006)</p>	<p>Danish twins: Male-male MZ twin pairs: 0.15 (0.39 if &gt;60) Male-male DZ twin pairs: 0.10 (0.21 if &gt;60) Female-female MZ twin pairs: 0.18 (0.30 if &gt;60) Female-female DZ twin pairs: 0.08 (0.19 if &gt;60) Swedish and Finnish twins: Male-male MZ twin pairs: 0.43 Male-male DZ twin pairs: 0.15 Female-female MZ twin pairs: 0.32 Female-female DZ twin pairs: 0.17</p>	<p>Danish twins: Male-male MZ twin pairs: 0.04 (0.06 if &gt;60) Male-male DZ twin pairs: 0.04 (0.05 if &gt;60) Female-female MZ twin pairs: 0.04 (0.06 if &gt;60) Female-female DZ twin pairs: 0.03 (0.05 if &gt;60) Swedish and Finnish twins: Male-male MZ twin pairs: 0.03 Male-male DZ twin pairs: 0.03 Female-female MZ twin pairs: 0.03 Female-female DZ twin pairs: 0.02</p>	<p>Danish twins: Male-male MZ twin pairs: 851 Male-male DZ twin pairs: 1500 Female-female MZ twin pairs: 862 Female-female DZ twin pairs: 1607 Swedish and Finnish twins: Male-male MZ twin pairs: 829 Male-male DZ twin pairs: 1380 Female-female MZ twin pairs: 987 Female-female DZ twin pairs: 1930</p>	<p>Danish, Finnish and Swedish twins</p>	<p>1870-1910 for Danish births, 1886-1925 for Swedish births, 1880-1910 for Finnish births</p>
<p>Wyshak (1978)</p>	<p>Male on male twin: 0.106 Male on female twin: 0.080 Female on male twin: 0.111 Female on female twin: 0.091</p>		<p>Male on male twin pairs: 2100 Male on female twin pairs: 1224 Female on male twin pairs: 672 Female on female twin pairs: 1059</p>	<p>Salt Lake City, Utah</p>	<p>18th and 19th centuries, but born before 1850</p>



Kerber et al (2001)	Like-sex twins: 0.249 Opposite-sex twins: 0.078		Like-sex twins: 472 pairs Opposite-sex twins:238 pairs	Utah	1870-1907
<b>Panel D: Spousal correlations</b>					
Phillipe (1978)	0.042-0.121		154 pairs	Isle-aux-Coudres, Quebec, Canada	parents married 1820-1899
Parman (2017)	0.142-0.179	0.038-0.047	619 pairs	Mecklenburg county, North Carolina	Deaths in 1934-1975
Mitchell et al (2001)	0.01		312 pairs	Amish (Lancaster County, Pennsylvania)	1749-1890
Wyshak (1978)	0.127		5457 pairs	Salt Lake City, Utah	18th and 19th centuries, but born before 1850
<b>Panel E: Grandparent Correlations</b>					
Kerber et al (2001)	Grandparent-grandchild: 0.015		25,903 pairs	Utah	1870-1907
Piraino et al (2014)	Grandparent-grandchild: -0.022-(-0.012) Great-Grandparent- great-grandchild: 0.021	All insignificant	Grandparent- grandchild: 2601 pairs Great-Grandparent- great-grandchild: 1837 pairs	Cape Colony, South Africa	Born between 1652 - 1850

Table A2. Comparing Tree data with SSA data by cohort

Age	Sample		SSA		Difference	
	Male	Female	Male	Female	Male	Female
1910 Cohort						
25	45.5	51.77	43.34	49.62	2.16	2.15
40	32.84	39.54	31.2	37.64	1.64	1.9
60	17.49	22.92	16.34	21.58	1.15	1.34
80	7.5	9.57	6.86	8.93	0.64	0.64
100	2.05	2.09	1.97	2.25	0.08	-0.16
1900 Cohort						
25	46.64	53.66	45.12	52.07	1.52	1.59
40	33.74	40.58	32.28	39.09	1.46	1.49
60	18.2	23.43	17.12	22.39	1.08	1.04
80	7.27	9.32	7.02	9	0.25	0.32
100	1.36	1.56	1.9	2.19	-0.54	-0.63

*Notes:* The table shows the remaining years of life left at different ages. Difference calculated (SSA-sample), giving a difference of sample from population. The cohort life tables produced by the Social Security Administration (SSA) are available here: [https://www.ssa.gov/oact/NOTES/pdf\\_studies/study120.pdf](https://www.ssa.gov/oact/NOTES/pdf_studies/study120.pdf).

Kaplan-Meier estimates are produced using the methods described here:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3059453/>

Table A.3. Comparison of Matched Sample and Full Census Sample Mean Values

Variable	Matched Analysis Data	Unmatched Census data
Lifespan	73.0	
Female	0.47	0.52
Birth Year	1901	1898
White	0.99	0.82
Black	0.01	0.14
Northeast	0.15	0.24
Midwest	0.41	0.25
South	0.35	0.35
West	0.07	0.04
Immigrant	0.01	0.08
Father is Immigrant	0.13	0.24
Mother is Immigrant	0.10	0.19
Observations	26,134,161	960,504,392

*Notes:* The estimates in this table compare the mean values of individuals who were age 25 or older in one of the US censuses from 1900-1920 based on whether or not we were able to match the individual to information on their lifespan and the lifespan of both of their parents.

Table A4. Raw Correlations in Lifespan Across Generations

Model	Outcome			Observations
	Lifespan (Years)	Percentile	Log Lifespan	
Son/Father	0.08	0.09	0.06	13,944,386
Son/Mother	0.06	0.08	0.05	13,944,386
Son/Parents' Average	0.10	0.12	0.08	13,944,386
Daughter/Father	0.06	0.08	0.05	12,189,775
Daughter/Mother	0.08	0.09	0.06	12,189,775
Daughter/Parents' Average	0.10	0.12	0.08	12,189,775
Father/Mother	0.05	0.05	0.05	10,251,695

*Notes:* Each cell separately provides the raw correlation in lifespan, log lifespan, or percentile lifespan between the two individuals indicated in the row.

Table A5. Summary Statistics of Sibling Subsample

	Census based sample matched to FamilySearch, cohorts born 1880-1920	
	(1) Full Sample	(4) Siblings
Average Lifespan	72.97 (16.09)	73.06 (16.12)
Father's Lifespan	71.66 (13.56)	71.96 (13.29)
Mother's Lifespan	72.31 (15.89)	72.52 (15.59)
Birth Year	1901	1901
White	(0.99)	(0.99)
Black	0.01	0.01
<u>Place of birth and ancestry</u>		
Northeast	0.15	0.14
Midwest	0.41	0.41
South	0.35	0.36
West	0.07	0.07
Immigrant Status	0.01	0.01
Father's Immigrant	0.10	0.11
Mother's Immigrant	0.13	0.14
<u>Family characteristics</u>		
Siblings	2.89 (2.36)	3.39 (2.19)
Birth order	2.39 (1.68)	2.63 (1.71)
Age mother at birth	33.93 (8.02)	34.13 (7.89)
Age father at birth	29.13 (6.71)	29.26 (6.61)
Observations	26,134,160	22,283,088

*Notes:* The estimates in this table compare individuals who were age 25 or older in one of the US censuses from 1900-1920 for whom we have information about their own lifespan and the lifespan of both of their parents. Standard deviation in parentheses.

