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The historical demography of the multigenerational family: Evidence from crowdsourced genealogies

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Abstract

Knowledge of the demography of multigenerational family ties is limited to the 20th and 21st centuries. Exploiting crowdsourced genealogies (the *FamiLinx* data), our research note empirically reconstructs the changing multigenerational family from pre-industrial colonial America (1700) up to the end of the gilded age (1910) in today's United States in comparison with contemporaneous data from selected European regions. We estimate supply of and exposure to multigenerational kin measured by the number of, and years of life shared with, parents and grandparents. Multigenerational supply and exposure increased in the US and all European regions, but changes were modest compared to the surge that followed in the 20th century. Historically, the multigenerational family was consistently stronger in the US than in all European regions yet from 1850 onwards differences diminished. Our study documents, for the first time, the substantial cross-continental differences in the demographic-historical pathways leading up to the modern multigenerational family.

***Keywords**:* historical demography; multigenerational family; big data; online genealogies; FamiLinx database

Introduction

Knowledge on the multigenerational family has expanded rapidly, in particular research on the changing demography of grandparent-grandchild relations (Arpino, Gumà, & Julià, 2017; Dykstra & Komter, 2006; Hagestad & Lang, 1986; Kemp, 2003; Leopold & Skopek, 2015a, 2015b; Margolis, 2016; Margolis & Verdery, 2019; Margolis & Wright, 2017; Skopek, 2021; Skopek & Leopold, 2017; Song & Mare, 2019; Szinovacz, 1998; Uhlenberg, 1996). Bengtson's (2001) case for the "rising importance of multigenerational bonds" is based on the notion of families morphing from pyramids to beanpoles in which multiple generations share longer years of lifetime than ever before. Empirical studies demonstrate, at least for the 20th century, that secular changes in fertility and longevity have increased the prevalence of multigenerational ties and the lifetime shared by different generations in the family (Margolis & Verdery, 2019; Skopek, 2021; Song & Mare, 2019). Whether and where these increases continue to the present day is less clear, as their main driver – mortality declines – may be partly and in some contexts even fully offset by fertility delays (Skopek 2021; Leopold & Skopek 2015b).

Nearly nothing, in contrast, is known about the preceding demographic history of the multigenerational family. How common was it in the 18th and 19th centuries to have surviving parents and grandparents at birth, during childhood and adolescence, and in adulthood? How many years of life did people share with their parents and grandparents? More generally, how did generational structures in families look like before two demographic transitions transformed them, and are eras preceding the demographic transitions better described by stability or change? The present study seeks answers to these questions in order to expand our knowledge on the demography of multigenerational families and to situate more recent shifts in a broader historical context.

Data and Method

Data

This study explores the demography of the multigenerational family for individuals born 1700 to 1910 in North America (today's United States) and Europe using the *FamiLinx* release of data crowdsourced from the pedigree website *Geni.com* and made available for scientific use by Kaplanis et al. (2018). The *FamiLinx* data show a high concordance with historical data on life expectancy (Kaplanis et al., 2018), even though online genealogical data may include some social elite bias (Stelter & Alburez-Gutierrez, 2022). Demographers have used *FamiLinx* to study historical patterns of fertility, mortality, geographical mobility, and population genetics (Blanc, 2020; Colasurdo & Omenti 2024; Cozzani et al. 2023; Hsu, Posegga, Fischbach, & Engelhardt, 2021; Rawlik, Canela-Xandri, & Tenesa, 2019).

Conceptual approach

Our analysis focuses on two multigenerational concepts, supply of and exposure to multigenerational kin. In line with previous demographic studies (Chapman et al., 2017; Margolis & Verdery, 2019; Skopek, 2021; Song & Mare, 2019), we define *supply* of multigenerational kin as the probability of having living parents and grandparents at different ages, and *exposure* to multigenerational kin as the number of years shared with parents and grandparents. Supply is conditional on age and hence independent of anchor mortality. Exposure is sensitive to anchor mortality and hence shaped by mortality in all family generations.

We adopt a retrospective genealogical approach – looking back from children to their parents and grandparents – by reconstructing the ancestry relations of online profiles (henceforth anchors). The retrospective approach resembles the logic by which users of ancestry websites enter data on their pedigrees. The main benefit of this approach are logical constraints that ensure the completeness of multigenerational pedigree data. Specifically, we used the fact that each individual has two biological parents and four biological grandparents as a condition to select complete sections of multigenerational pedigrees from the *FamiLinx* database. In contrast, a prospective approach that follows up anchors' offspring cannot determine if the data include all children and grandchildren.

Data selection

The raw dataset includes more than 86 million profiles. We first selected anchor profiles born from 1600 to the present day with complete records on year of birth, sex, location (country), and a valid and complete parent and grandparent kin structure (2 parents, 4 grandparents). These conditions limited the data to *N*=1,101,678 anchors. Second, we focused on anchors born on the territory of today's United States of America or one of three regional clusters in Europe, each group comprising the national territories of four contemporary countries: Scandinavia (Denmark, Norway, Finland, Sweden), Central Europe (Germany, Austria, Czech Republic, Poland), and Western Europe (Belgium, France, the Netherlands, Great Britain). The resulting dataset contained *N*=889,155 anchors. Third, to ensure consistency of retrospective multigenerational data, we applied various further restrictions (details are provided in Appendix A1 and Table A1). A key criterion was availability and consistency of birth and death years in all pedigrees. Our final dataset included *N*=177,792 anchors born between 1700 and 1910 in North American and European regions and with full and plausible multigenerational data. For our analyses, we grouped anchor birth cohorts into 10-year intervals. Table 1 shows how case numbers of anchors are distributed over countries and regions. Figure A1 plots the number of cases born and alive by period.

=== TABLE 1 HERE ===

Sex differences

The anchor data contain more males than females, a known imbalance in genealogical sources of demographic data in which women are commonly “imported” into male-based lineages (Willigan & Lynch, 1982, pp. 109–131). Research examining the aptness of online genealogies from the *FamiLinx* database for historical demography reported an underrepresentation of women as well (Colasurdo & Omenti 2024). Figure 1 (left-hand panel) illustrates for our sample the gender imbalance and its decline over cohorts for North America and Europe.

