Households and kinship over the life cycle

Martin Kolk[a,b,c] and Emma Pettersson[d]

[a] Department of Sociology, Demography Unit, Stockholm University, Sweden

[b] Institute for Future Studies, Stockholm, Sweden

[c] Åbo Akademi, Vasa, Finland

[d] Department of Clinical Neuroscience, Karolinska Institutet, Sweden

martin.kolk@sociology.su.se

emma.pettersson@ki.se

We study all households in Sweden using register data on the complete Swedish-born population in 2017. The study takes an individual perspective and maps how the number and the types of household members people live with varies across different ages. We use register data to reconstruct family links, including extended kin such as cousins and grandparents, and compare differences by individuals' own gender as well as by the gender and lineage of their kin. The results show that Sweden is predominantly a nuclear family society, and that household composition follows the nuclear family life cycle, with the largest households occurring during childhood and the family formation years. We document the extent of complex families in Sweden, though find that these represent a modest share of all household relationships. We document clear gender differences in household composition, which are largest at older ages and in early adulthood. We conclude by reflecting on how our results compare to other times and places.

Introduction

Living arrangements in all human societies vary greatly across the life course. Some life course patterns are human universals, such as the co-residence of newborn with their parents. Others are highly culturally contingent, differing across household and kinship systems, historical periods, and welfare state arrangements. Even within a single society, household composition can vary substantially, both across socioeconomic strata and across ethno-cultural sub-populations. Across the world, one finds great variation in household arrangements (Esteve et al., 2024).

In many northwestern European societies such as Sweden, most men and women start to leave the parental household in their late teens and early 20s (Billari, Philipov, & Baizán, 2001; Dribe, 2000) At the other end of the life course, household arrangements among the elderly vary greatly across different welfare and kinship systems. In Sweden, elderly individuals typically live alone or with their partners (Reher, 1998). Living arrangements in all societies are both a cause and consequence of how resources are distributed across the human life course (Chayanov, 1925[1966]). The resources that individuals share with family members, as well as resources transferred through the state, are fundamentally influenced by household composition and the varying needs of household members at different life course stages (Lee & Mason, 2011).

In this study we document how household size, and the different family relationships a person has with those household members, vary over the life course in contemporary Sweden. We study both how the number of household members varies across individuals of different ages, as well as how household composition evolves. We study households over the life course from a multifaceted view, engaging with gender differences, household size, various less common extended family kin types, and the ages of the other household members. We put a particular focus on "complex" families formed through union dissolution and repartnering (Thomson, 2014).

We map how in Sweden, individuals are born in relatively large households consisting primarily of their parents and siblings. Throughout their childhood both size and complexity increase as the number of step-parents and half/step-siblings increase, though step-kin are only a small share of all household members. In their 20s, individuals leave the parental home, and live in smaller households with more non-relatives. As they advance throughout their 20s they form first new partnerships and eventually new nuclear families, and thus family size grows again, until they eventually live alone with their partner, and as they reach their 70s and 80s increasingly live alone. Broadly, our results are consistent with Sweden as an individualistic nuclear family-oriented society, characterized by neolocal household formation and a relatively early exit from the parental home. Most household members belong to either the nuclear family of procreation (where a child grows up), or nuclear family of destination (the new family in adulthood). Nevertheless, we document non-trivial shares of extended family relationships,

and their distribution over the life course. We also show the extent of non-family household members over the life course.

Background

Modernization theories have often focused on the emergence of the nuclear household as the dominant form of family organization in industrialized societies (Goode, 1963; Parsons, 1943). A central insight in family sociology is that in nuclear family-oriented contemporary societies, living arrangements shift over the life course as individuals leave their family of origin, form their own nuclear families, which eventually shrink in size as their own children leave their households. A large share of family sociology focuses on different parts of such a domestic life cycle, focusing on processes such partner acquisition, family structure during childhood, or intergenerational family relationships.

Nuclear family household organization is both the most normative and most frequent way of organizing families in most high-income countries, though it is well recognized that the extent of household formation that incorporates larger number of household members varies significantly across time, space, and household systems (Goode, 1963; Reher, 1998). In high-income societies, nuclear families predominate, but this is not necessarily true across the world (Esteve et al., 2024; Ruggles & Heggeness, 2008).

The Swedish family system has often been described as typical for the northwestern European family system, characterized by neolocal household formation, relative late ages for family formation, and comparatively low levels of intergenerational coresidence (Boholm, 1983). In present times, Sweden, has often been characterized as a society where government transfers make individuals less reliant on support from other household members (Berggren, Trägårdh, & Donovan, 2022). This is likely both an effect of and an explanation for the resilience of the northwestern European marriage patterns (P. Laslett, 1977), and Sweden continues to have low levels of intergenerational residence (Isengard & Szydlik, 2012). Consistent with this pattern, Sweden also has amongst the smallest households in the world (Esteve et al., 2024).

Sweden was a forerunner of many of the demographic trends that are sometimes referred to as the second demographic transition, including increasing family diversity from complex households. Today Sweden still has higher shares of complex families than most European countries, though lower levels than the United States (G. Andersson, Thomson, & Duntava, 2017). As a consequence, Sweden is a relevant benchmark country to assess frequencies and patterns in household patterns originating from complex families. Sweden is also interesting as a context where the meaning of complex families is undergoing transformation through increasing rates of shared residence of children following separation (Eriksson & Kolk, 2024).

Literature review of previous research

Research on households

Historians and demographers have a rich tradition of studying households and household sizes from the perspective of cross-sectional data sources such as census data, where each member of a household is assigned either as the head of the household or through the relationship to the head. Historical demographers became very focused on household size in a comparative perspective starting in the 1960s (Peter Laslett, 1965; Peter Laslett & Wall, 1972). Initially, researchers where primarily interested in general topics of the size of households compared over time and region, but increasing attention has been focused on the role of the life course and age in determining household composition (Lundh, 1995; Ruggles, 1994). Starting in the 1980s social scientists began focusing more on individual level perspectives on an individual's relationship to other household members (Kok & Mandemakers, 2010; Ruggles, 1994).

Research on households in contemporaneous societies followed quite similar patterns. Many studies of household formation in the 1960s to 1990s used households as a unit of analysis (Iacovou & Skew, 2011; Keilman, 1988). When using households as a level of analysis, the focus centers on household typologies, such as single-person, extended or nuclear family arrangements. While research on various aspects of household composition typically have an individual-focus, such as those of children (G. Andersson et al., 2017), or the elderly (ref), research focusing on full populations, have until recently often had household based focus.

Since the 2020s, comparative research on households across the world has seen growing amount of interest, with increasingly sophisticated analyses of harmonized census data (Ruggles, McCaa, Sobek, & Cleveland, 2015). Recent research has documented broad patterns of higher prevalence of multigenerational households in poorer societies, while nuclear families predominate in high-income countries (Esteve et al., 2024; Esteve & Reher, 2024). Time trends are however more complex, and intergenerational coresidence is increasing in many low and middle income settings (Esteve & Reher, 2024; Ruggles & Heggeness, 2008). Over time, single-person households are growing in number, and households are generally growing smaller (Esteve et al., 2024). Much of the decline in household size is explained by falling fertility (Esteve et al., 2024).