Table A6. Sibling correlations for outcomes in the 1940 census compared to adult longevity

Model	(1) Adult longevity	(2) Education	(3) Income	(4) HH Income	(5) Adult longevity	(6) Education	(7) IGPLF
Brother/Brother	0.141 3,664,460	0.553 3,664,460	0.260 3,664,460	0.347 3,664,460	0.141 4,126,499	0.551 4,126,499	0.094 4,680,402
Sister/Sister	0.106 2,402,338	0.593 2,402,338	0.167 2,402,338	0.359 2,402,338	0.106 3,102,766	0.585 3,102,766	0.098 3,693,559
Sister/Brother	0.037 5,747,644	0.529 5,747,644	-0.104 5,747,644	0.328 5,747,644	0.037 6,988,569	0.525 6,988,569	0.094 8,183,995

*Notes:* Each cell in this table is a separate correlation. In the first four columns, we only use sibling pairs for which information on all four outcomes is available for both siblings. Since occupation and income are often missing for women in the 1940 census, we include the next two columns and we restrict the sample to just those sibling pairs for which both education and lifespan are available. The final column includes the IGPL between the children in the previous two columns and their fathers.

Table A7: Intergenerational Persistence of Education and Lifespan

	Father		Mother	
	Education	Lifespan	Education	Lifespan
Son	0.440	0.175	0.497	0.140
	0.000	0.001	0.001	0.001
	3,184,950	3,184,950	3,442,355	3,442,355
Daughter	0.402	0.126	0.483	0.133
	0.000	0.001	0.001	0.001
	2,615,551	2,615,551	2,796,741	2,796,741

*Notes:* Sample is restricted to individuals who survive to age 25. We also restrict the sample to have both education and lifespan for comparability.

Table A8: Assessing how the quality of the age at death information affects the results

	All siblings (reproduced from table 6)		All siblings have a death certificate in tree	
	Sibling coefficient	Father coefficient	Sibling coefficient	Father coefficient
Panel A: Sister-sister				
	0.106	0.069	0.118	0.081
	(0.001)	(0.001)	(0.002)	(0.002)
N	2,402,338	3,693,559	229,196	321,367
Panel B: Brother/Brother				
	0.134	0.084	0.159	0.096
	(0.001)	(0.001)	(0.002)	(0.001)
N	3,664,460	4,680,402	542,232	702,565
Panel C: Sister/Brother				
	0.035	0.077	0.060	0.091
	(0.001)	(0.001)	(0.001)	(0.001)
N	5,747,644	8,183,995	659,296	899,945

*Notes:* This table was created using a previous iteration of the dataset. The left two columns are copied from Table 6. The right two columns have the same specification as the left but are restricted to a subsample that also matched to a death certificate record on Family Search.



Table A9. Accounting for SES in the 1940 Matched Sample

Sample	sample with education		sample with education, income and occupation		sample with education		sample with education, income and occupation	
Parental Lifespan	Father				Mother			
<b>Panel A: Son's lifespan</b>								
Parental Lifespan	0.080 (0.0004)	0.079 (0.0004)	0.078 (0.0004)	0.078 (0.0004)	0.055 (0.0004)	0.052 (0.0004)	0.052 (0.0004)	0.052 (0.0004)
Child's Education		0.246 (0.002)	0.248 (0.002)	0.267 (0.002)		0.241 (0.002)	0.246 (0.002)	0.267 (0.002)
Income/100			-0.001 (0.001)	0.006 (0.01)			-0.004 (0.001)	0.003 (0.001)
Occupation				-0.020 (0.001)				-0.022 (0.001)
R <sup>2</sup>	0.023	0.026	0.026	0.026	0.021	0.024	0.024	0.024
N	7,055,371		6,604,623		7,055,371		6,604,623	
<b>Panel B: Daughter's lifespan</b>								
Parental Lifespan	0.067 (0.0004)	0.064 (0.0004)	0.064 (0.001)	0.064 (0.001)	0.064 (0.0004)	0.058 (0.0004)	0.057 (0.0004)	0.057 (0.0004)
Child's Education		0.391 (0.002)	0.383 (0.002)	0.382 (0.002)		0.374 (0.002)	0.369 (0.002)	0.369 (0.002)
Income/100			0.017 (0.002)	0.011 (0.002)			0.010 (0.002)	0.007 (0.002)
Occupation				0.004 (0.001)				0.002 (0.001)
R <sup>2</sup>	0.008	0.015	0.015	0.015	0.009	0.015	0.015	0.015
N	6,054,117		5,249,738		6,054,117		5,249,738	

Notes: The sample used in this table consists of all individuals in the main sample that have at least one sibling. Each regression uses the full controls from table 3 in addition to the variables included in this table.

