# Living arrangements in a cross-national perspective: trends by age, sex, and time

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## Abstract

Based on over 425 million individual records from 102 countries and over 697 million records from 94 countries for the cross-time analysis, this study presents a global classification and analysis of living arrangements, examining variations by age, sex, and time. We identify thirteen distinct types of living arrangements and document significant regional differences in their prevalence. In Europe and North America, living arrangements are relatively homogeneous, with a strong trend toward nuclear and independent living, while other regions show greater diversity, with extended living arrangements being more prevalent.

Two key life stages—young adulthood and old age—stand out for their greater diversity in living arrangements and pronounced gender differences. Europe and North America exhibit the lowest overall diversity and gender differences, while Latin America and the Caribbean countries show similar levels of high diversity of living arrangements. Africa has the highest gender differences, while Asia and Oceania reveal a convergence between men's and women's living arrangements in midlife. Over time, nuclear arrangements have generally increased, and extended arrangements have declined. However, traditional nuclear families with partners and children have decreased in Europe and North America as well as Asia and Oceania. In Asia and Oceania, this decline is partially offset by rising extended forms, while in Europe and North America, an increase in people living with their partner only is observed. These shifts point to growing complexity in household forms, with Europe and North America trending toward greater independence and Asia and Oceania displaying both nuclearization and extended family persistence.

Our findings challenge the idea of global convergence toward nuclear families, highlighting instead rising diversity. While we do not examine consequences, demographic changes like fertility decline and increased longevity are likely to reshape family structures further. The decline of traditional extended families may coincide with new forms of extended living and a rise in solo living—trends that require continued research to understand their social implications.

## 1. Introduction

A key theme in demographic analysis is population heterogeneity, reflecting systematic differences across individuals and groups. This chapter contributes to this theme by examining age- and gender-specific heterogeneity in living arrangements across different societies, drawing on newly published data from the Global Living Arrangements Database (GLAD) (Galeano & Esteve, 2025).

We take advantage of the versatility of the GLAD database to develop a classification of living arrangements that enables cross-country comparisons. This classification is based on the widely recognized distinction in the literature between nuclear and extended households, the latter being defined in its simplest form as those households that include the presence of adult relatives beyond the couple.

The perspective of living arrangements, which prioritizes the individual over the household unit, has the advantage of capturing both macrosocial differences and the transformations inherent in individuals' life courses. In this sense, living arrangements vary according to individual characteristics such as age and sex. Age and sex are fundamental demographic factors that structure life course events and significantly shape living arrangements alongside other family events such as births, deaths, or the mobility/migration of close kin (Elder, 1994; Glick, 1947; Hogan & Kitagawa, 1985). However, when comparing individuals of the same age and sex across countries, we observe that regional and societal factors—such as economic development, cultural norms, and political policies—also influence living arrangements (Thornton, 2001). Large differences exist in family patterns and living arrangements among societies and regions (Esteve & Reher, 2024; Therborn, 2004). These patterns also evolve over time, reflecting both structural and cultural shifts in society (Bongaarts & Zimmer, 2002; Cherlin, 2010; Goode, 1963; Lesthaeghe, 2010; Ruggles, 1997; Therborn, 2004).

In sum, living arrangements reflect the complexity of individual life courses, shaped by determinants operating at multiple levels. The literature contains numerous examples—including comparative studies—of various aspects of living arrangements, such as those involving elderly people or young adults (Schwanitz & Mulder, 2015; Tomassini et al., 2004), or specific types of arrangements, such as living alone or intergenerational co-residence (Esteve & Reher, 2021; Jeffers et al., 2024; Reher & Requena, 2018). However, few studies have provided a comprehensive, global perspective that compares national differences in living arrangements across key variables: age, sex, and time. This study addresses that gap, drawing on a rich data source, a well-constructed typology, and a multidimensional comparative approach.