The right-hand panel of Figure 1 shows sex differences in anchor longevity measured by average age at death (see Figure A2 for regional details). We observe higher longevity in North America than in Europe across the entire cohort range despite a substantial dip caused by the civil war (1861-1865), which imposed an estimated death toll of up to 850,000 (Hacker, 2011). The plot also captures declining longevity for those born in European regions during the first half of the 19th century; a likely demographic echo of the multiple wars and conflicts that had torn Europe in 19th century (e.g., the Napoleonic wars 1803-1815, the Crimean War 1853-1856, the Austro-Prussian war 1866, the Franco-Prussian war 1870-71, or the Dutch colonial conflicts throughout 19th century). Women show lower longevity over large periods, especially in North America, and start surpassing men only by the end of the 19th century. Higher female mortality in preceding periods is likely driven by maternal mortality (Chamberlain, 2006). Despite these sex differences, additional data analyses showed that all conclusions hold for both sexes.

=== FIGURE 1 HERE ===

Results

Parent and grandparent supply

Figures 2 and 3 show changes in the supply of parents and grandparents. In all regions, parent supply increased modestly. The modest nature of this increase is notable in light of the drastic increases that followed in the 20th century (Uhlenberg, 1996). In European regions, the increase in parent supply was hardly visible in the cohort range 1700 to 1850, accelerating thereafter and showing the clearest upswings at older anchor ages. Parent supply was similar in Scandinavia and Western Europe and lower in Central Europe although these differences tended to decline across cohorts. In the US, supply of parents was substantially higher than in all European regions. This applies across the cohort range and at all ages, although the cohort increase in the US was less pronounced. The lower panels differentiate between mother and father supply and show a more pronounced US advantage in father supply. For example, for an individual born in 1800, the probability of having a surviving father at age 40 was approximately 40% in the US, compared to 20-25% in Central European regions.

=== FIGURE 2 HERE ===

=== FIGURE 3 HERE ===

Figure 3 shows the same set of results for grandparent supply. Conclusions about differences across regions are similar to parent supply but trends within regions differ. US increases in grandparent supply picked up in the cohort range 1770 to 1820, followed by a modest decline, and modest increases from cohorts 1870 onwards. Similar trends are found in Western Europe. In Scandinavia and in Central Europe, grandparent supply remained stable or even declined slightly until the cohorts of 1850, followed by increases similar to the other regions. Again, the most notable findings are the sizable advantage of US regions over European regions and the modest scope of change in all regions.

Parent and grandparent exposure

How many years of life could persons born in the 18th and 19th centuries expect to share with their parents and grandparents? Figure 4 presents results on multigenerational exposure as the average number of years shared with their parents and grandparents, a measure shaped by grandparents' and parents' age at birth and by mortality in all generations. In contrast to supply indicators, multigenerational exposure is influenced not only by parent and grandparent mortality but also by anchor mortality. Evidence for this, for example, is the decline in longevity in the anchor cohort range 1800–1850 in North America and in Western Europe, leading to an increase in the fraction of people outlived by parents and grandparents (Figure A3).

Figure 4 shows overall increases in multigenerational exposure in all regions, although trends are non-linear and non-monotonic. We also observe substantial differences across regions. Compared to European regions, anchors born in today's US shared a substantially higher number of years of life with their parents and grandparents. For example, those born around 1800 could expect to share approximately 41 years with at least one parent and approximately 21 years with at least one grandparent. In contrast, those born around 1800 in Central Europe could expect to share only 28 years with at least one parent and only 11 years with at least one grandparent.

The American civil war once again left a sizable demographic footprint on the years of life shared by the generations, which dipped across the cohort range 1800 to 1850. We find a similar pattern in the Western European regions under study which where parties in multiple and major wars and conflicts especially during the first half of the 19th centuries. Towards the end of the 19th century, we find increases in all regions, the most rapid of which occurred in Central Europe. Increases in this cohort range were generally steeper for parent exposure than for grandparent exposure. At the turn of the 19th century, differences across the four regions in terms of parent and grandparent exposure had diminished, a result driven by a rapid rise in European regions accompanied by a more gradual rise in the US. Our findings are invariant by anchor sex (see Figure A4). Furthermore, heterogeneity in exposure (as measured by the interquartile range) was largely stable over time but consistently higher for parents (see Figure A5).

=== FIGURE 4 HERE ===

Conclusion

Our historical analysis of multigenerational family ties of people born between 1700 and 1910 yields two main findings. First, although multigenerational supply and exposure increased in all European and North American regions, these changes were modest compared to the subsequent surge that has been documented for the 20th century (Uhlenberg, 1996). Second, in the early modern world, North America appears to be an outlier in terms of multigenerational supply and exposure. Parent and grandparent survival, as well as years shared by the family generations, were considerably longer here than in all European regions, especially compared with Central Europe. With the pervasive increases in survival starting in the cohorts of 1850, differences within Europe and between Europe and the US diminished, both in terms of multigenerational supply and exposure.

Crowdsourced online genealogies like the FamiLinx data provide unprecedented opportunities for historical demography (Billari & Zagheni, 2017; Colasurdo & Omenti 2024; Kaplanis et al., 2018; Stelter & Alburez-Gutierrez, 2022). In the present study, we focused on the "sweet spot" of the *FamiLinx* database that supports the analysis of historical but not of more recent trends (i.e., data are valid only for deceased profiles). Although the novelty of our results means that we lack direct benchmark measures for multigenerational family ties, the one existing study for a similar time period corresponds closely with our results (Chapman, Lahdenperä, Pettay, & Lummaa 2017). This study examined changes in the shared lifetime of grandchildren and grandparents based on genealogical church records from eight parishes of Finland, covering pedigree data from the late 18th to the mid-20th century. Similar to our findings for Scandinavia, results showed that increases in grandparent exposure commenced in the mid-19th century.

Our retrospective design looked back from anchor individuals to their parents and grandparents. This approach allowed us to determine the completeness of pedigree data by logical constraints, but it precluded a prospective view of an individual's survival into different family generations. The benefit of a prospective design is obvious when considering the selectivity associated with conditioning on anchor survival in our supply measure, especially in the high-mortality context in which our study cohorts spent their lives. A prospective design, instead, could model the probability of becoming a parent and a grandparent and the years lived in these family roles as a function of survival in infancy, childhood, adolescence, and adulthood as well as the timing and quantum of fertility in all generations. This way of looking from anchors to their children and grandchildren is feasible only if data completeness can be determined not (only) for anchor persons' ancestry, as done here, but (also) for their progeny. *FamiLinx* data do not currently meet this demanding criterion, but the rise of similar genealogical sources will pave a promising future for the historical analyses on the demography of the multigenerational family.