Figure A.0: Data Construction

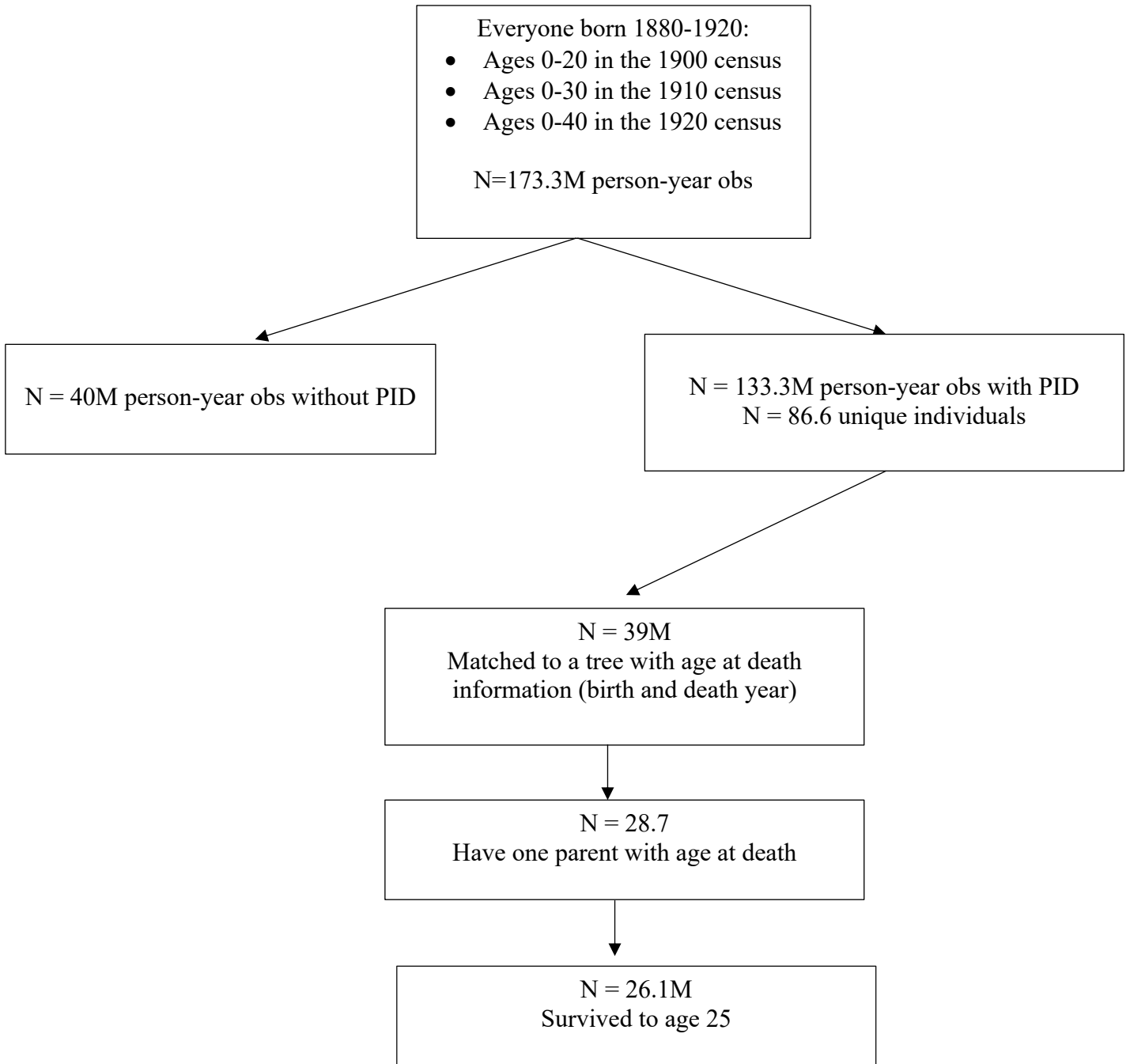
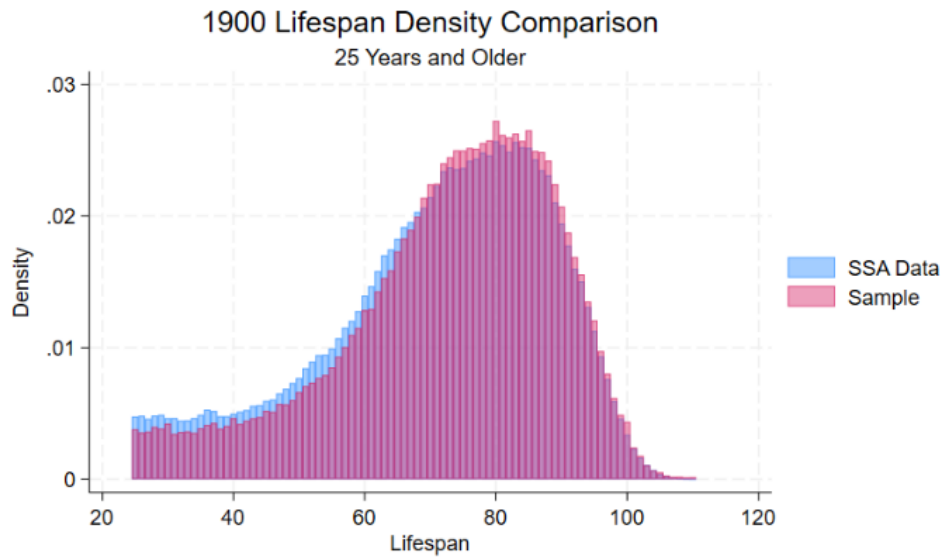
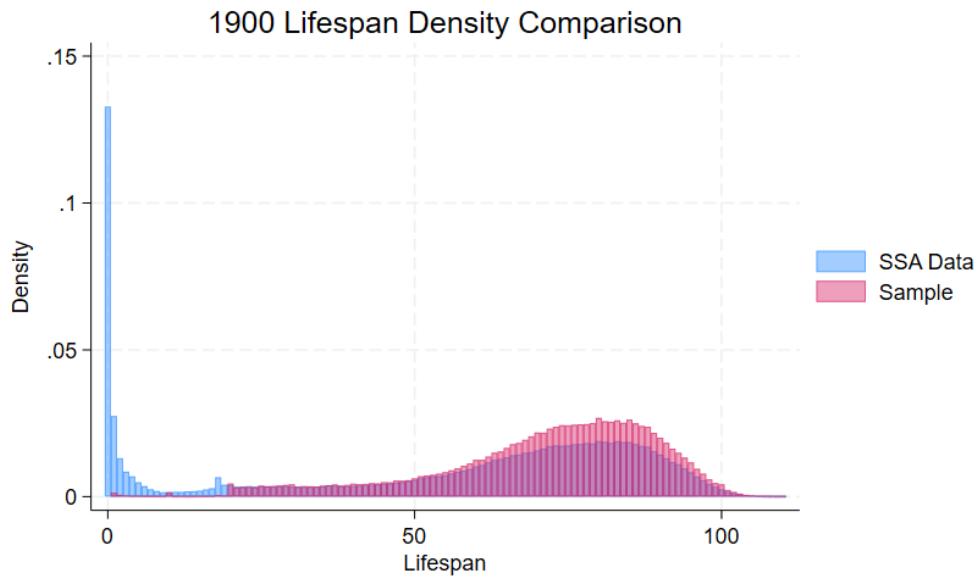
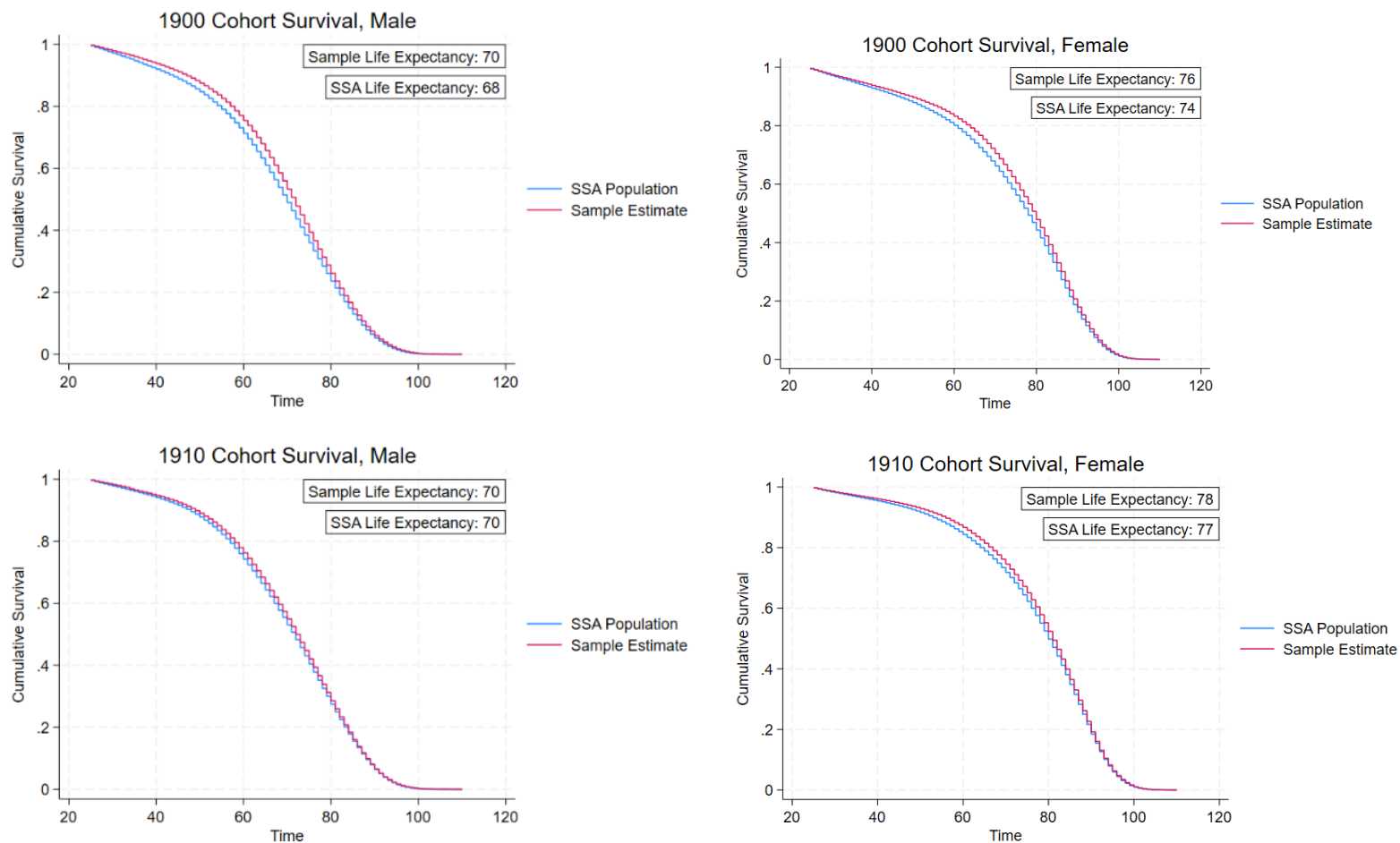