## 2. Background

Studies on living arrangements commonly rely on typologies to structure their analyses. Unlike household-level approaches, individual-level typologies take into account not only the relationships among household members but also the individual's own perspective. For example, older and younger individuals may perceive their living arrangement differently, even if, from a household perspective, it appears identical. Living arrangements refer to the structure of co-residence within a household. Households are typically defined as units of cohabitation—people sharing a dwelling and functioning as a unit of consumption and socialization. When studying living arrangements, defining a typology is essential. Constructing or adopting a typology is, in itself, an act of theoretical conceptualization.

In demography, it is common to analyze households through the lens of living arrangements, which focus on the relationships among household members. Most of these relationships are based on kinship. However, some individuals live alone or in non-family households. The most common kin relationships include those within the nuclear family

(parents, children, and partners) and the extended family (grandparents, grandchildren, uncles, aunts, and other non-nuclear relatives). As we will explore further, modernization theory suggests that the shift toward nuclear living arrangements is a response to the economic transformations in society, although, in contrast, more culturalist interpretations argue that the nuclear nature of households has roots that predate the industrialization of Western countries (Henrich, 2020; Laslett & Wall, 1972). The distinction between nuclear and extended households has a long-standing tradition in the social sciences, with foundational contributions from Le Play (1871), Laslett and Wall (1972), and Goode (1963). Yet, an individual-level perspective on living arrangements offers greater flexibility, allowing for the incorporation of life course dynamics and other individual-level variables.

Elderly individuals are among the most extensively studied populations in this area. Common typologies for this group include living alone, living with a partner, living with children, or other forms of co-residence (Bongaarts & Zimmer, 2002; Tomassini et al., 2004). Some studies focus specifically on whether older adults live with children, using binary categories such as living with children versus not living with children. Similarly, research on young adults frequently examines whether they live with their parents (Giuliano, 2007), with some studies further distinguishing between living with the mother or father and whether a partner of the parent is also present (Lloyd & Desai, 1992). When studies span all age groups, typologies tend to become more complex. For instance, Esteve and Reher (2024) proposed a classification with eight distinct categories—living alone, with both parents, with mother only, with father only, with partner only, with partner and children, with children only, and with others—capturing a wide range of perspectives across age groups. Similarly, Vespa et al. (2013) analyzed individuals aged 18 and over by first dividing them into two groups, younger and older adults, and then applying separate typologies to each subgroup. Others emphasize particular classifications, such as 'primary versus non-primary living arrangements' (Esteve & Reher, 2024) or 'nuclear versus stem living arrangements' (Kamo, 1990).

Beyond issues of classification, which we will address in the methods section, the study of living arrangements has a long tradition in sociology, demography, and economic history. It is a variable that reveals the structure and organization of family and social life. It is directly related to household composition and reflects, in turn, the impact of economic, cultural, and demographic changes. Living arrangements are typically defined as the way individuals co-reside with others and the nature of their relationships within a household (Bongaarts & Zimmer, 2002; United Nations, 2022). Throughout history, the structure of family arrangements has evolved in tandem with the economic and cultural structure of societies. In hunter-gatherer societies, people lived in groups as a strategic necessity for defense and cooperative survival. With the advent of agriculture, extended family systems predominated, driven by the need for collaborative labor in agricultural economies (Goode, 1963). The rise of industrialization marked a shift toward nuclear family units, adapting to the increasing specialization and mobility required by industrial labor markets (Bales & Parsons, 2014; Goode, 1963; Laslett & Wall, 1972). Since the mid-20th century, modernization, the rise of individualization, and technological advances have led to significant diversification in family structures and living patterns (Beck & Beck-Gernsheim, 2002). This dynamic view of living arrangements—aligned

with shifts in economic structures—emphasizes the adaptive and functional nature of households.