References

Arpino, B., Gumà, J., & Julià, A. (2017). *The demography of grandparenthood: the role of family histories* (No. 50). *RECSM Working Paper*. Barcelona, Spain. https://doi.org/http://hdl.handle.net/10230/30802

Bengtson, V. L. (2001). Beyond the Nuclear Family: The Increasing Importance of Multigenerational Bonds. *Journal of Marriage and Family*, 63(1), 1–16. https://doi.org/10.1111/j.1741-3737.2001.00001.x

Billari, F. C., & Zagheni, E. (2017). Big Data and Population Processes: A Revolution? In A. Petrucci, & R. Verde (Eds.), *Statistics and Data Science: new challenges, new generations. 28-30 June 2017 Florence (Italy). Proceedings of the Conference of the Italian Statistical Society* (pp. 167–178). Florence: Firenze University Press. https://doi.org/10.17605/OSF.IO/F9VZP

Blanc, G. (2020). *Demographic Change and Development from Crowdsourced Genealogies in Early Modern Europe*. Retrieved from https://hal.archives-ouvertes.fr/hal-02922398v2

Chamberlain, G. (2006). British maternal mortality in the 19th and early 20th centuries. *Journal of the Royal Society of Medicine*, (99), 559–563.

Chapman, S. N., Lahdenperä, M., Pettay, J. E., & Lummaa, V. (2017). Changes in Length of Grandparenthood in Finland 1790-1959. *Finnish Yearbook of Population Research*, *52*, 3–13. https://doi.org/10.23979/fypr.65346

Colasurdo, A., & Omenti, R. (2024). Using Online Genealogical Data for Demographic Research: An Empirical Examination of the FamiLinx Database [Preprint]. SocArXiv. https://doi.org/10.31235/osf.io/62yxm

Cozzani, M., Minardi, S., Corti, G., & Barban, N. (2023). Birth month and adult lifespan: A within-family, cohort, and spatial examination using FamiLinx data in the United States (1700–1899). *Demographic Research*, 49, 201–218. https://doi.org/10.4054/DemRes.2023.49.9

Dykstra, P. A., & Komter, A. E. (2006). Structural Characteristics of Dutch Kin Networks. In P. A. Dykstra, M. Kalmijn, T. C. M. Knijn, A. E. Komter, A. C. Liefbroer, & C. H. Mulder (Eds.), *Family Solidarity in the Netherlands* (pp. 21–42). Amsterdam: Dutch University

Press.

Hacker, J. D. (2011). A census-based Count of the Civil War Dead. *Civil War History*, *57*(4), 307–348. https://doi.org/10.1353/cwh.2011.0061

Hagestad, G. O., & Lang, M. E. (1986). The Transition to Grandparenthood: Unexplored Issues. *Journal of Family Issues*, *7*(2), 115–130.

Herlofson, K., & Hagestad, G. O. (2011). Challenges in moving from macro to micro: Population and family structures in ageing societies. *Demographic Research*, *25*, 337–370. https://doi.org/10.4054/DemRes.2011.25.10

Hsu, C. H., Posegga, O., Fischbach, K., & Engelhardt, H. (2021). Examining the trade-offs between human fertility and longevity over three centuries using crowdsourced genealogy data. *PLoS ONE*, *16*(8 August), 1–20. https://doi.org/10.1371/journal.pone.0255528

Kaplanis, J., Gordon, A., Shor, T., Weissbrod, O., Geiger, D., Wahl, M., … Bhatia, G. (2018). Quantitative analysis of population-scale family trees with millions of relatives. *Science*, *9309*(March), 1–12.

Kemp, C. L. (2003). The Social and Demographic Contours of Contemporary Grandparenthood: Mapping Patterns in Canada and the United States. *Journal of Comparative Family Studies*, *34*(2), 187–212. https://doi.org/10.3138/jcfs.34.2.187

Leopold, T., & Skopek, J. (2015a). The Delay of Grandparenthood: A Cohort Comparison in East and West Germany. *Journal of Marriage and Family*, *77*(2), 441–460. https://doi.org/10.1111/jomf.12169

Leopold, T., & Skopek, J. (2015b). The Demography of Grandparenthood: An International Profile. *Social Forces*, *94*(2), 801–832. https://doi.org/10.1093/sf/sov066

Margolis, R. (2016). The Changing Demography of Grandparenthood. *Journal of Marriage and Family*, *78*, 610–622. https://doi.org/10.1111/jomf.12286

Margolis, R., & Verdery, A. M. (2019). A Cohort Perspective on the Demography of

Grandparenthood: Past, Present, and Future Changes in Race and Sex Disparities in the United States. *Demography*, *56*(4), 1495–1518. https://doi.org/10.1007/s13524-019-00795-1

Margolis, R., & Wright, L. (2017). Healthy Grandparenthood: How Long Is It, and How Has It Changed? *Demography*, *54*, 2073–2099. https://doi.org/10.1007/s13524-017-0620-0

Rawlik, K., Canela-Xandri, O., & Tenesa, A. (2019). Indirect assortative mating for human disease and longevity. *Heredity*, *123*(2), 106–116. https://doi.org/10.1038/s41437-019-0185-3

Skopek, J. (2021). Grandparent status and multigenerational relationships. In N. F. Schneider & M. Kreyenfeld (Eds.), *Research Handbook on the Sociology of the Family* (pp. 278–299). Cheltenham, UK: Edward Elgar Publishing.

Skopek, J., & Leopold, T. (2017). Who becomes a grandparent – and when? Educational differences in the chances and timing of grandparenthood. *Demographic Research*, *37*, 917–928. https://doi.org/10.4054/DemRes.2017.37.29

Song, X., & Mare, R. D. (2019). Shared Lifetimes, Multigenerational Exposure, and Educational Mobility. *Demography*, *56*, 891–916. https://doi.org/10.1007/s13524-019-00772-8

Stelter, R., & Alburez-Gutierrez, D. (2022). Representativeness is crucial for inferring demographic processes from online genealogies: Evidence from lifespan dynamics. *Proceedings of the National Academy of Sciences*, 119(10). https://doi.org/10.1073/pnas.2120455119

Szinovacz, M. E. (1998). Grandparents today: A demographic profile. *The Gerontologist*, *38*(1), 37–52. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/9499652

Uhlenberg, P. (1996). Mortality Decline in the Twentieth Century and Supply of Kin Over the Life Course. *The Gerontologist*, *36*(5), 681–685. https://doi.org/10.1093/geront/36.5.681

Willigan, D. J., & Lynch, K. A. (1982). *Sources and Methods of Historical Demography*. New York: Academic Press.