Recent census-based household research typically adopts an individual perspective on family relationships and households (Esteve & Reher, 2024; Ruggles & Heggeness, 2008). Some recent studies have also had some focus on examining family relationships by age (Esteve et al., 2024; Liu & Esteve, 2021), though focusing on a less detailed set of family ties than in this study. In a variation on the theme of studying family relationships by age, Esteve and Reher (2024) use cross-sectional data to construct individual-level synthetic life courses showing time spent in different households arrangements.

Recent research has documented increasing shares living with "non-relatives" in high-income countries (Esteve et al., 2024; Jeffers, Esteve, & Batyra, 2024). The type of "roommate-like" arrangements documented by census data differ substantively from the non-genealogically related kin we later document in our study, where step-parents, step-sibling and step-children are common. We expand on this research clearly defining non-genealogical kin, who are fully integrated into the nuclear family household, examining how non-kin household membership varies by age, whether they can be recognized as a step-family relationship, and how the ages of the non-kin differs across life course state.

The most extensive research on households beyond the nuclear family, is found in aging research, focusing on multigenerational households, with the focus on three generational households. Researchers have documented large international differences in the living arrangements of older individuals (refs), and the number of children living in households with grandparents (refs). In contrast, to social science research on households, such research has typically have used to individual as the unit of analysis.

Research on kinship

Beyond research on households, the 2010s and 2020s have seen the reemergence of quantitative kinship studies in the social sciences. While kinship was central to comparative social science perspectives in the early 20th century, interest in non-nuclear households declined in the social sciences in the second half of the 20th century. Recently, however, there has been more attention to extended family relationships and households (Bengtson, 2001; Mare, 2011), with a particular expansion of new work in kinship demography (Alburez-Gutierrez et al., 2022).

A multitude of new quantitative approaches have been developed to better map kinship in contemporary societies. Administrative data such as the one in this study have been used to map complete kin counts of high-income populations such as Sweden (Kolk, Andersson, Pettersson, & Drefahl, 2023) and the Netherlands (de Bel, Bokányi, Hank, & Leopold, 2024). Researchers have examined socioeconomic differences (L. Andersson & Kolk, 2023), as well as used geographic longitudinal data (Kolk, 2017). Survey data have also been used to estimate kin relations (Daw, Verdery, & Margolis, 2016; Dykstra & Komter, 2006). So far, research on kinship using administrative data have been primarily focused on genealogical relationships, and not households.

In contexts lacking high quality data, increasingly complex methods to estimate kinship have been developed, such as microsimulations (M. Murphy, 2011) and increasingly sophisticated analytical models (Caswell, 2020). A great advantage of such data is that they allow estimates of kinship in all countries with sufficient quality age-specific rates (Alburez-Gutierrez, Williams, & Caswell, 2023).

Previous research on Swedish households have for example studied life course household presence and geographic proximity (Kolk, 2017), living arrangements of children (G. Andersson et al., 2017), or the

inclusion in various comparative studies (Isengard & Szydlik, 2012), though little research has focused on living arrangements of the entire population of Sweden across sex and ages.

Research designs for counting, measuring, and classifying households

In the current study we give a life course perspective on kinship, based on enumerating individuals of different birth years (ages) in a single year. We are not aware of any research that fully explores household formation across an entire life span, with full information on household composition at all ages, as this would require extreme data demands (requiring up to a hundred year of observation). As such, we give a snap-shot picture of household composition by age, accurately describing the Swedish population in 2018, rather than any cohort over their life span. Consequently, our life course perspective is entirely "synthetic", examining different birth cohorts with different ages at a single time point, a feature of our data that should be kept in mind at all times when analyzing the data.

We apply a fully individualistic focus on households from the perspective of the individual within the household, and the person's relationship to other household members. We use age as the primary dimension of household composition we explore, which follows naturally from an individual level perspective. As a consequence we also then focus on family positions within the household, which we define from other registers than households (primarily genealogical parent-child links from administrative registers). These family relationships vary substantially over the life course. It makes little sense to study the number of grandchildren of a teenager, or the number of grandparents of an old person, in a household. Individuals' exposure to different categories of family members shifts across the life cycle, as an individual acquires and lose kin through demographic processes, and as households evolve through people leaving, joining and forming ner arrangements.

In contrast, much previous household research has used households as the unit of analysis. These studies typically define households by their structural characteristics, such as the number of generations present, the presence of an intact partnership union, household size (e.g. if it is a single person household), or the characteristics of the household "head". Since household include individuals of different ages and positions, they cannot be assigned a single "age". While we examine many of the same topics as household-oriented research, such as household size, we approach them from an individual's perspective, by for instance studying the number of other household members.

To be able to quantitatively analyse household composition and households, which have different number of members, the concept of a single "head of household" has been central in much research on households. While of clear historical sociological relevance, and linked to data collection processes, and in some contexts (though not in Sweden) to taxation, it is also fundamentally an arbitrary

assignment, and is clearly related to a patriarchal organization of a society. The concept has been argued to have less and less meaning in increasingly gender egalitarian and individualistic contemporary societies (M Murphy, 1991), and can be entirely avoided if one studies individual of both sexes from the perspective of all possible kinship roles. Similarly. attempts to forecast households have increasingly moved towards individual level perspectives (Keilman, 2019).

Our research makes several contributions to ongoing research on households and kinship, by introducing high-quality household register data, to estimations of kinship based on longitudinal national administrative data source (e.g. Kolk et al., 2023). We see our research design as a synthesis of recent advances in quantitative kinship research, and comparative research on international households using census data.

We create a period view of households and kinship in a given year (2017), examining both the number and type of kin that individuals born in different years live with in the reference year. As we can establish all genealogical links independently of our household registers through parent-child linkages, our approach differs from censuses and surveys where people self-identify their relationships to the household head. Thus, our data do not rely on how the head of household is assigned, or individuals own assessment on how to for example classify adopted children, step-children or biological resident children.

This approach differs in important ways from the main body of literature on households where the relationship to the assigned head of household is central (Esteve et al., 2024; Ruggles, 1988). Another concrete advantage of relying on genealogical links, is that we are not limited to pre-constructed kinship categories such as “grandmothers” or “aunts. We can further sub-divide such kin into a mother’s mother or brother’s sister, and even those sharing only partial genealogical links (e.g. an aunt related to only one grandparent). Indeed, we find such differences to be substantive, in for example the higher share of co-residential maternal grandmothers.

In our study, similar to a census, we have micro-level data on each individual resident in a household. An advantage compared to a traditional census study, is that we can estimate the share of a given kin type that is both resident *and* not-resident with an individual, as we have data on all kinship ties regardless of residential status. Thus, we can estimate not only how many people live with a given type of kin, but also what proportion of that relative type lives with the focal individual. For example, we can not only estimate how many people that live with an aunt, but also what proportion of people that are genealogically an aunt, who lives with their nephew or niece.