In contemporary contexts, however, greater emphasis is placed on the individuality of living arrangements. These arrangements increasingly reflect personal choices, made possible by rising material living standards and increased socio-economic autonomy. Modes of living have increasingly become the result of experience and deliberate decision-making—either individually or through negotiation within families, actively or passively. While certain patterns remain constant (such as the dependence of infants on parental care), individuals continuously adjust and adapt their living arrangements in response to social and economic change. The global diversity in living arrangements thus not only reflects the evolving life trajectories of individuals and families but also serves as a representation of broader societal transformations.

Beyond the influence of broad economic and cultural systems on household organization, living arrangements also reflect, at the individual level, the different stages of life: childhood, youth, adulthood, and old age. In this chapter, we focus on two key analytical dimensions: age and sex. Age is closely tied to life course stages. A considerable body of literature on living arrangements concentrates on specific age groups—particularly the elderly and young adults, as previously noted—since these are pivotal transitional phases (Asis et al., 1995; Ruggles, 2007). However, no existing research systematically examines all age groups together to identify at what stages we find the greatest diversity in living arrangements, or how such heterogeneity varies by country (Esteve & Reher, 2024). As a working hypothesis, we expect to find the highest levels of heterogeneity among young adults, when individuals begin to leave the parental home, form partnerships, and start families. A second peak in heterogeneity is anticipated in old age, when individuals often experience the loss of a partner, cease co-residing with children, and reorganize their living arrangements.

On the one hand, young adults typically leave the parental home, begin cohabiting or get married, have children, or co-reside with others. On the other hand, older adults undergo significant life course transitions such as retirement, spousal loss, declining health, and increasing functional limitations (Asis et al., 1995). These two life stages are closely interrelated. As Fokkema and Liefbroer (2008) observed, young adults who remain in the parental home often do so by necessity, and their co-residence implies that middle-aged parents are simultaneously living with their adult children. Accordingly, many studies have explored intergenerational living arrangements between older and younger generations (Frankenberg et al., 2002).

With respect to sex, we expect to find notable differences between men and women in living arrangements—differences that emerge during the transition to adulthood and reappear in later life. Gender analysis is widely considered essential in studies on living arrangements, particularly concerning transitions to adulthood, single parenthood, and living alone in old age. Fokkema and Liefbroer (2008) found that in Europe, men tend to leave the parental home and form families later than women, resulting in a consistent lag in men's transitions compared to women's. These patterns reflect gendered social roles and expectations, such as the timing of marriage (Marini, 1978; Schoon & Lyons-Amos, 2016). A significant gender difference also exists in single-parent households. Although

the number of single-father households is increasing, women remain far more likely to head single-parent families (Bianchi, 2014). In later life, women are more likely to live alone due to higher life expectancy and widowhood (Reher & Requena, 2018). In patriarchal contexts, gender also shapes intergenerational living preferences, with elderly parents more likely to co-reside with sons than daughters (Asis et al., 1995; Yount, 2005).

A central issue in this chapter is examining how heterogeneity in living arrangements by sex and age evolves over time. It has been widely documented that living arrangements are not static; rather, they evolve over time in response to demographic shifts and socio-economic development. According to modernization theory, as industrialization spreads, family structures around the world were expected to converge toward the Western conjugal family model (Goode, 1963). Indeed, rapid industrialization and modernization have accompanied significant nuclearization in some regions, such as East Asia (Cherlin, 2012). However, there is no global convergence toward a single model of nuclear households or living arrangements across the world. Instead, growing diversity and complexity in family forms are now more apparent (Buchmann & Kriesi, 2011; Kuijsten, 1996). On the one hand, additional forms of living arrangements have emerged or increased, such as the appearance of young adults' co-residence with non-family members in the United States (Jeffers et al., 2024) and the universal increase in living alone in most of the world (Cámara et al., 2021; Reher & Requena, 2018). On the other hand, traditional patterns, such as extended living arrangements, still prevail in regions such as Africa, Asia, and Latin America despite differences in forms and prevalence (Esteve et al., 2022; Esteve & Reher, 2024; Fang et al., 2024). Global-scale studies show that household size is converging toward smaller units, but household diversity in terms of composition remains relatively stable. In this chapter, we analyze this same trend from the perspective of living arrangements. The global trend toward greater diversity and complexity may itself reflect a form of convergence, as countries increasingly follow similar paths in diversifying living arrangements. This pattern aligns with the theory of the Second Demographic Transition (SDT), which highlights shared features in Western societies—such as sustained below-replacement fertility, increasing union instability, and growing pluralism in family and living arrangements—and reflects a shared transition toward more plural and complex family and living patterns. As Boh (1989) insightfully described, it represents a "convergence to diversity". It is important to acknowledge that demographic processes and the pace of family transformation differ significantly across regions (Esteve et al., 2024; UNDESA, 2024). While in many regions beyond the Western context, the second phase of demographic transition is just beginning (Reher, 2004), the full set of SDT characteristics is by now widely present across all Western countries (Lesthaeghe, 2022). These variations, alongside cultural and policy divergences, contribute to the increasing multidimensionality of global family patterns.