TABLES

Table 1. Numbers of anchor profiles in regions and countries (today's borders)

Cluster/Country			N
North America		USA	83,695
Europe			94,097
	Western Europe		23,813
		BEL	1,406
		FRA	3,023
		GBR	6,100
		NLD	13,284
	Scandinavia		58,992
		DNK	5,721
		FIN	10,546
		NOR	23,415
		SWE	19,310
	Central Europe		11,292
		AUT	972
		CHE	1,395
		DEU	7,139
		POL	1,786
Total			177,792

FIGURES

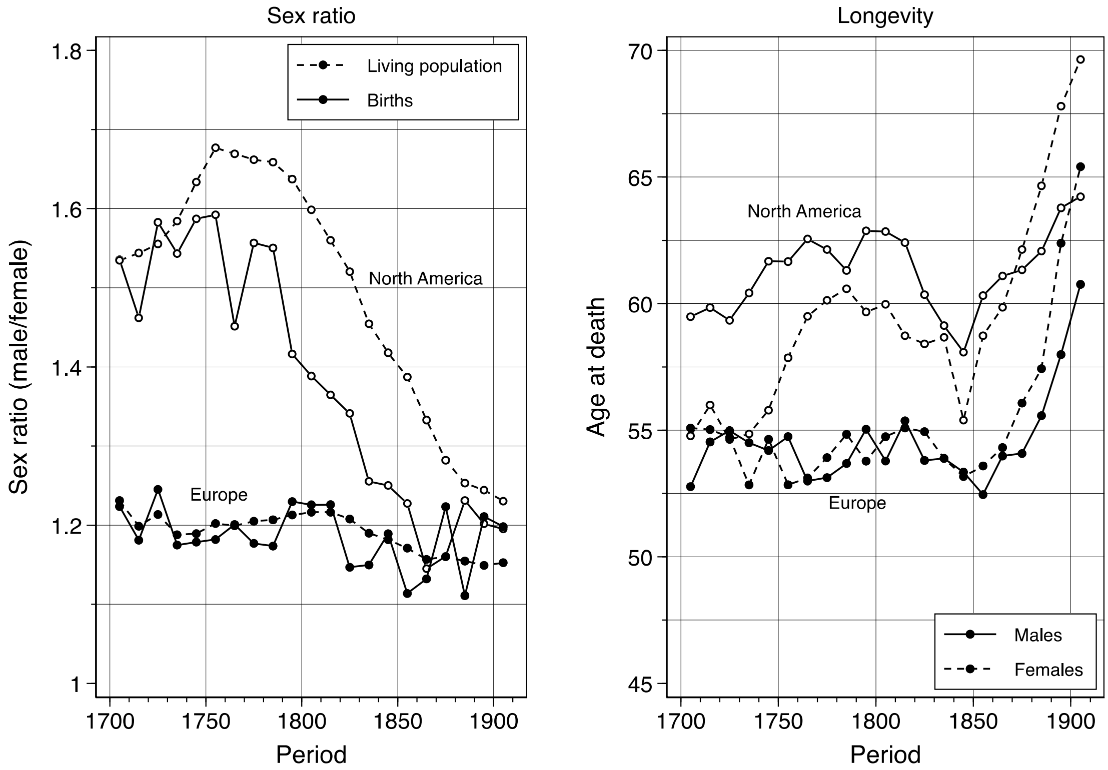


Figure 1. Sex ratios and gender differences in longevity (average age at death).

Figure 2. Supply of parents (average number of living parents by age).
Notes: Supply evaluated at anchor ages in the following order: Age 0 (grey hollow circles), 10 (green solid dots), 20 (red crosses), 30 (blue hollow diamonds), and 40 (yellow solid diamonds).

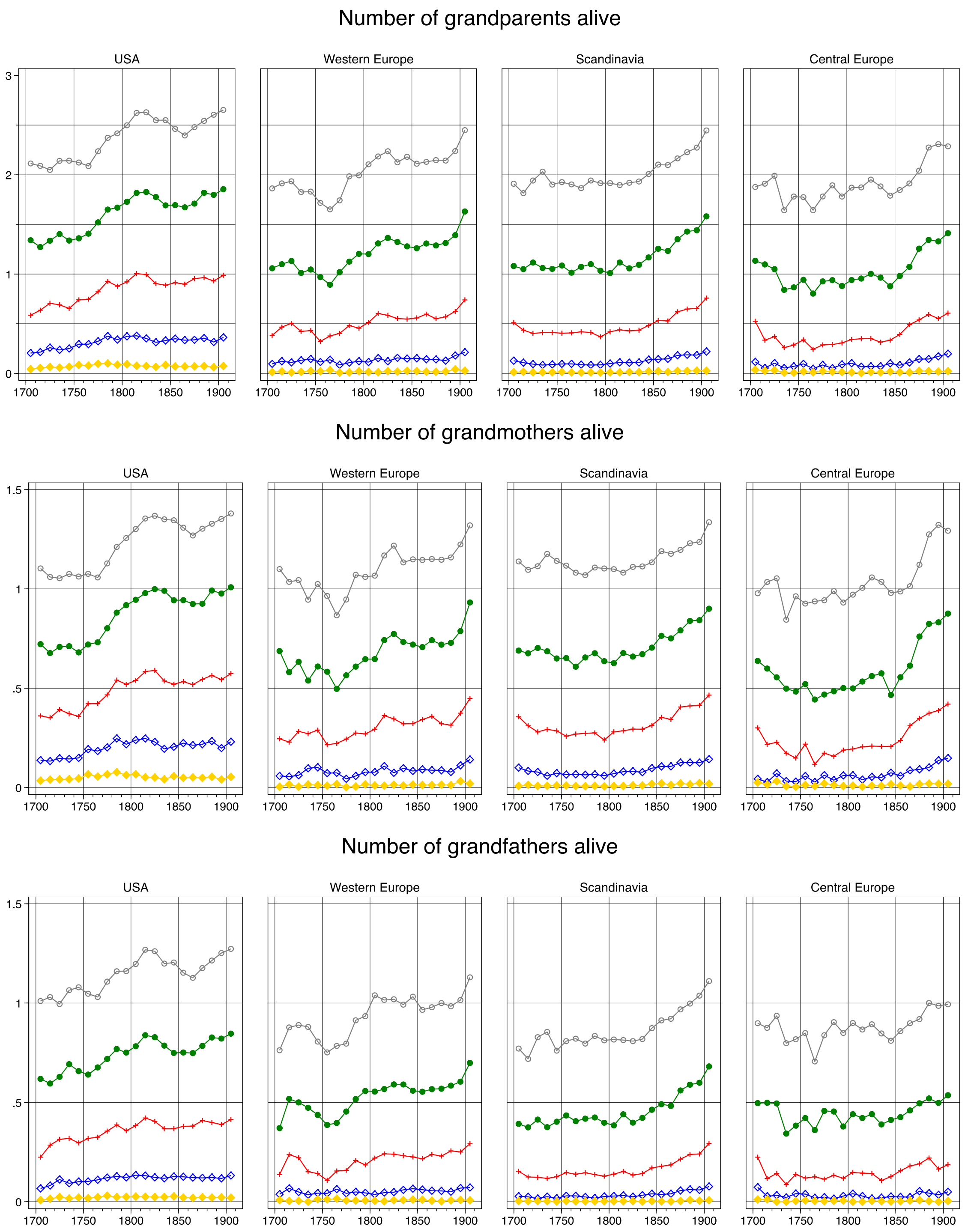


Figure 3. Supply of grandparents (average number of living grandparents by age).
Notes: Supply evaluated at anchor ages in the following order: Age 0 (grey hollow circles), 10 (green solid dots), 20 (red crosses), 30 (blue hollow diamonds), and 40 (yellow solid diamonds).