Figure A.1. Distribution of the age at death In the Census-Tree data  
Comparison with SSA Cohort Data



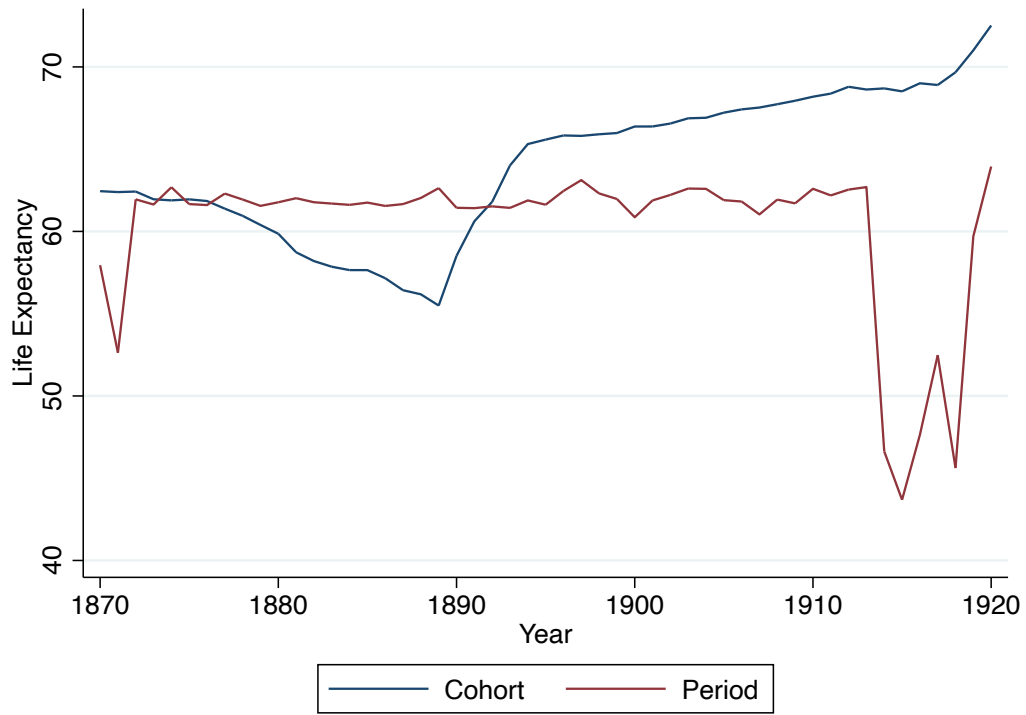
Notes: These figures use our sample derived from the Family Tree (see text for details) and cohort life tables produced by the Social Security Administration (SSA), available here: [https://www.ssa.gov/oact/NOTES/pdf\\_studies/study120.pdf](https://www.ssa.gov/oact/NOTES/pdf_studies/study120.pdf).

Figure A2: Comparing survival rates in the Census-Tree data and the SSA cohort data



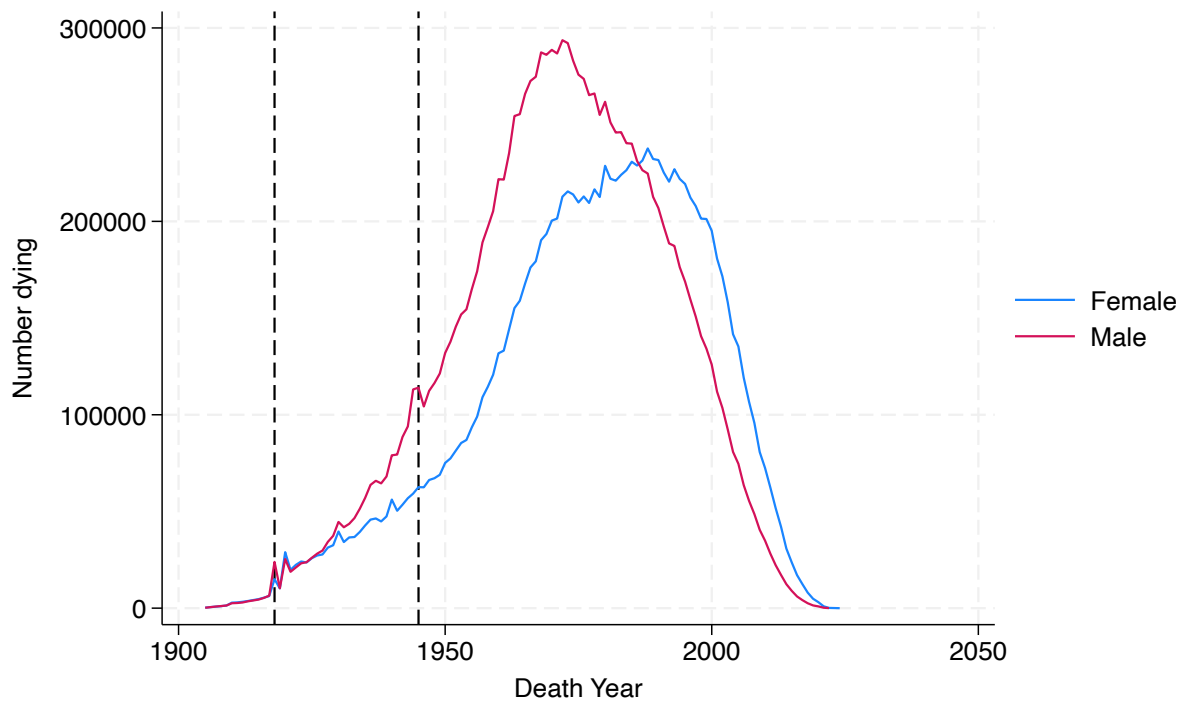
Notes: These figures use our sample derived from the Family Tree (see text for details) and cohort life tables produced by the Social Security Administration (SSA), available here: [https://www.ssa.gov/oact/NOTES/pdf\\_studies/study120.pdf](https://www.ssa.gov/oact/NOTES/pdf_studies/study120.pdf). Kaplan-Meier estimates are produced using the methods described here: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3059453/>