## 3. Data and Methodology

### 3.1. Data

This paper utilizes data from the Global Living Arrangements Database (GLAD), a database that compiles information on the living arrangements of 735 million individuals across 107 countries from 1960 to 2020 (Galeano & Esteve, 2025). The original data sources include microdata from the Integrated Public Use Microdata Series international (IPUMS-I) (Minnesota Population Center, n.d.) and the European Labour Force Survey

(EU-LFS) (Eurostat, n.d.). For this study, we select countries with at least one sample from the most recent period (post-2000) to examine regional, age-group, and gender-based heterogeneity in global living arrangements. For temporal analysis, we additionally select countries with at least two data points (the earliest and the most recent one) to examine changes over time. The recent sample and the sample used for temporal comparison are outlined in Figure 1, classified by continent. The classification follows the United Nations Geoscheme (United Nations, 1999). In line with the UN's framework, continents with fewer countries are merged into the broader one based on geographic proximity and similarities in socio-economic and cultural aspects, such as Oceania into Asia and Oceania, North America into Europe and North America, the Caribbean into Latin America and the Caribbean—ensuring a balanced and comparable analysis across regions. The samples from Africa, Asia and Oceania, and Latin America and the Caribbean are all sourced from the IPUMS database, while those from Europe and North America are predominantly drawn from the EU-LFS database.

- Figure 1 about here –

### 3.2. Methodology

*Typology of living arrangements*

The GLAD database offers the possibility of creating a customized classification of living arrangements according to the specific needs of the research, based on the possibilities allowed by the original data sources. We focus exclusively on private households. The population living in collective households is excluded from the analysis, as this information is not systematically standardized across all censuses. In this study, we classify living arrangements based on the presence of the following core household members: ego, father, mother, spouse, child, sibling, other relative, and non-relative. Here, "other relative" refers to kin beyond parents, spouse, children, and siblings. "non-relative" comprises household members without any kinship ties to the ego. Based on the identification of these household members, we form 13 groups of living arrangements (Figure 2). These groups are mutually exclusive and exhaustive, with each individual assigned to a single group. Among them, five of these groups have both nuclear and extended versions. They are **1) living with a single parent, 2) living with both parents, 3) living with a partner, 4) living with a partner and children, 5) living with children.** The remaining three categories are **living alone, living with non-primary kin,** and **living with non-kin.**

- Figure 2 about here –

The term “nuclear pattern” refers to a living arrangement in which the ego (i.e., the focal individual) resides with their primary kin. However, the definition of primary kin depends on the ego’s familial status—specifically, whether the ego has a partner and/or children. When the ego does not have a partner or children, their primary kin include their father, mother, and siblings. In contrast, when the ego has a partner or children, those

individuals—namely, the partner and children—become the primary kin. In such cases, the ego's parents and siblings are no longer considered primary kin and are instead classified as non-primary kin.