Our usage of national level register data also allows us to in detail calculate the distribution of household size, and the contributions of various categories of kin to average household size.

Unfortunately, the absence of public Swedish census data (and their eventual abolishment) means that Sweden is absent form contemporary IPUMS derived research, and direct comparisons with our approach and census data is not possible.

Data and methods

Our data is derived from a combination of register data, most importantly including the total population register of Sweden that defines our population, parent-child links since 1932 allowing us to create a deep kinship network, and the Swedish household register available since 2012 which contains household data on all Sweden's. Our study population is all Swedish born individuals resident at the end of 2017 in Sweden. When calculating data on household members of our study population, we additionally include all individuals' resident in Sweden, including also non-Swedish born household members. Given the migration history of Sweden, this means that our study population includes mostly ancestral Swedes at older ages, while the youngest generations born after the 2000s more often include second-generation migrants, born to recently immigrated parents. These individuals will seldom have grandparents there grandparents recorded in Swedish registers (cf. Kolk et al., 2023).

Most of our categories of kin are strictly genealogical and based on observed parent-child links, that are combined across multiple generations to create more complex kin relations (e.g. a cousin is connected trough an ego's parents'parents' childrens' children). The main exception is our partnership variable that is a combination of civil status registers for official different-sex and same-sex marriages (same-sex marriages include both registered partnerships and later legal same-sex marriages), and Statistics Sweden's household derived definition of a cohabiting partner. We describe the partnership variable in further detail in supplemental text X, which is based on a household being composed of 2 different-sex individuals with an age gap smaller than 15 years co-residing (excluding potential adult household members with known genealogical links). The same approach has been used previously to defined partnership in Swedish registers (Lindmarker, Kolk, & Drefahl, 2025). Finally, we have a category of "non-kin" which are individuals which are not captured by any of the above, which captures household members such as roommates, friends, and plausibly to some extent household misregistration. It is a very diverse group capturing both friends living together, lodgers sub-letting rooms in dwellings, and students sharing dwellings with joint kitchens, and some institutional living arrangements.

Our data on households are purely administrative, and the quality of our data is a reflection of the quality of underlying registers. Several potential concerns are related to the usage of such data sources, ranging from minor to potentially concerning, including miss-registration (in particular of migrants and students), dual residence of children, mobile sub-populations (refs). We discuss and evaluate these issues at greater length in supplemental text A.

A specific conceptual challenge is related with the rise of shared physical residency, where children de-facto live half their lives with each parent, and thus are not based in two rather than a single household. Swedish law and registration only allows individuals to be registered at a single dwelling. We discuss this at length in supplemental text S1, as well as report the frequency and demographic patterns of shared physical custody.

We describe possible data issues in further detail in supplemental text S1, where we in particular discuss the nuances of assessing "step-kin" in the age of shared physical custody, as well as possible data registration issues. Regarding misregistration we conclude that overall we see relatively little evidence of misregistration for our Swedish born-individuals, though it appears to be somewhat larger (while still not dramatic) among our youngest Swedish born individuals, that to a larger extent are second-generation migrants with recently arrived parents, where both the quality of register data for genealogical links are worse, and they also have less access to secure long-term housing.

In supplemental text S1 we also describe some other nuances in the interpretation of the non-kin share of our results, related to institutional living of the very old, and some undercounting of cohabiting (same-sex) partnerships. In supplemental text S1, we finally also discuss how some kinship relations may be truncated for some older cohorts, due to the partial absence of registration of parent-child links before the 1940s.

Results

We begin by giving an overview of household size over the life course, where we show average household size by age, and group household members into major categories of kin (figure 1a). The short-dashed line shows average number of other household members by age (including ego), and the long-dashed line show the number of household members other than ego. The average number of household members across age has a bi-modal shape, and characterized by large households in childhood (a peak at a little over 3 other members on average, at ages 5-12), and family formation ages (a peak at around 2.5 around age 40), with moderately low household size in young adulthood (a local minima around age 25 a little under 1.5), followed by continuously decreasing household size from the mid 40s to very old age, eventually going down to less than 0.5 other household members.

The shape of the curve follows the northwestern European kinship system centered around a family of origin (where ego is a child) and the family of destination (where ego forms a family themselves),

characterized by nuclear families and neolocal household formation. This is also strongly reflected in the type of household members in figure 1, where in childhood most household members are parents and siblings, eventually being replaced by ego's partner, and at age 30-55 joined by children of ego. Towards the end of life Swedes mostly live with their partner, and at very old ages increasingly alone. There is some modest contribution of non-kin members across the life course, whereas extended kin outside the nuclear family are rare, though most common in the first years of life.

Gender differences are shown in figure 1b, where we also show the different types of kin as non-stacked lines, and in figure 1c where we show the gender difference in kinship directly. Overall, there are not very large gender differences in overall household composition between men and women. Women are much more likely to live with children, and to a lesser extent a partner. Women also leave the parental home earlier in their early 20s (reflected by having a partner at an earlier age, and being less likely to live with parents and siblings), though these differences eventually disappear.

The differences are largest at older ages, where men are much more likely to live with a partner (due to higher male mortality, and men marrying younger women). When looking at total household size the differences are largest at age 20 (men live more often in their childhood home), at around age 35 (women live more often with children), and after age 70 when women more often live alone as widows.

Figure 1a: Average household size by age and type of relationship in 2017 for individuals born in Sweden.