Figure A3: Male period and cohort life expectancy trends France 1870-1920



Notes: Uses period and cohort tables from the Human Mortality Database.

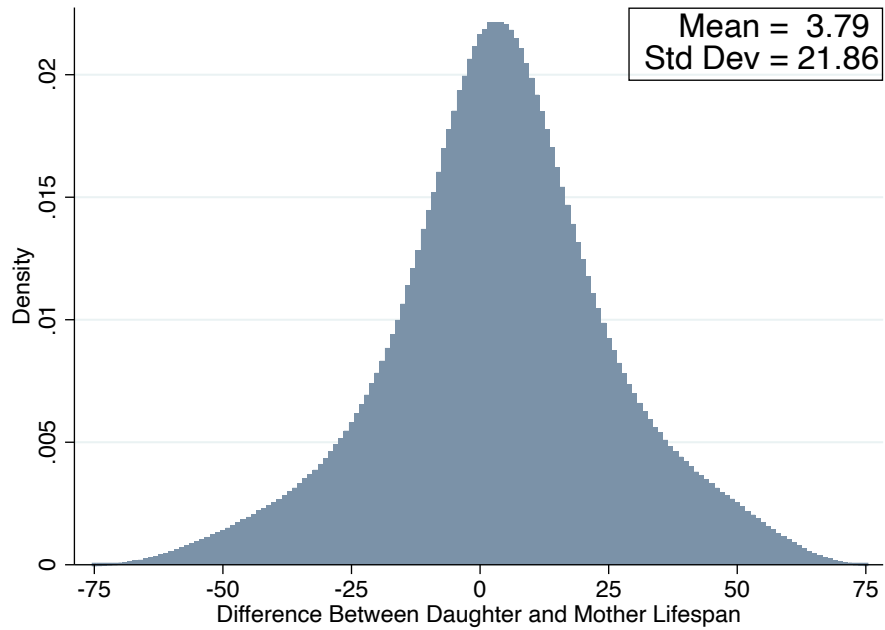
Figure A4. Number of deaths by death year in our sample.  
Cohorts born 1880-1920 surviving to age 25.



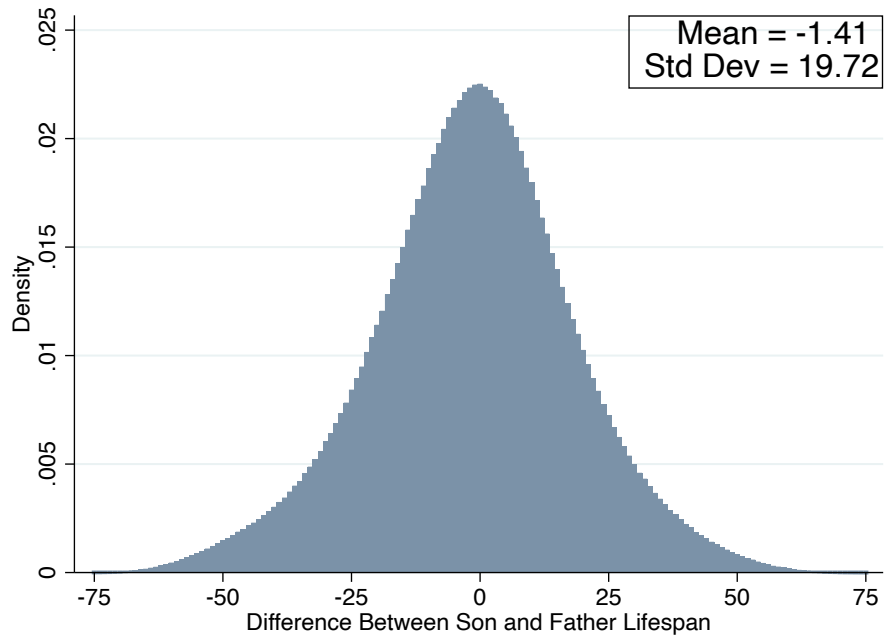
Notes: The figure shows the death year of the individuals born 1880-1920 who survived to age 25 and who are in our sample (they have birth and death dates and so do their parents). The dashed lines denote 1918 and 1945, the deadliest years of WWI and WWII. In 1918 there was also a flu pandemic.

Figure A.5: distribution of adult longevity gap in Census-tree data

a. Daughter age at death – mother age at death

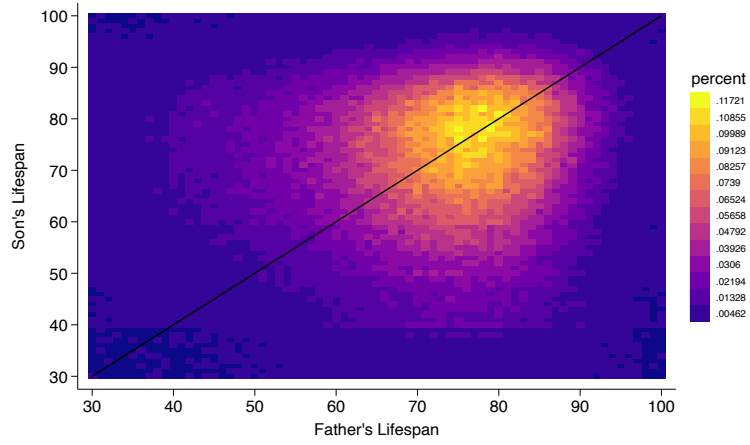


b. Son age at death – father age at death

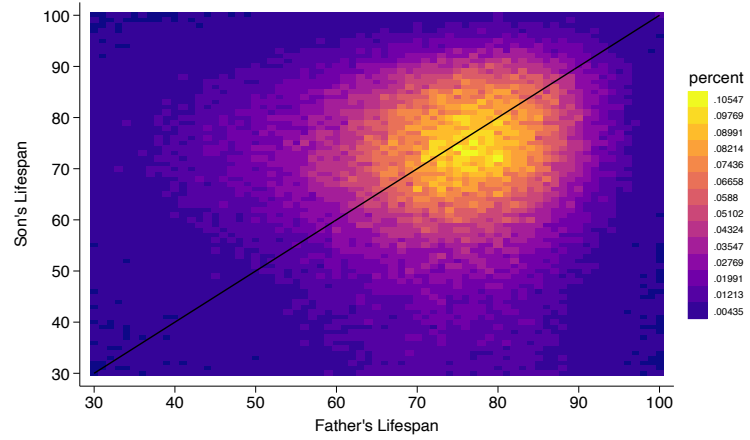


*Notes:* Figure shows the gap in the age at death of the child minus the age at death of the parent, conditional on both parent and child surviving to age 25. Census-Tree data for cohorts born 1880-1920.