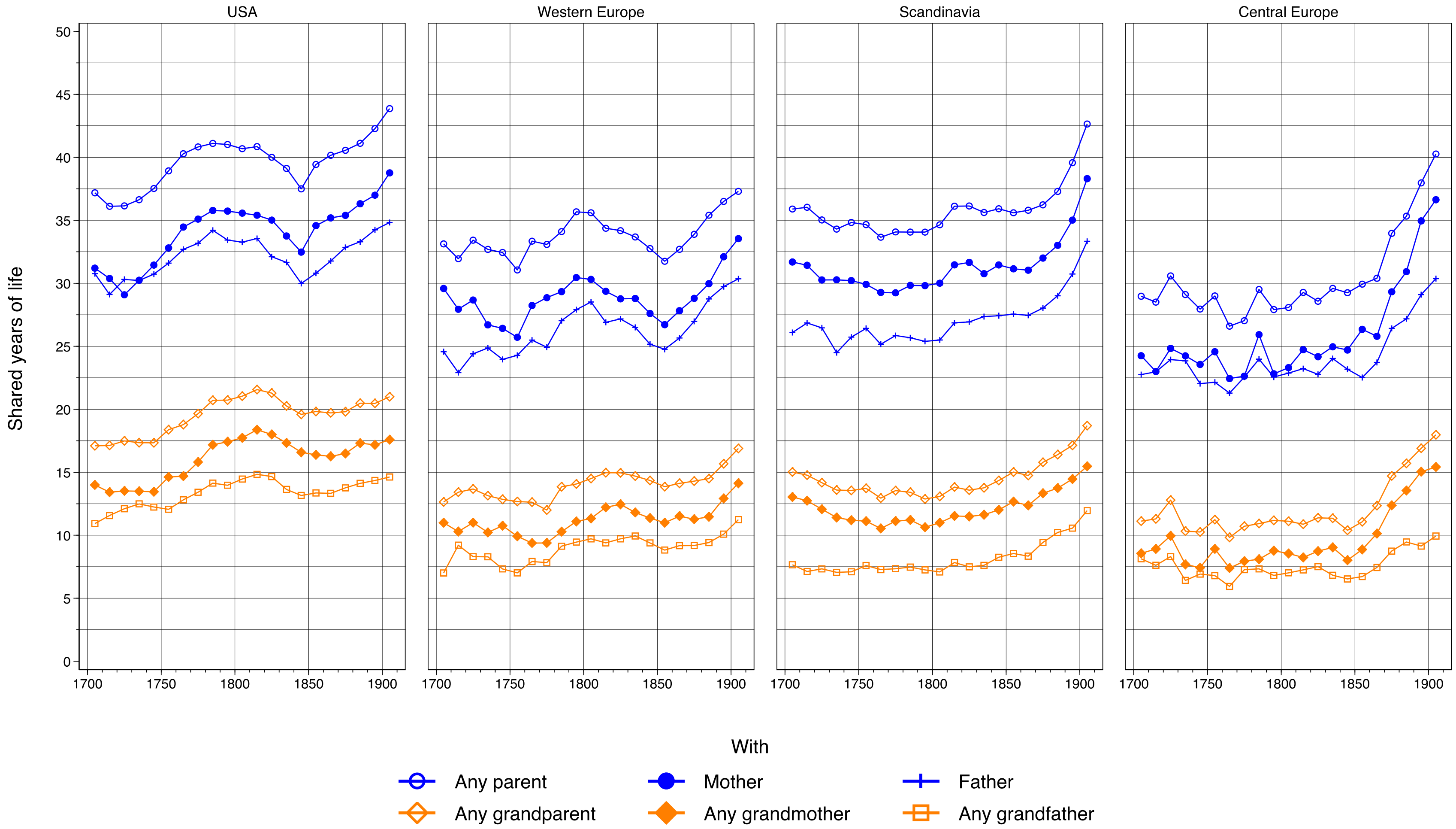


Figure 4. Average years of life shared with parents and grandparents.
Note: Any parent/grandparent = at least one parent / grandparent.

ONLINE APPENDIX

A1 Sample selection rules

See Table A1 below. Here we provide additional details:

- First, we selected only valid and complete records using flag variables provided at data retrieval (~-1%).
- Second, we restricted the sample to anchors for which full information on birth years were available across all three generations.
- Third, we dropped all cases for which the year of death was not available.
- Fourth, for the remaining 25% (N=220,597) of the sample we applied a series of retrospective selection criteria to remove implausible and sometimes clearly erroneous multigenerational data (e.g., the mother died before anchor's birth, the maternal grandmother was 1000 years old at birth of anchor, etc.).
- Fifth, we imposed restrictions on anchors' birth cohorts. Data are sparse before 1700 and after 1910. Moreover, anchors profiles born after 1910 are selective as the FamiLinx project extracted only public profiles already deceased at the time of extraction (confirmed in personal correspondence). Our restriction to anchor cohorts 1700 to 1910 is similar to the other studies using FamiLinx and cited in the paper.