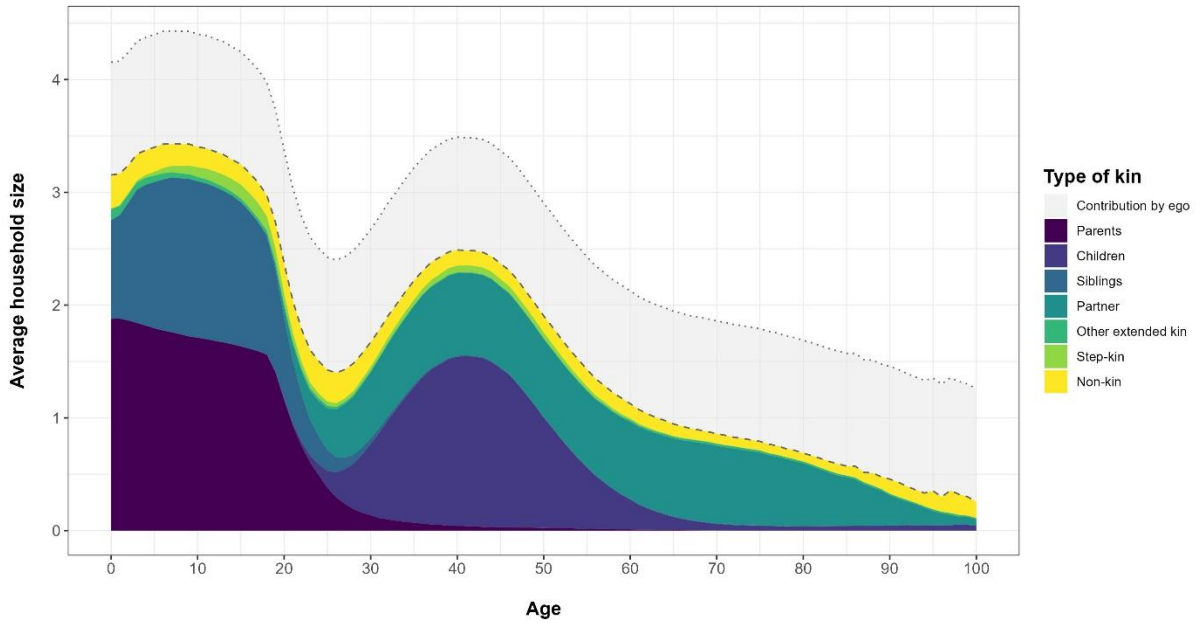


Figure 1b: Average household size by age and type of relationship in 2017 for individuals born in Sweden, by sex

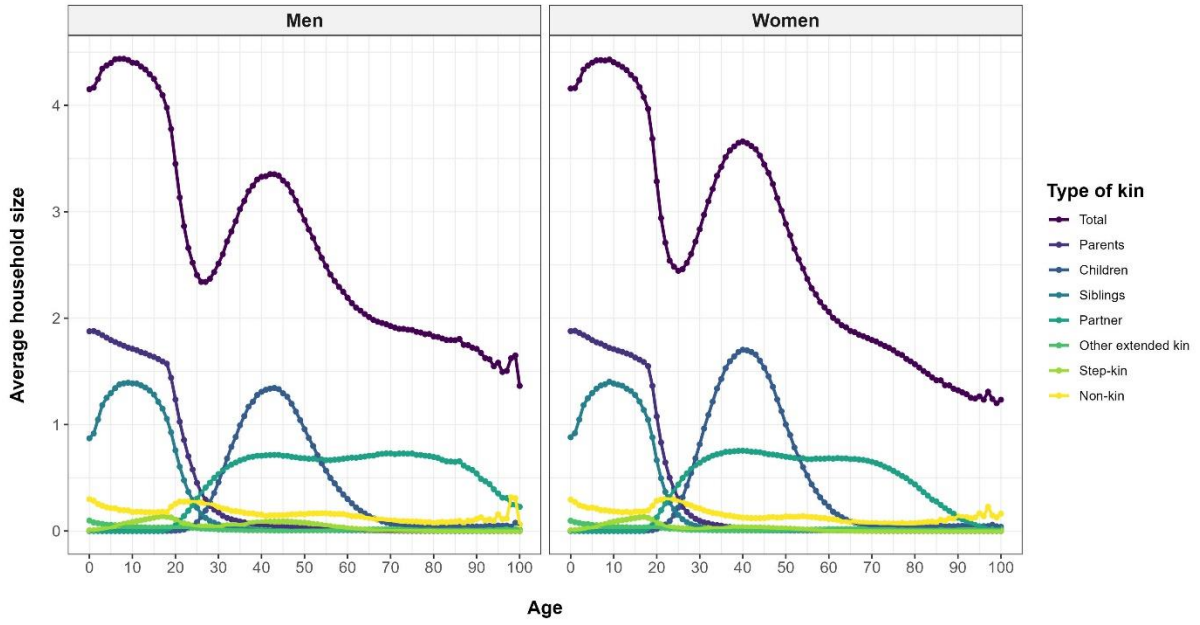
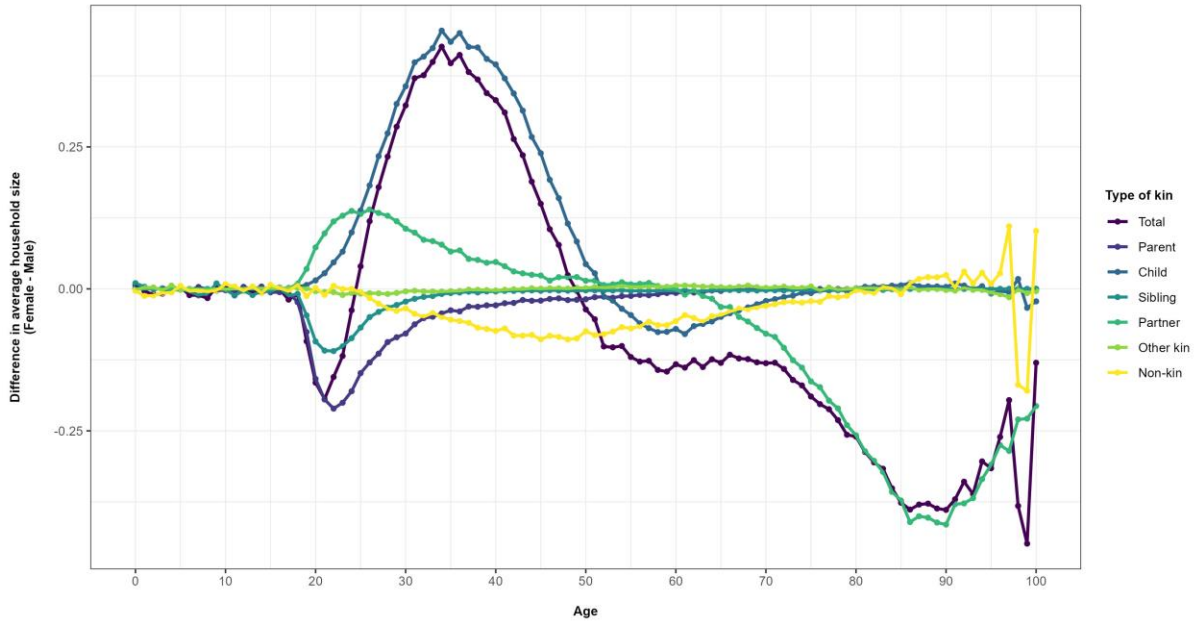


Figure 1c: Sex difference in average household size by age and type of relationship in Sweden for individuals born in Sweden