The "extended pattern" describes a situation in which the ego lives with non-primary kin. These non-primary kin may also include other relatives, such as grandparents or cousins. If the ego resides with both primary kin and at least one non-primary kin, the arrangement is classified as an extended version of primary kin living arrangement. For example, if a person lives with their children and also with their parents or other relatives, the arrangement would be described as "living with children (extended)." In contrast, when the ego lives exclusively with non-primary kin, with no primary kin present, the arrangement falls under the category "Non-primary kin." Extended arrangements may also include non-relatives. Given the low frequency of such cases, we have not distinguished them from extended households composed solely of family members. However, we have established a separate category for individuals who are not related to any other household member, which is referred to as the "Non-kin" living arrangement.

*Summary indicators of the importance of different living arrangements*

Once all individuals have been classified into one of the 13 living arrangement categories, we calculate summary indicators to assess the prevalence of these arrangements in each country and sample. The starting point is the distribution of living arrangements by age and sex for each sample. We calculate the percentage of people in each group who belong to each living arrangement type. Our analysis is limited to individuals aged 0 to 80 years. In some samples, the number of cases decreases considerably beyond this age, while in other countries, the number of people institutionalized in elderly care facilities may increase. To measure the prevalence of each living arrangement, we simply sum the proportion of individuals in each arrangement for every age between 0 and 80[1].

*Diversity of living arrangements*

We further analyze the diversity of people's living arrangements across age groups, countries as observed in each cross-sectional year, and gender. Each age group and gender within every country represent a unit, with each unit assigned a Fractionalization Index (Alesina et al., 2003). This index captures the probability that two randomly selected individuals fall into different living arrangement groups. When the index approaches 1, it

[1] The total sum can be interpreted as the average total number of years a population would live in each living arrangement, assuming everyone reaches age 80 and the structure of living arrangements remains constant over time. These assumptions are similar to those used in the synthetic fertility rate indicator and enable comparisons between countries and over time. However, it should be noted that these figures cannot be interpreted as actual durations derived from longitudinal data. In this study, we have consciously avoided adjusting for mortality differences, such as by using the Sullivan method (Sullivan, 1971), because we wanted to weight all life stages equally. If we were to adjust for mortality, the contribution of each age group would be conditioned on surviving to that age.

reflects a high degree of diversity, indicating that individuals at a given age are spread across various types of living arrangements. Conversely, values approaching 0 indicate low diversity, reflecting a concentration in fewer, more uniform living arrangements.

*Gender difference*

Gender difference in people's living arrangements is measured using the Index of Dissimilarity (Duncan & Duncan, 1955). This index is calculated by first determining the absolute difference between the proportions of men and women in each type of living arrangements, and then aggregating these differences across all living arrangements and finally dividing the result by 2. This index can be interpreted as the percentage of the population that would need to change their living arrangements to achieve a symmetrical distribution of living arrangements between men and women. High values of the dissimilarity index indicate large differences between men and women.

*Time change*

We also measure the decade change in the aggregated prevalence of each living arrangement. This value is calculated by subtracting the prevalence in the earliest year from that in the most recent year. Since the interval of years between two observations varies depending on the country, we divide the difference by the number of years between the two observations and then multiply it by 10 to standardize it to a decade of change.

## 4. Results

### 4.1. Prevalence of living arrangements among the population aged 0 to 80 years

Figure 3 illustrates the prevalence of living arrangements among the population aged 0 to 80, disaggregated by sex and continental region using data from the most recent sample from the year 2000 onward. Due to the way the indicator is constructed and for presentation purposes, prevalence can be expressed in years on a scale from 0 to 80, corresponding to the age range considered. The vast majority of living arrangements involve some form of kinship. Co-residence with non-kin (non-kin living arrangements) is rare across all regions of the world. Living alone is also not very common, except in Europe and North America.