Figure A6. Heat maps by cohort for men  
a. 1880



b. 1900



c. 1920

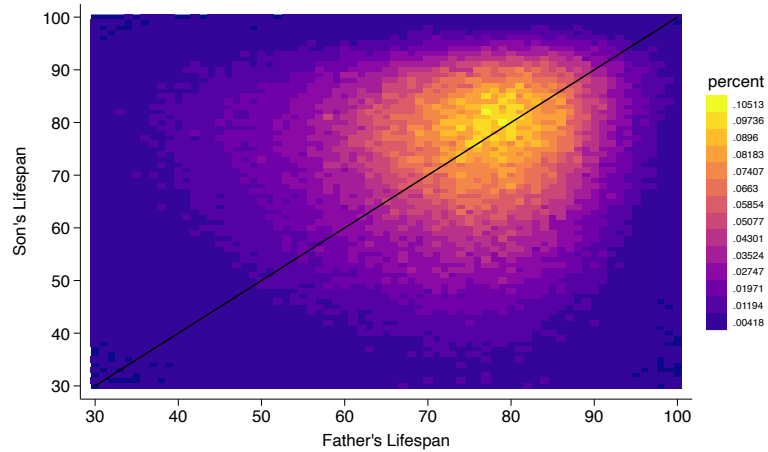
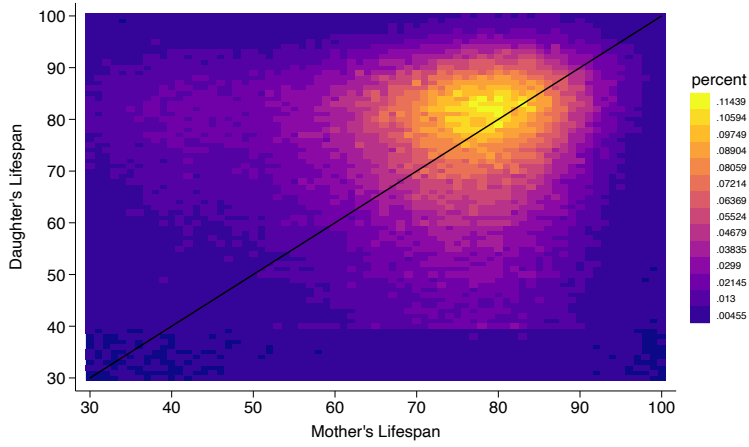
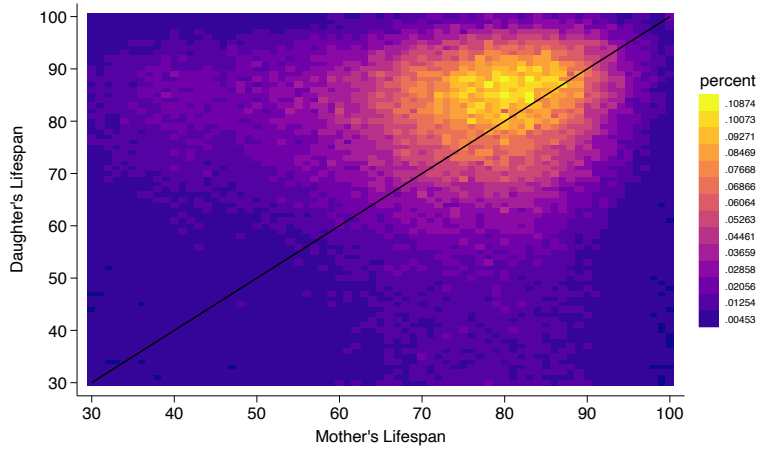