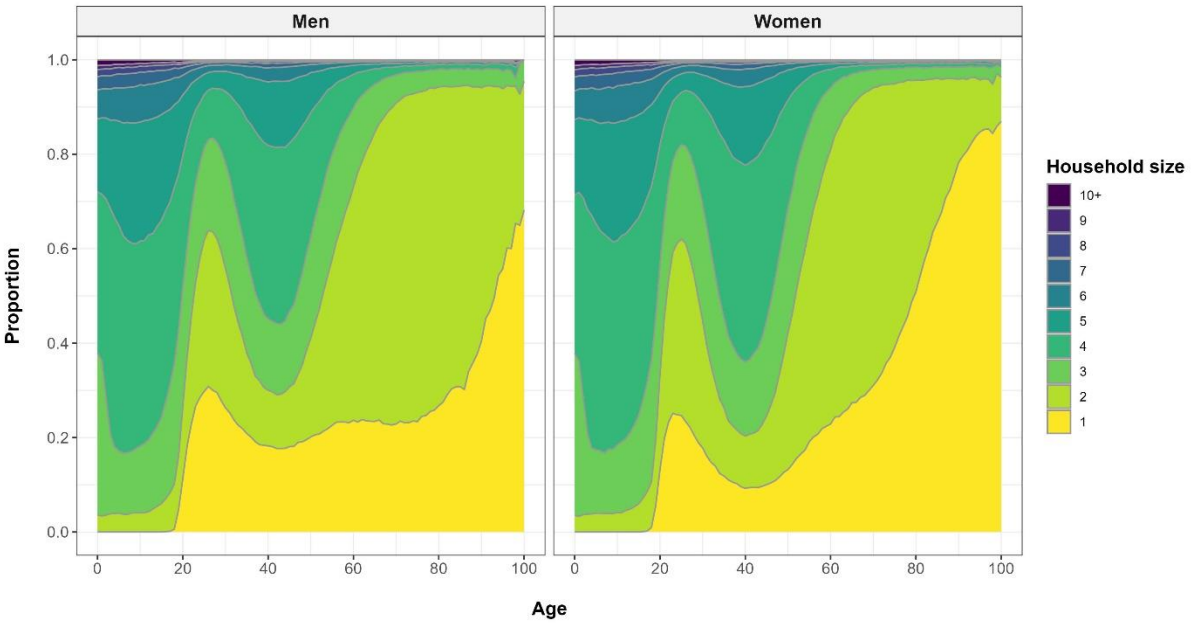


In the next section we explore the distribution of household members by age in Figure 2. In Figure 2a, we show the share of household size by age in Sweden, by sex. The bi-model shape in average household size is reflected in the distribution of household members. By far, the largest households are found among the youngest, where 40% live in households with 4 or more members and around 7% live in households with more than 7 members. Single-person households become common at around age 20, reaching a local peak above 25% before dropping off and then increasing again toward old age.

There are very strong gender differences in single-person households, where they are more common among men in young/mid-adulthood, but become much more common among women in old age, reaching 50% at age 80, and eventually going over 80% at very old ages. Two-person households are most common around age 25 and again in old age, with lower prevalence between ages 25-35.

In family formation ages household size is quite diverse, ranging from 0 up to 7+. The absences of very large households (less than 3% ??? with 7 or more members) among both men and women aged 30-55 is quite striking in an historical and cross-cultural context, consistent of the idea of Sweden as a nuclear family society. One reason for the difference in number of large households among the very young and the middle-aged, is that children growing up in families with many siblings form a larger share of all children, than the number of parents who have many children (cf. Preston, 1976). The same fertility pattern (where cohort fertility was nearly constant in 20th century Sweden) give rise to different distributions from the perspective of a child and a parent. In supplemental figure SX we show the contribution of different household sizes to average household size (cf . Figure 1). These results, confirm that the importance of larger households mostly early in life, and that large households contribute little to average household size in Sweden.

Figure 2: Distribution of household size by age and sex in Sweden for individuals born in Sweden.



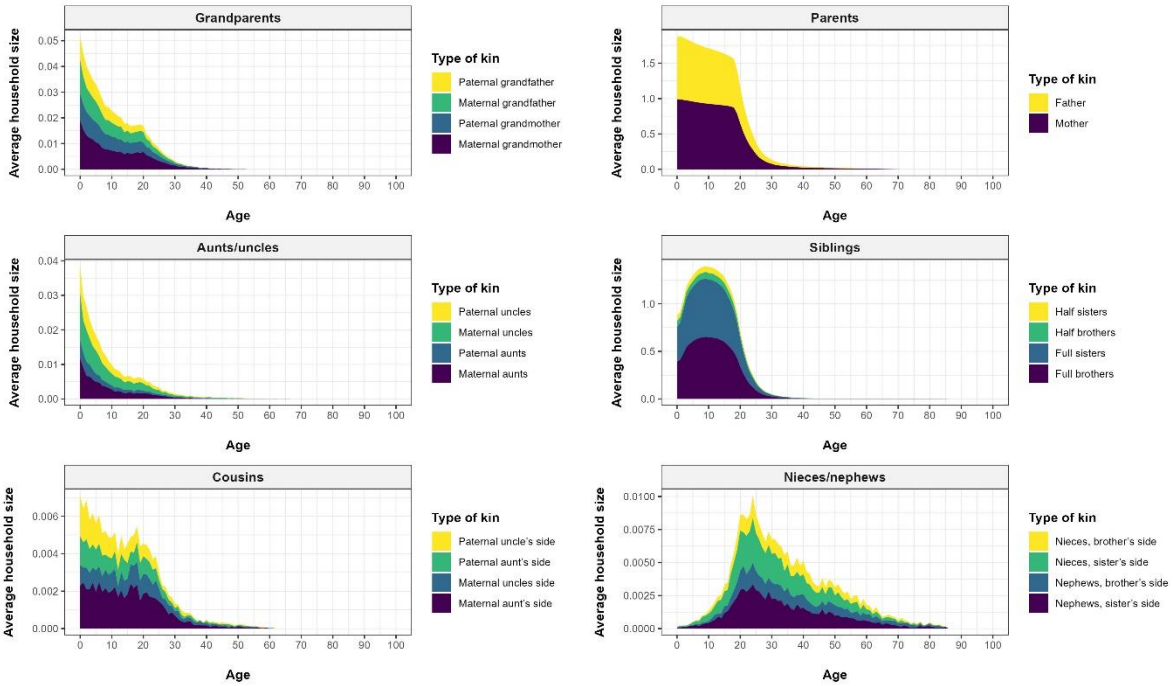
In figure 3a (showing kin members that differ little by sex) and 3b (showing kin members that differ more by sex), we explore different categories of household members over the life course in greater detail. In figure 4, we show the share of kin with at least one of the different types (e.g. living with at least one daughter, at least one son, or at least one child). We both show very common categories of kin (parents, partners, children, siblings), and less common categories such as step-kin and kin outside the

nuclear family. The frequency of different kin members vary substantially, so the range of the y-axis varies greatly.

Individuals live with parents over their childhood, with nearly all living with two parents at birth (reflecting low rates of single motherhood in Sweden). By age 20, individuals live with an average of 1.5 parents, and while co-residence with parents remains common in the early 20s, very few remain in parental homes by age 30 (0.25 parents), and nearly none by age 40. It is more common to live with mothers than with fathers, though this difference diminishes after age 20. At age 45 to 60, nearly no one lives with parents, reflecting that intergenerational households where adult children provide care to older parents is very uncommon in Sweden.