- Figure 3 about here –

Generally, nuclear living arrangements are the most common across all regions, particularly those involving "living with both parents (nuclear)" and "living with a partner and children (nuclear)". While extended living arrangements are uncommon in Europe and North America, they remain widespread in Africa, Asia and Oceania as well as Latin America and the Caribbean. Additionally, "living with a partner (nuclear)" is a prevalent arrangement in Europe and North America.

Regarding "living with both parents (nuclear)," significant regional differences in prevalence are observed. According to our indicator, the highest prevalence occurs in Europe and North America, where individuals have values close to 20 on the 0 to 80 scale. This is followed by Asia and Oceania, and Latin America and the Caribbean, with average values ranging between 10 and 15. The lowest prevalence is found in Africa, where values are generally below 10. Across all regions, men show consistently higher prevalence values for this living arrangement than women, with gender differences typically ranging

from 0.5 to 2 points. A more detailed country-level analysis confirms this pattern: in every country included, men exhibit higher prevalence values for living with both parents compared to women. The gender difference varies from 0.29 years in Botswana (2011, Africa) to 3.19 in Bulgaria (2015, Europe). Since this living arrangement is most common among younger individuals, the consistent gender difference suggests that young men are more likely to remain in the parental home longer than young women.

When it comes to "living with a partner and children (nuclear)," the highest prevalence is observed in Asia and Oceania, followed by Latin America and the Caribbean, and then Europe and North America—all with average values above 15 on the 0 to 80 scale. In contrast, Africa shows the lowest prevalence of this living arrangement, largely due to significantly lower prevalence among women, whose average falls closer to 10. This suggests important regional and gender differences in the prevalence of nuclear family living arrangements involving a partner and children. In all regions except Europe and North America, we observe significant gender differences in the prevalence of co-residence with children and a partner, with higher prevalence among men than women.

Europe and North America are the regions in which living exclusively with a partner is most common. According to our prevalence indicator, this corresponds to an average value of around 15 on the 0 to 80 scale. This living arrangement is more prevalent among men. The highest values are observed in countries such as the Netherlands, Switzerland, Germany, and the United Kingdom. In contrast, living only with a partner is relatively uncommon in other parts of the world, particularly in Africa, although men consistently show higher prevalence than women for this type of living arrangement.

Extended living arrangements exhibit the greatest diversity across countries. These living arrangements are common in Africa, Asia and Oceania, and Latin America and the Caribbean, but remain limited in Europe and North America. For instance, in Africa, the prevalence of "living with a partner and children (extended)" varies considerably, ranging from as little as 0.06 years for women in Egypt (2006) to as much as 18.48 years in Guinea (2014). A similarly wide range can also be observed in Latin America and the Caribbean, and Asia and Oceania.

Overall, gender differences in the prevalence of various living arrangements remain consistent across continents. As previously discussed, men generally show higher prevalence in arrangements such as "living with both parents (nuclear)," "living with a partner (nuclear)," and "living with a partner and children (nuclear)." In contrast, women tend to have higher prevalence in living arrangements that involve children but exclude a partner, both in nuclear and extended family forms. For instance, the prevalence of "living with children (nuclear)" is relatively low among men—scoring below 2 on the 0 to 80 scale in all regions. In comparison, women consistently show higher prevalence in this arrangement, typically scoring between 3 and 6 across continents. However, when it comes to living alone, gender patterns vary by region: in Asia and Oceania, as well as Europe and North America, women have higher prevalence of living alone than men, whereas in Latin America and the Caribbean and Africa, the opposite pattern is observed, with men more likely to live alone than women.