Table A1. Sample selection

Sample selection step	N	%
Initial (North America and Europe)	889,155	100
Complete and valid profile	884,859	100
All generations: non-missing birth date	531,016	60
All generations: non-missing death dates if not alive	220,597	25
Anchor: Alive or if dead, age at death 0-110	220,360	25
Anchor: Dead or if alive, age at import 0-110	220,352	25
Father: Alive or if dead, age at death 0-110	220,220	25
Mother: Alive or if dead, age at death 0-110	220,081	25
Father: Dead or if alive, age at import 0-110	220,077	25
Mother: Dead or if alive, age at import 0-110	220,074	25
Parents: Non-missing age (at anchor birth)	220,074	25
Parents: Age strictly positive (at anchor birth)	219,579	25
Parents: Age between 12 and 70 (at anchor birth)	218,679	25
Mother: Year of death not before anchor's year of birth	217,332	24
Father: Year of death not before anchor's year of birth - 1	216,694	24
Grandfather (paternal): Alive or if dead, age at death 0-110	216,504	24
Grandmother (paternal): Alive or if dead, age at death 0-110	216,319	24
Grandfather (maternal): Alive or if dead, age at death 0-110	216,128	24
Grandmother (maternal): Alive or if dead, age at death 0-110	215,853	24
Grandfather (paternal): Dead or if alive, age at import 0-110	215,842	24
Grandmother (paternal): Dead or if alive, age at import 0-110	215,841	24
Grandfather (maternal): Dead or if alive, age at import 0-110	215,833	24
Grandfather (paternal): Dead or if alive, age at import 0-110	215,822	24
Grandparents: Non-missing age (at parent birth)	215,822	24
Grandparents: Age strictly positive (at parent birth)	214,146	24
Grandparents: Age between 12 and 70 (at parent birth)	211,357	24
Grandmothers: Year of death not before parent's year of birth	208,563	23
Grandfathers: Year of death not before parent's year of birth - 1	207,300	23
Anchor: Born 1700 to 1910	177,792	20

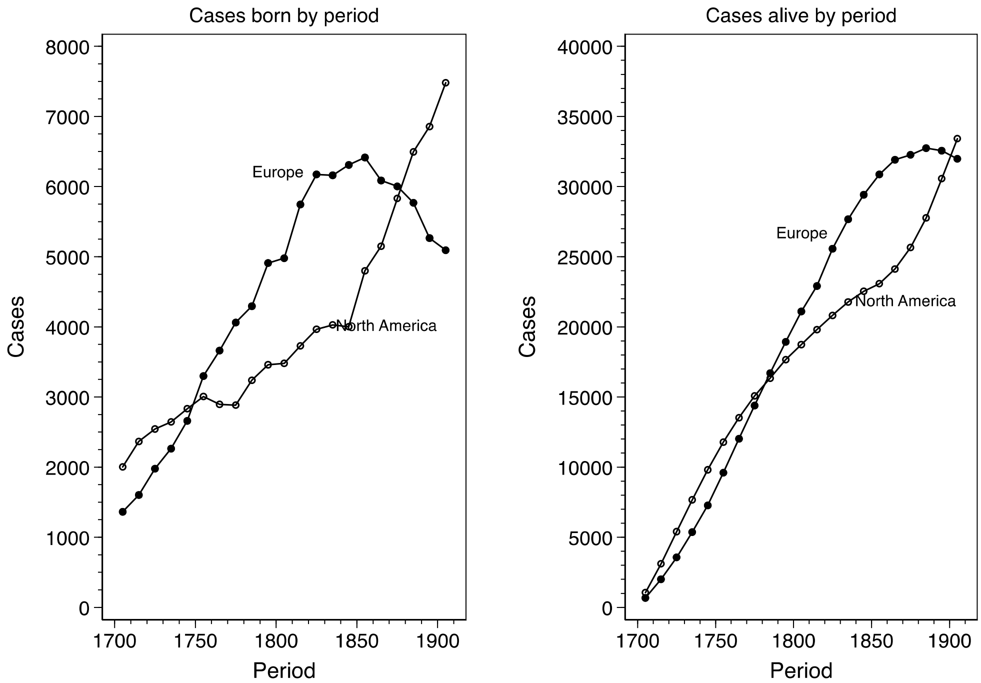


Figure A1. Cases born and cases alive by period and region.

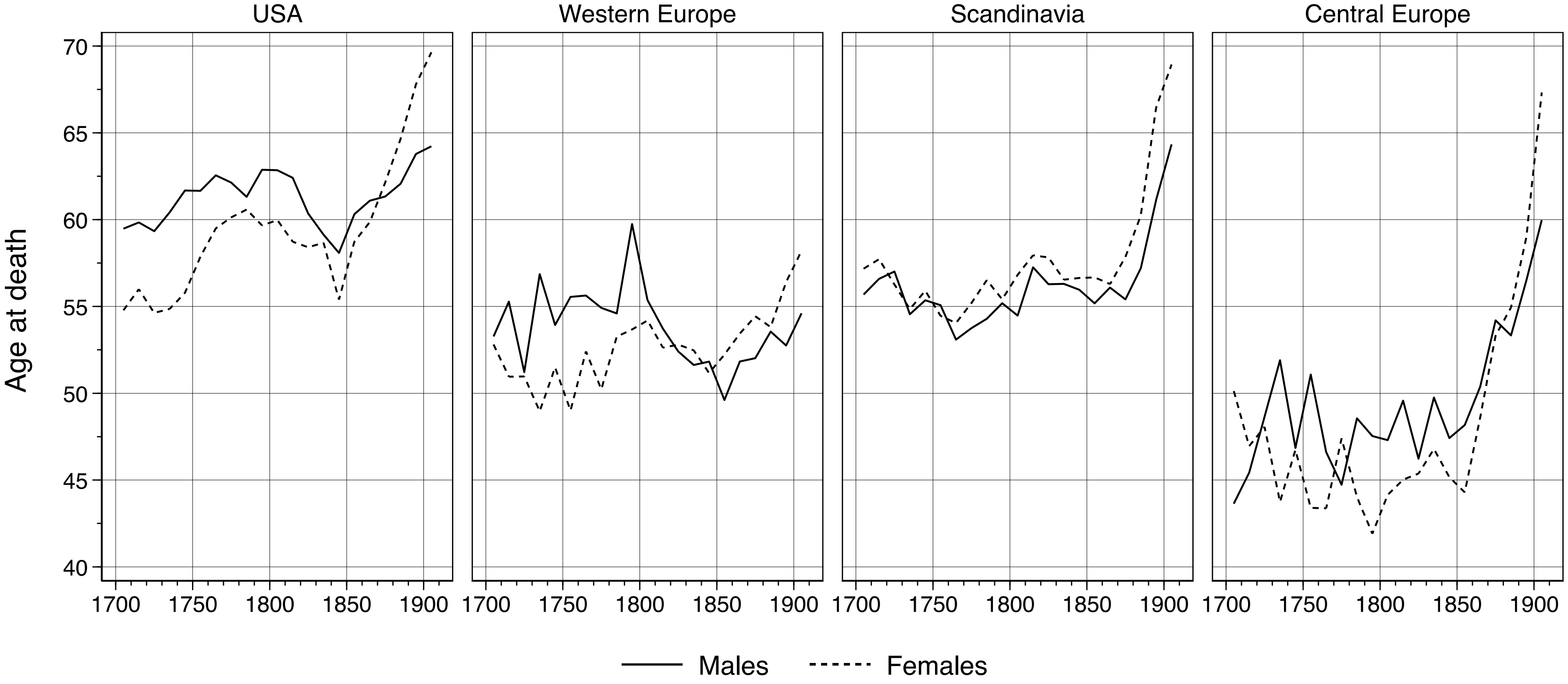
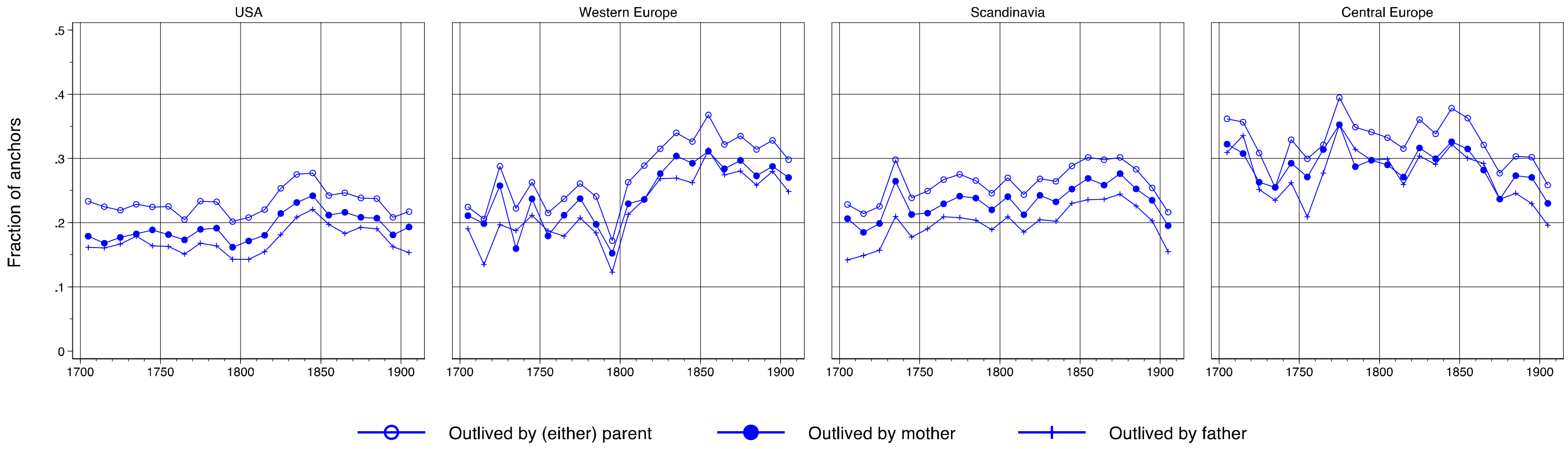