Sibling co-residence peaks at around age 10 and after age 25 it is very uncommon to live with siblings. It is more common to live with half-siblings at age 10-20 than age 0-20. Extended kin are uncommon in Sweden as seen in Figure 1a, but are most common in early childhood as seen for aunts/uncles and grandparents where individuals at age 0 live with around 0.05 of each. There is a maternal and female bias for both types of kin, where the maternal lineage effect is stronger. It is very uncommon to live with both cousins (if so early in life) and nieces/nephews (if so in adulthood)

Figure 3a: Average household size by age and type of relationship in 2017 for individuals born in Sweden, by detailed classification of kin relationship.



In figure 3b, we show the average household size by kin types and gender. The proportion having a partner increase from around 0 at age 18 to around 0.7 at age 40, with women partnering slightly earlier than men. Cohabitation dominates partnerships until age 30, after which the share gradually decreases with age to very low levels by age 80. The trend after age 50 are likely a reflection of a cohort effect.

Same-sex marriages remain relatively rare in all periods, though here we have no data on same-sex cohabiting partnersips. For men, partnership is quite stable from age 35 to age 80, after which their partners start to pass away. For women widowhood happens earlier, and to a much larger extent.

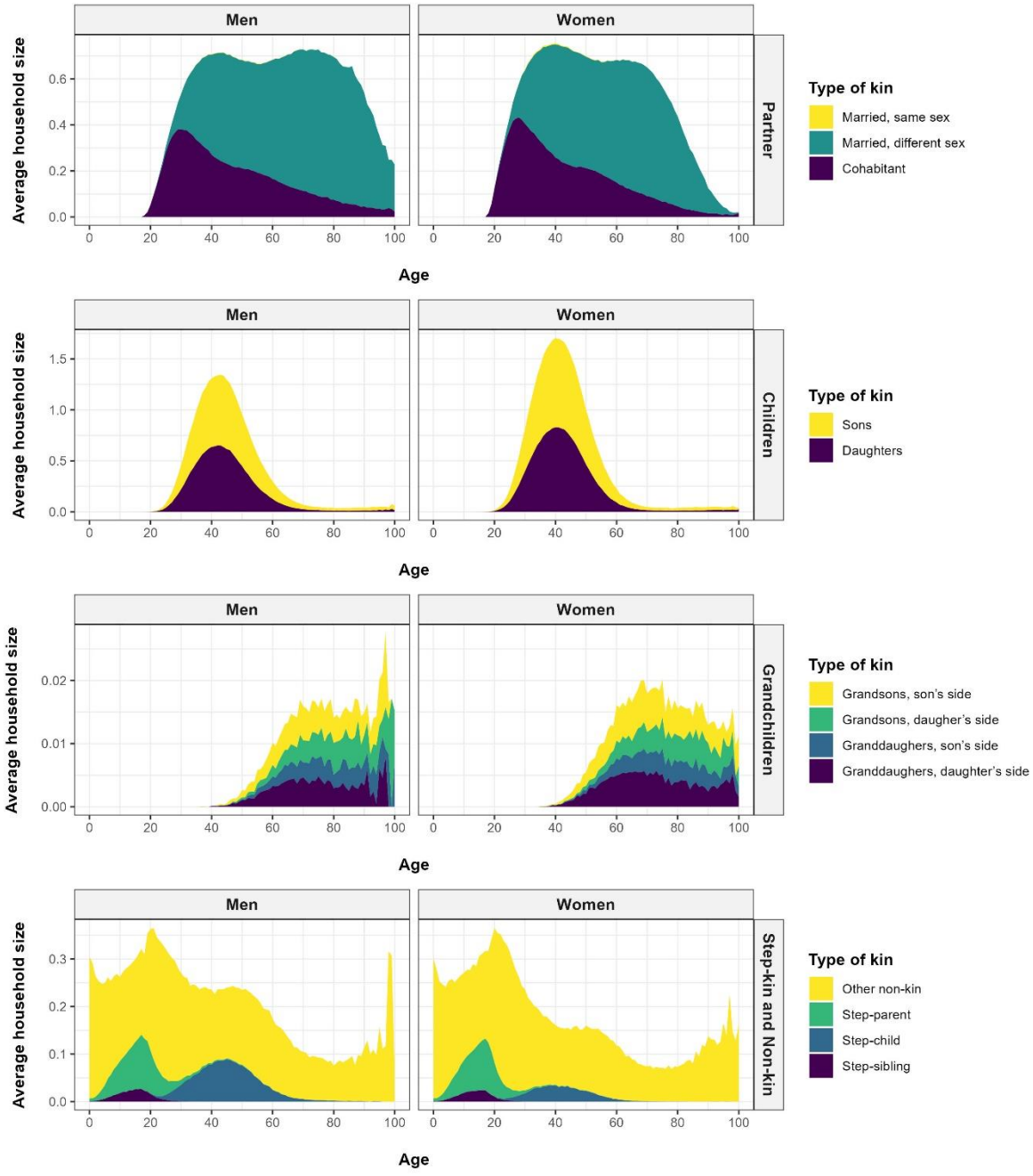
Women are more likely than men to live with children, peaking around age 40, though substantial shares of men and women still live with children at age 55 and even 65, though it is uncommon after age 80 reflecting the low share of extended families in Sweden. There are no major differences between living with sons versus daughters. It should be noted that these shares reflect that a child can only have a single legal residence following separation, this means that we avoid double counting children, but also that only a single parent can be recorded in the case of a 50-50 shared physical custody arrangements. We discuss the effects of these at length in supplemental text S1.

We find relatively small gender differences in the share of non-kin (a diverse group including for example friends, lodgers, cooperatives, very complex households, misregistration), which are most common before age 40.

Our separate analyses, looking only at those with Swedish ancestry, reveals that non-kin coresidence is much less common among ancestral Swedes, suggesting that non-kin presence in early adulthood may reflect unconventional housing arrangements and incomplete genealogical register records among recently arrived families with young second-generation children. Non-kin co-residence at later ages differs less, and likely to a larger extent reflects non-kin such as friends and lodgers. A small share also likely stems from limitations in administrative definition of cohabitation (see data section), that for example misclassify gay and lesbian cohabitants. We discuss data issues related to non-kin in our supplemental text.

We find that being a step-parent is much more common among men. In contrast, there are only minor gender differences in having step-siblings and step-parents, and these relationships are typically found in the later parts of childhood peaking at age 18. It is noteworthy that it is still relatively small share of Swedish household members that are step-kin despite, a high share of union dissolution.

Figure 3b: Average household size by age and type of relationship in 2017 for individuals born in Sweden, by detailed classification of kin relationship and sex.



In Figure 4, we focus on the experience of living with any kin, in contrast to the focus on average number of kin in figure 3.