Figure A7. Heat maps by cohort for women  
a. 1880



b. 1900



b. 1920

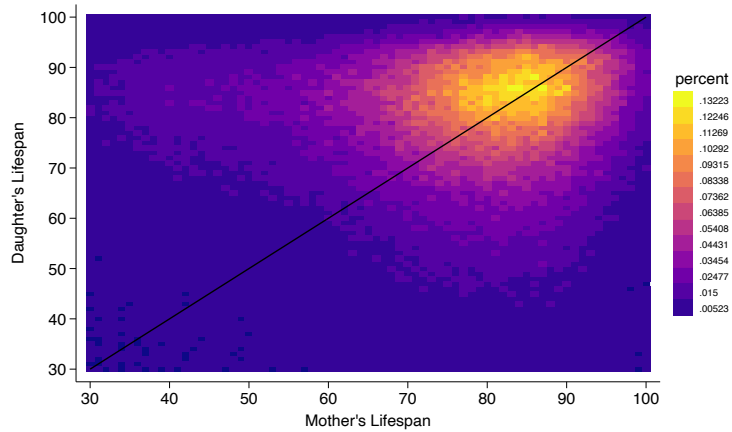


Figure A8: Changes in Absolute Mobility 1880-1920

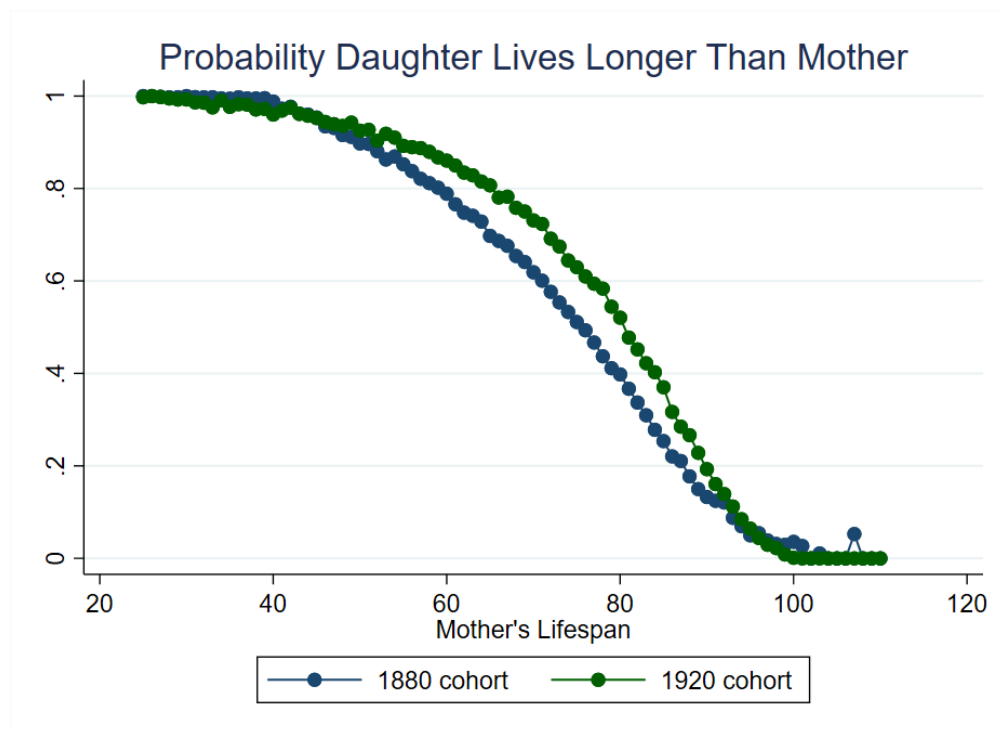
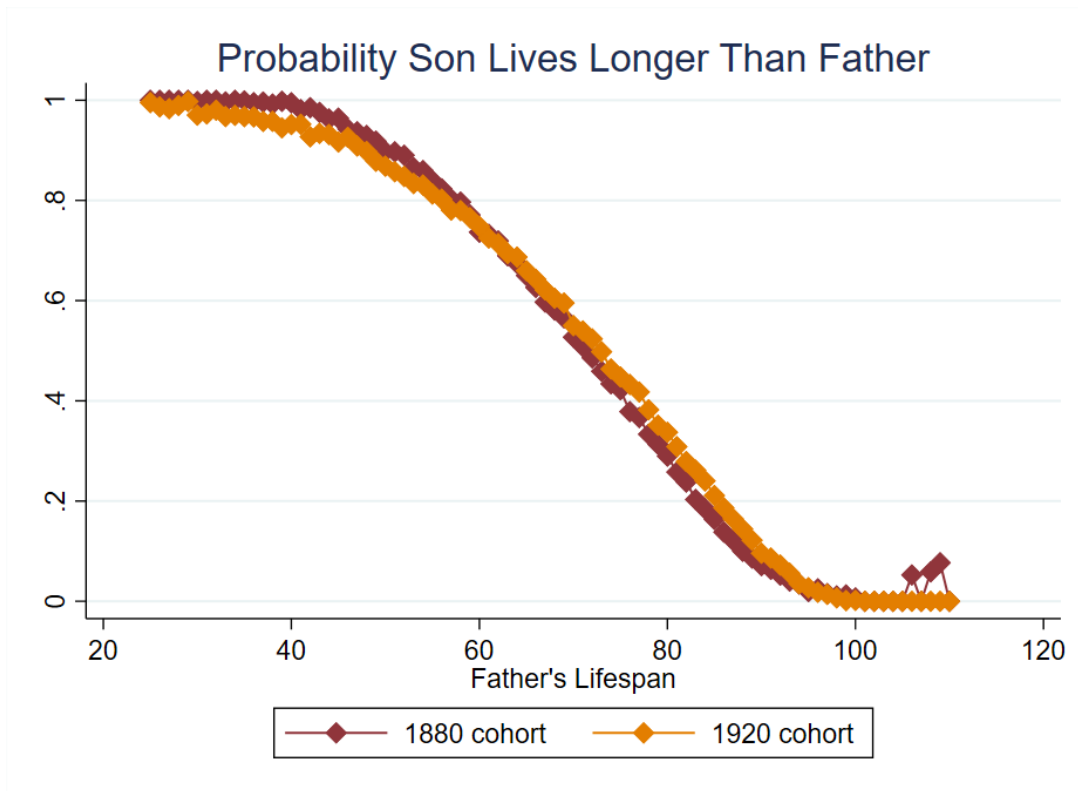
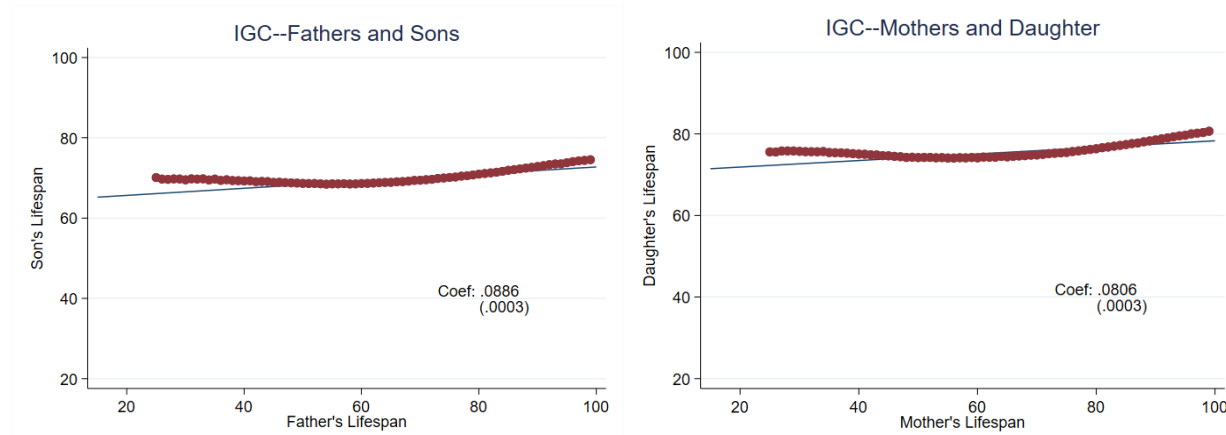
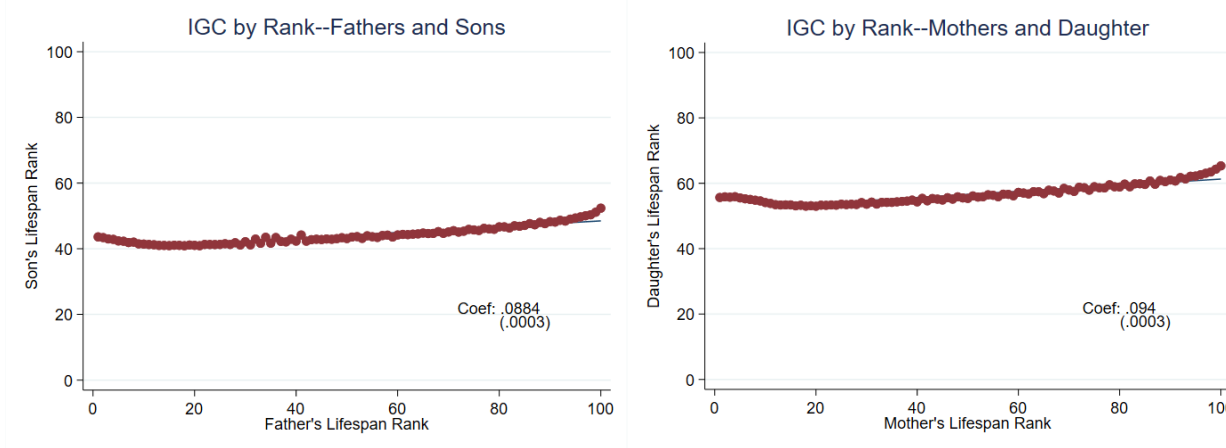