Figure A2. Gender differences in longevity by region.



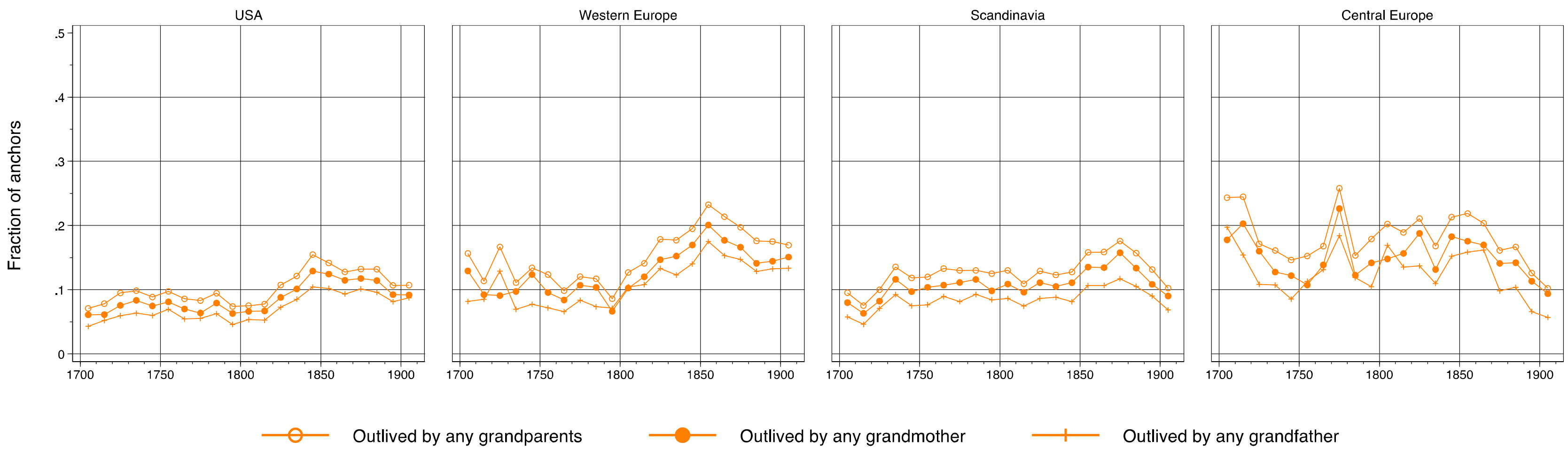


Figure A3. Fraction of anchors outlived by parents and grandparents.