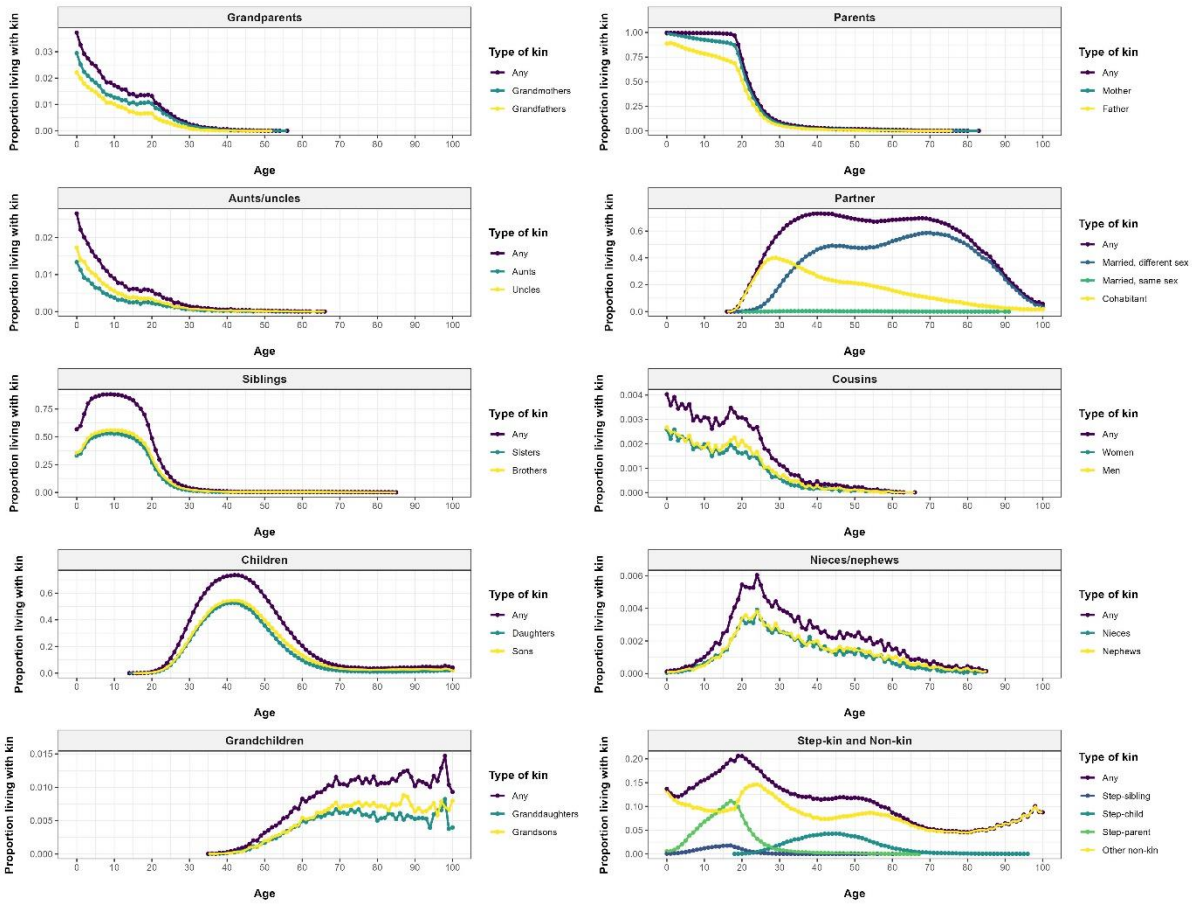
Co-residence with grandparents is highest at birth (around 3-4%) and declines rapidly with age. A maternal bias exists, where living with grandmothers is more common than living with grandfathers.

Similarly, aunts and uncles show low co-residence rates (peaking at around 2.5% in early childhood) and living with aunts being slightly more common.

Sibling co-residence peaks around age 10-15 at approximately 80%, then declining sharply after age 25. Sisters are slightly more likely to be household members than brothers throughout the life course. Partnership rates peak at around 60-70% in middle age before declining in later life due to widowhood. The data clearly shows the dominance of cohabitation in younger ages, with marriage become more common after age 30. Nearly all individuals live with parents at birth, but rates decline sharply at age 18-25, though residing with mothers is slightly more common than fathers.

Co-residence with children follows the expected bell-shaped pattern, peaking around ages 40-50 with approximately 60-70% living with children. It is slightly more common to reside with daughters than sons. Residing with grandchildren remain uncommon throughout the life course, reflecting Sweden's low prevelance of multigenerational households.

Figure 4: Proportion living with at least one kin by age and type of relationship in 2017 for individuals born in Sweden.



Conclusion

In our study we have mapped Swedish households in a life course perspective. Life course strongly structures both types of household members Swedes live with, as well as household size. By and large, our results are consistent with the Swedish household system being nuclear-oriented, with internationally relatively low levels of extended family relationships within households. We find gender differences in household composition that mirrors well known gender differences in family demographic patterns in Sweden such as age at leaving the parental home, and partner age differences (Kolk, 2015b).

The study reveals a relatively low share of complex family relationships, with step-siblings and step-parents contributing to less than 3% of household size in childhood, and step-children even less to household size in adulthood. This is somewhat surprising giving the great role given to increasing family complexity in high income societies, following decades of increasing union dissolution and family complexity (Cherlin, 2009; Thomson, 2014). Swedish divorce rates peaked in the early 2000s (G. Andersson & Kolk, 2015), and the children in our study should be those experiencing peak family complexity, as compared to later cohorts of children.

This is likely to a large extent explained by that step-relationships often are relatively short-term and may still be a common life-course event, ´while though still contributing relatively little to average household size. It should be noted that the emerging pattern of 50-50 shared physical residency is changing the meaning of post-separation childhood arrangements (Eriksson & Kolk, 2024), and as children are less likely to live full term at a single dwelling the concept of step-siblings, step-parents, and half-siblings, is likely to be rapidly changing, and can only be imprecisely captured in research designs and theoretical perspectives assuming a single dwelling and household of a child, such as the one adopted in the current study. The two most important gender differences we see are related to earlier home leaving and partnership formation among women, as well as higher widowhood among women given a propensity to choose older partners and living longer (Kolk, 2015a).

References

Alburez-Gutierrez, D., Barban, N., Caswell, H., Kolk, M., Margolis, R., Smith-Greenaway, E., . . . Zagheni, E. (2022). Kinship, Demography, and Inequality: Review and Key Areas for Future Development. *SocArXiv, doi:10.31235/osf.io/fk7x9.*

Alburez-Gutierrez, D., Williams, I., & Caswell, H. (2023). Projections of human kinship for all countries. *SocArXiv, hn3zm: doi: 110.31235/osf.io/hn3zm*.

Andersson, G., & Kolk, M. (2015). Trends in childbearing, marriage and divorce in Sweden: An update with data up to 2012. *Finnish Yearbook of Population Research, 50*, 21-30.

Andersson, G., Thomson, E., & Duntava, A. (2017). Life-table representations of family dynamics in the 21st century. *Demographic Research, 37*, 1081-1230.

Andersson, L., & Kolk, M. (2023). Kinship and socio-economic status: Social gradients in frequencies of kin across the life course in Sweden. *Population Studies*, 1-22.

Bengtson, V. L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and the Family, 63*(1), 1-16.