### 4.2. Diversity of living arrangements

Figure 4 shows the diversity of people's living arrangements across different age groups, countries, and genders based on data collected since 2000. We use the index of fractionalization. Two distinct life stages stand out for having greater variety in living arrangements. The first stage occurs between ages 15 and 35, when children transition into adulthood. During this time, many experience major life changes—leaving their parents' home, getting married or cohabiting, living alone or with others, having children, or remaining childless. These transitions contribute to the wide range of living situations observed in this age group. The second stage happens later in life, typically between ages 40 and 65 (up to 60 in Europe and North America, and up to 70 in Asia and Oceania). This period reflects a shift from the perspective of young adults to that of middle-aged and elderly people. Here, living arrangements become diverse again due to events such as children leaving home, the loss of spouses, or the arrival of new household members. These changes add to the variety of living situations experienced in later life.

- Figure 4 about here –

The level of diversity in living arrangements varies significantly across continents. Europe and North America exhibit the lowest overall diversity, with an average fractionalization index of 0.64. In contrast, Latin America and the Caribbean show the highest diversity, averaging 0.78, followed by Africa (0.75), and then Asia and Oceania (0.69). However, notable disparities also exist within continents. Europe and North America, in particular, show the greatest variation between countries—especially during childhood and old age. For instance, among girls aged 5–9, the fractionalization index ranges from 0.69 in Russia to just 0.23 in the Netherlands. Overall, much of the global variation in diversity stems from differences between subregions. Eastern European countries tend to display higher levels of diversity, as seen in Latvia (0.64), Lithuania (0.62), and Belarus (0.60). In contrast, Southern European nations such as Greece (0.25), Italy (0.26), Portugal (0.38), and Spain (0.38) exhibit much lower levels of fractionalization. A similar pattern is observed among males.

In contrast, Latin America and the Caribbean stand out for their internal homogeneity, as all countries in the region exhibit consistently high levels of fractionalization in living arrangements. Among girls aged 5–9, for example, the fractionalization index falls within a relatively narrow range—from 0.55 in Argentina to 0.77 in Jamaica. During the transition to adulthood, although overall diversity remains high, differences between countries within the same region tend to narrow.

In addition, although the fractionalization index is generally high during transitional periods, the variation between countries within each continent is smaller during the transition to adulthood than at other life stages. This may indicate a pattern of "convergence to diversity" during this transitional period.

Regarding gender differences, females generally experience greater diversity in their living arrangements than males as they age—starting from age 35 in most regions, and around age 45 in Europe and North America. However, at more advanced ages (after 75, or after 70 in Africa), this pattern tends to reverse, with the exception of Europe and North America, where women continue to show higher diversity. Additionally, there is greater variation between countries in male living arrangements compared to females during the same life stages.

### 4.3. Gender difference in living arrangements

Figure 5 shows the differences between men and women in terms of the distribution of living arrangements. To capture this, it uses the dissimilarity index. Values close to 0 indicate minimal differences between men and women, while values close to 1 indicate substantial differences. The dissimilarity in living arrangements between males and females varies across different stages of the life course. From ages 0 and 14, dissimilarity is minimal, indicating that boys and girls tend to live in similar arrangements. From age 15 onward, gender differences become more pronounced, with dissimilarity highest from ages 20 to 29. From ages 30 and 45, this difference slightly declines, forming a secondary low point after early adulthood. At older ages, dissimilarity is again higher and remains elevated through the later stages of life. Overall, the lowest levels of dissimilarity are observed during childhood, while the highest are seen during the transition to adulthood and in old age.

- Figure 5 about here –

Across all regions, countries in Africa generally display the highest levels of gender dissimilarity in living arrangements, followed by those in Asia and Oceania, Latin America and the Caribbean, and finally Europe and North America. Notably, from ages 25 to 45, countries in Asia and Oceania exhibit the lowest dissimilarity between females and males, suggesting relatively similar living arrangements during this midlife stage.

Gender dissimilarity also varies across countries within each region, and the degree of heterogeneity between countries tends to correspond with the overall level of gender dissimilarity. When gender differences are large—as is often the case among older age groups—cross-country variation is also more pronounced. In contrast, when gender dissimilarity is lower, such as during childhood, differences between countries are typically more modest. Consistent with earlier findings, Latin America and the Caribbean countries stand out for their internal uniformity. Not only do they show high overall levels of fractionalization, but they also exhibit remarkably consistent gender patterns across countries. This reinforces the idea that living arrangements in Latin America and the Caribbean are more homogeneous across both demographic and geographic dimensions compared to other regions.