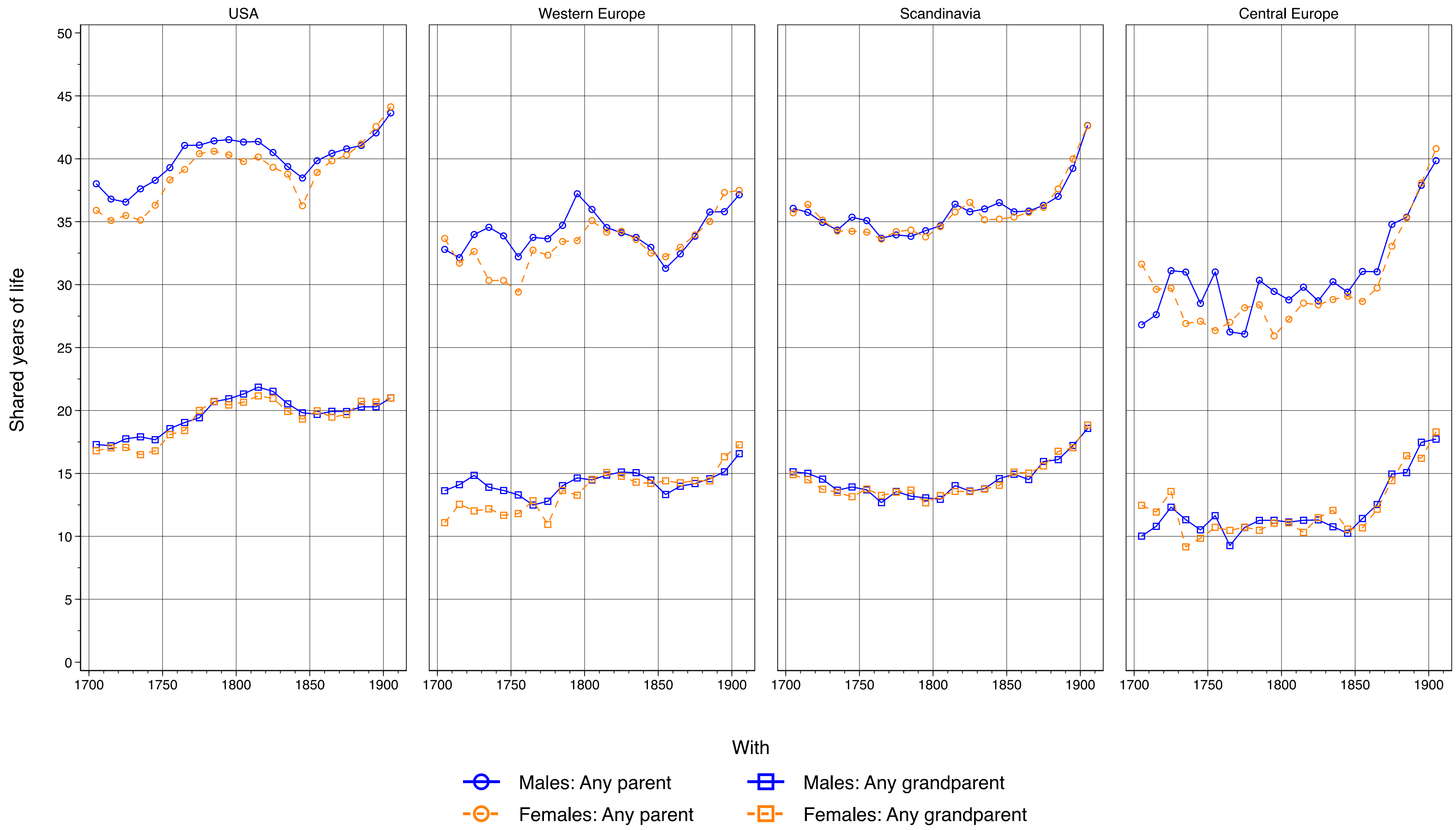


Figure A4. Sex differences in years of shared life.

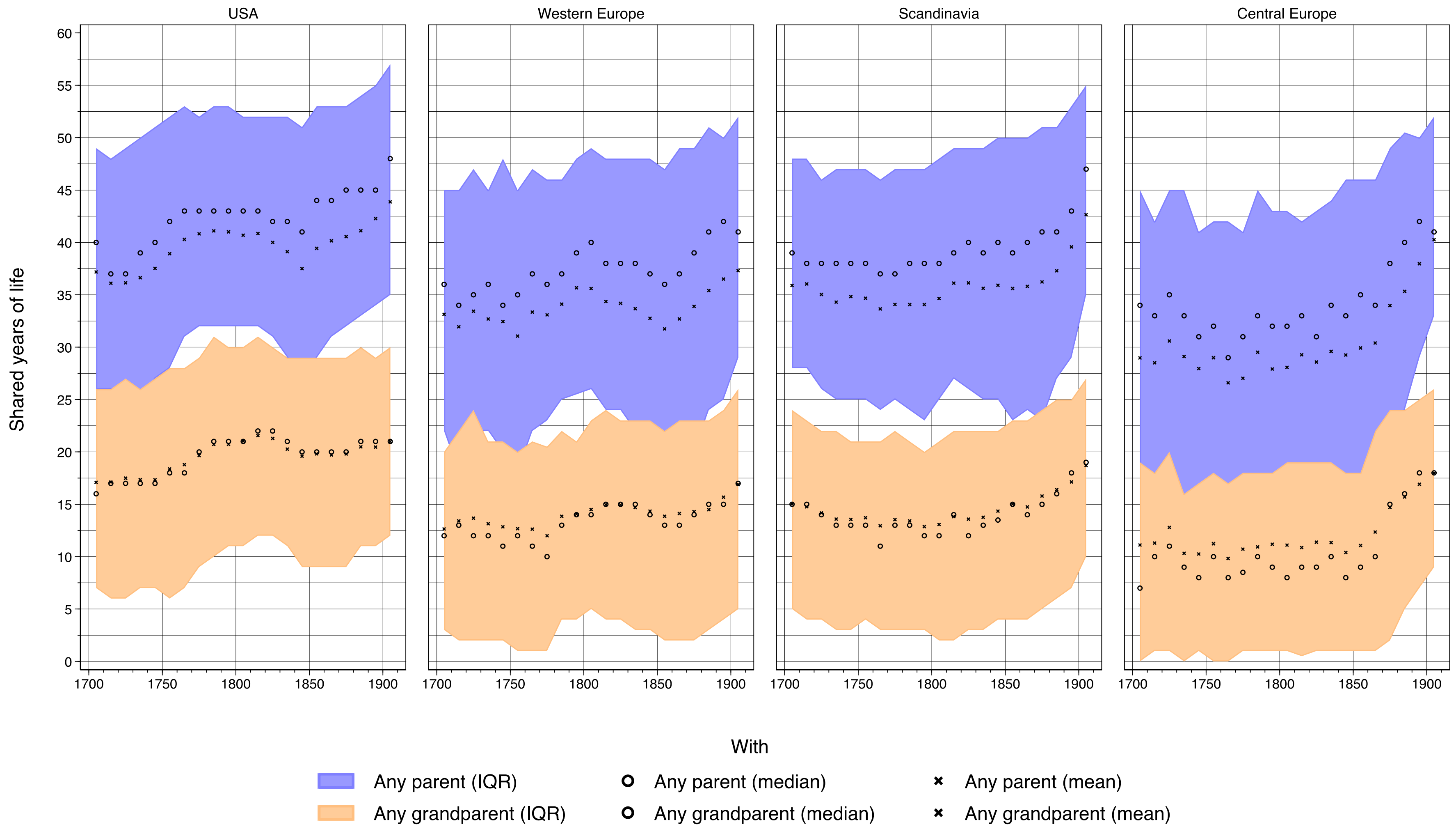


Figure A5. Years of life shared with parents and grandparents. Interquartile range (IRQ), median, and mean.