Berggren, H., Trägårdh, L., & Donovan, S. (2022). *The Swedish theory of love : individualism and social trust in modern Sweden*. Seattle: University of Washington Press.

Billari, F. C., Philipov, D., & Baizán, P. (2001). Leaving home in Europe: The experience of cohorts born around 1960. *International Journal of Population Geography, 7*(5), 339-356.

Boholm, Å. (1983). *Swedish Kinship: an Exploration into Cultural Processes of Belonging and Continuity*. Gothenburg: Acta Universitatis Gothoburgensis.

Caswell, H. (2020). The formal demography of kinship. II. Multistate models, parity, and sibship. *Demographic Research, 42*, 1097-1144.

Chayanov, A. (1925[1966]). *On the theory of peasant economy*. Homewood, Ill.: American Economic Association translation series.

Cherlin, A. J. (2009). The marriage-go-round : the state of marriage and the family in America today (1st ed. ed.). New York: Alfred A. Knopf.

Daw, J., Verdery, A. M., & Margolis, R. (2016). Kin Count (s): Educational and Racial Differences in Extended Kinship in the United States. *Population and Development Review, 42*(3), 491-517.

de Bel, V., Bokányi, E., Hank, K., & Leopold, T. (2024). A parallel kinship universe? Using Dutch kinship network data to replicate Kolk et al.'s (2023) demographic account of kinship networks in Sweden. *OSF preprint*, https://doi.org/10.31235/osf.io/31233k31236nq.

Dribe, M. (2000). *Leaving Home in a Peasant Society. Economic Fluctuations, Household Dynamics and Youth Migration in Southern Sweden*. Södertälje, Sweden: Almqvist & Wiksell International.

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.

Eriksson, H., & Kolk, M. (2024). Parental union dissolution and the gender revolution. *Social Forces, 103*(2), 550–571.

Esteve, A., Pohl, M., Becca, F., Fang, H., Galeano, J., García-Román, J., . . . Turu, A. (2024). A global perspective on household size and composition, 1970–2020. *Genus, 80*(1), 2. doi:10.1186/s41118-024-00211-6

Esteve, A., & Reher, D. S. (2024). Trends in Living Arrangements Around the World. *Population and Development Review, 50*(1), 211-232. doi:https://doi.org/10.1111/padr.12603

Goode, W. J. (1963). *World revolution and family patterns*. London: Free press of Glencoe.

Iacovou, M., & Skew, A. J. (2011). Household composition across the new Europe: Where do the new Member States fit in? *Demographic Research, 25*, 465-490.

Immonen Hagley, M., & Kolk, M. (2024). Kinship among natives and foreign-born: future forecasts of non-European migrant family composition in Sweden. *Stockholm Research Reports in Demography, 2024:4*, 1-28.

Isengard, B., & Szydlik, M. (2012). Living apart (or) together? Coresidence of elderly parents and their adult children in Europe. *Research on Aging, 34*(4), 449-474.

Jeffers, K., Esteve, A., & Batyra, E. (2024). Non-family living arrangements among young adults in the United States. *European Journal of Population, 40*(1), 10.

Keilman, N. (1988). Recent trends in family and household composition in Europe. *European Journal of Population/Revue européenne de Démographie*, 297-325.

Keilman, N. (2019). Family Projection Methods: A Review. In R. Schoen (Ed.), *Analytical Family Demography* (pp. 277-301). Cham: Springer International Publishing.

Kok, J. A. N., & Mandemakers, K. (2010). A life-course approach to co-residence in the Netherlands, 1850–1940. *Continuity and Change, 25*(2), 285-312. doi:10.1017/S0268416010000160
Kolk, M. (2015a). Age Differences in Unions: Continuity and divergence among Swedish couples between 1932 and 2007. *European Journal of Population, 31*(4), 365-382.
Kolk, M. (2015b). Age Differences in Unions: Continuity and Divergence in Sweden between 1932 and 2007. *European Journal of Population, 31*(4), 365-382. doi:10.1007/s10680-015-9339-z
Kolk, M. (2017). A Life Course Analysis of Geographical Distance to Siblings, Parents and Grandparents in Sweden. *Population, Space and Place, 23*(3), e2020. doi:10.1002/psp.2020
Kolk, M., Andersson, L., Pettersson, E., & Drefahl, S. (2023). The Swedish kinship universe: A demographic account of the number of children, parents, siblings, grandchildren, grandparents, aunts/uncles, nieces/nephews, and cousins using national population registers. *Demography, 60*(5), 1359-1385.
Laslett, P. (1965). *The world we have lost*. London: Methuen.
Laslett, P. (1977). Characteristics of the Western Family Considered Over Time. *Journal of Family History, 2*(2), 89-115.
Laslett, P., & Wall, R. (1972). *Household and family in past time*. Cambridge, UK: Cambridge University Press.
Lee, R. D., & Mason, A. (2011). Generational economics in a changing world. *Population and Development Review, 37*(s1), 115.
Lindmarker, J., Kolk, M., & Drefahl, S. (2025). Cohabitation and mortality across the life course: A longitudinal cohort study with Swedish register-based sibling comparisons. *European Journal of Population, 41*(1), 2.
Liu, C., & Esteve, A. (2021). Chapter 11: Living arrangements across households in Europe *Research Handbook on the Sociology of the Family*. Cheltenham, UK: Edward Elgar Publishing.
Lundh, C. (1995). Households and families in pre-industrial Sweden. *Continuity and Change, 10*(1), 33-68.
Mare, R. D. (2011). A multigenerational view of inequality. *Demography, 48*(1), 1-23.
Murphy, M. (1991). Household modelling and forecasting—dynamic approaches with use of linked Census data. *Environment and Planning A, 23*(6), 885-902.
Murphy, M. (2011). Long Term Effects of the Demographic Transition on Family and Kinship Networks in Britain. *Population and Development Review, 37*(supplement s1), 55-80.
Parsons, T. (1943). The kinship system of the contemporary United States. *American anthropologist, 45*(1), 22-38.
Preston, S. H. (1976). Family sizes of children and family sizes of women. *Demography, 13*(1), 105-114. doi:10.2307/2060423
Reher, D. S. (1998). Family Ties in Western Europe: Persistent Contrasts. *Population and Development Review*, 203-234.
Ruggles, S. (1988). The demography of the unrelated individual: 1900–1950. *Demography, 25*(4), 521-536. doi:10.2307/2061319
Ruggles, S. (1994). The Transformation of American Family Structure. *The American Historical Review, 99*(1), 103-128. doi:10.2307/2166164
Ruggles, S., & Heggeness, M. (2008). Intergenerational coresidence in developing countries. *Population and Development Review, 34*(2), 253-281.
Ruggles, S., McCaa, R., Sobek, M., & Cleveland, L. (2015). The IPUMS collaboration: integrating and disseminating the world's population microdata. *Journal of Demographic Economics, 81*(2), 203-216.
Thomson, E. (2014). Family complexity in Europe. *The Annals of the American Academy of Political and Social Science, 654*(1), 245-258.