Figure A9. Test for Linearity of the child-parent lifespan relationship, by sex

a. IGPL in levels: Child adult longevity as a function of parent longevity

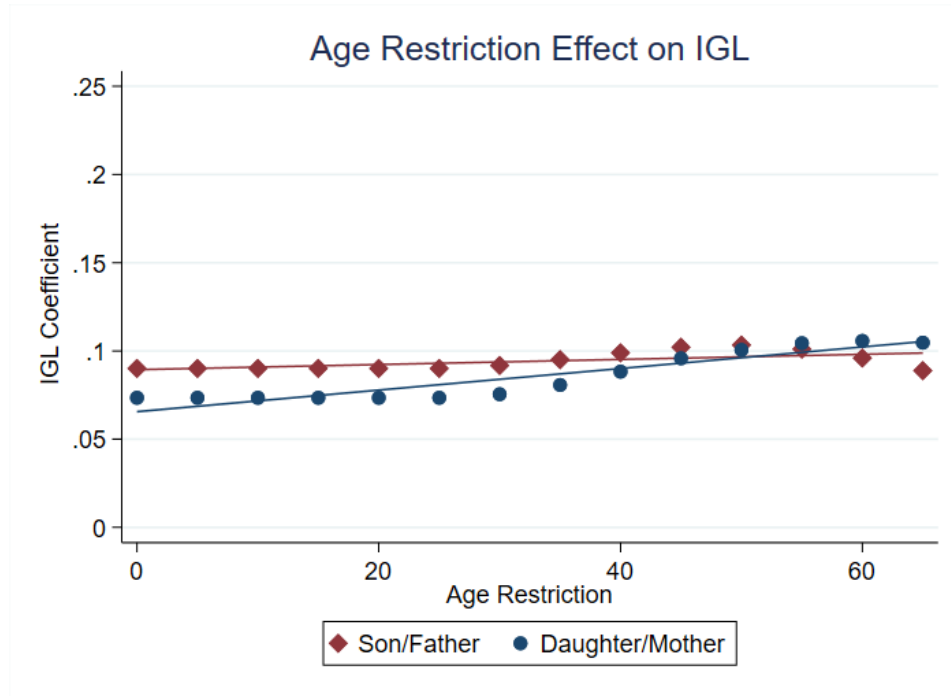


b. IGPL in ranks: Child adult longevity percentile as a function of parent adult longevity percentile



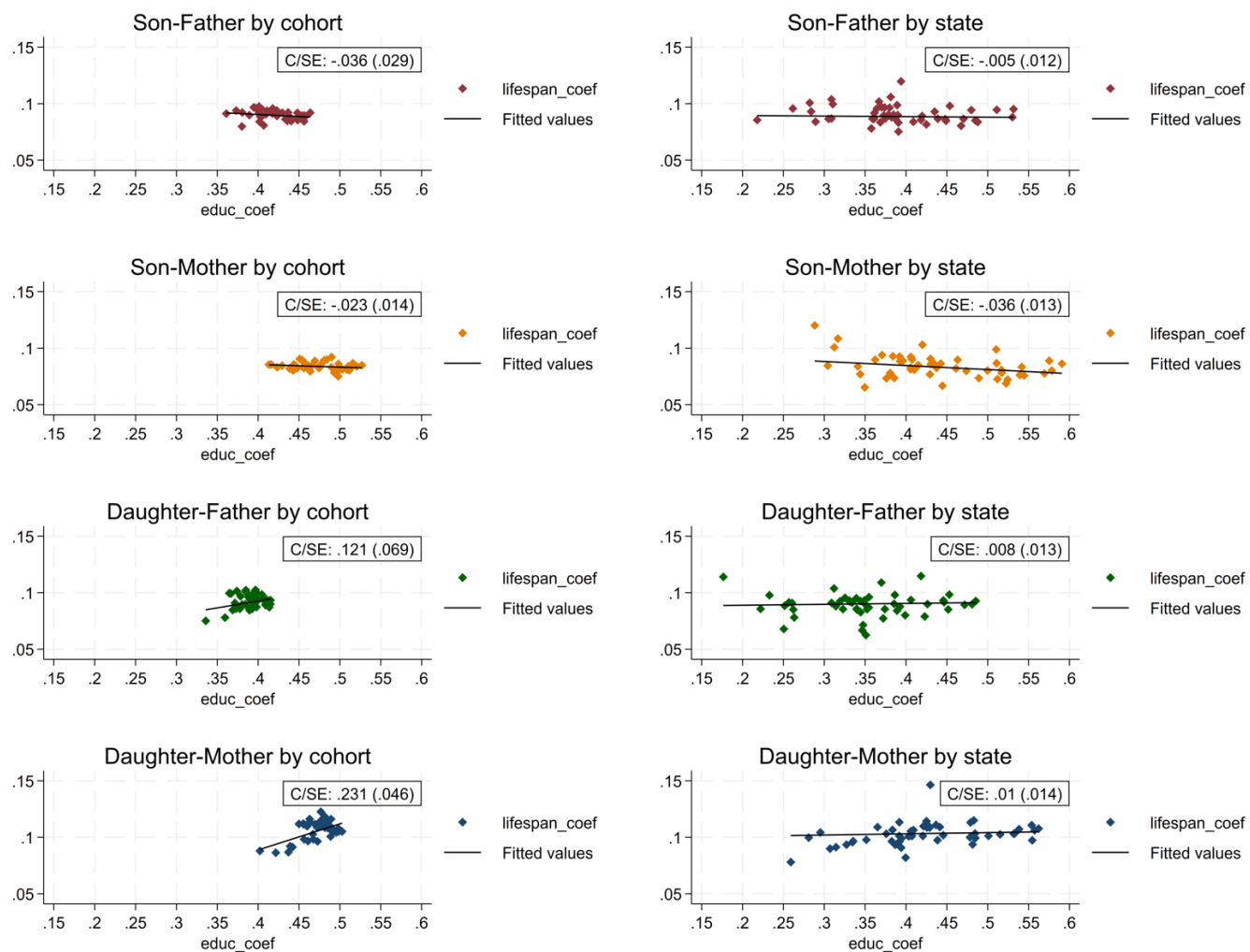
Notes: The top figures provide average of the son's lifespan in one-year bins based on the father's lifespan, conditional on both parents and children living to age 25. The bottom figures relate the average son's (daughter's) percentile in the distribution of the age at death among sons, relative to the father's (mother's) percentile.

Figure A10. Age restriction effect on IGPL



*Notes:* The specifications in these figures include birth cohort fixed effects for parent, child, and sibling. The age restriction is applied to parent and child.

Figure A11. Correlations Across Cohorts and States in the Persistence of Adult Longevity and the Persistence of Education



*Notes:* These figures plot the regression coefficients of child longevity on parent longevity on the y-axis, against the regression coefficient of child education on parent education on the x-axis for a given cohort or state. Fitted lines are weighted by in-sample population of state or cohort respectively. Lifespans are conditional on living to age 60.