### 4.4. Change in living arrangements over time

Finally, Figure 6 presents changes in the prevalence of different living arrangements over time, organized by region and standardized to a decade of change. We compare the earliest and latest observations available for each country, showing the absolute differences. Since the prevalence indicator can be interpreted as the number of years lived in each living arrangement within a synthetic cohort, the differences can also be understood in terms of years—solely for descriptive purposes, as the data are not derived from longitudinal sources.

- Figure 6 about here –

It is evident that living arrangements are not static—societies undergo changes over time, and these changes vary by type of living arrangement, region, and gender. From the wealth of information presented in this chart, we highlight the following findings. First, the prevalence of most nuclear forms of family arrangements tends to increase across regions. In contrast, certain extended living arrangements—such as (1) living with parents, (2) living with partners, (3) living with children, and (4) living with partner and children—generally decline, although not uniformly across all regions. Living with non-primary kin, however, shows a universal decline. Second, there are certain types of living arrangements that are generally increasing across most countries in each continental grouping. These include (1) living with a single parent (either in a nuclear or extended household), (2) living with both parents in a nuclear household, (3) living only with a partner (except in Africa), and (4) living alone. Third, there are arrangements for which we observe significant regional contrasts. For example, co-residence with a partner and children is increasing in most African countries but decreasing in the majority of Asian and European and North America countries. Conversely, living with children and a partner in an extended household is increasing in most Asian countries and declining elsewhere. Fourth, some forms show considerable intercontinental variability. Latin America and the Caribbean is the most homogeneous region among the four. Asia and Oceania and Africa, on the other hand, present substantial contrasts. Fifth, for most types of residential arrangements, we observe similar levels of change for men and women. In Asia and Oceania, the number of women living with their partner and children in an extended household appears to have increased more than for men. In Europe and North America, by contrast, the number of women living only with a partner seems to have risen relative to men. In both cases, greater male survival—implying fewer widowed women—may underlie this change.

## 5. Conclusion and Discussion

In this paper, we examine the diversity of living arrangements across multiple dimensions and countries. Drawing on hundreds of millions of individual records, the results of this research provide the most comprehensive summary of living arrangements compiled to date. Our analysis has shown that living arrangements are highly diverse and vary by age, sex, country, and historical period. This diversity is shaped by demographic characteristics such as age and gender, as well as regional contexts that reflect broader socio-economic and cultural backgrounds. Moreover, we observe that living arrangements evolve over time, reflecting the complex and often subtle adjustments individuals make in response not only to life course transitions but also to broader societal change. However, this chapter has not explored the causal mechanisms underlying these transformations.

Living arrangements display substantial diversity, which can be systematically analyzed through specific typologies. In our classification, we identify thirteen distinct types of living arrangements. People live in a variety of family arrangements over the life course, and the relative distribution of these arrangements differs considerably across regions. In Europe and North America, for example, living arrangements exhibit a relatively high degree of internal consistency, characterized by a strong trend toward nuclearization and independent living. Nuclear family and independent arrangements dominate the life course, while extended family arrangements are relatively rare. In other regions, although

nuclear arrangements remain prevalent, extended living arrangements are also common, and national-level variation tends to be greater.

Our research has identified two critical life course phases when living arrangements become especially diverse: the transition to adulthood and the aging stage. These phases are also when gender differences in living arrangements are most pronounced. This suggests that family structures experience more frequent transitions during these periods, with gendered trajectories reflecting different pathways into and out of family forms. Europe and North America, in general, show the lowest average levels of both diversity in living arrangements and gender differences. Nonetheless, within Europe and North America, there is significant variation across countries. Latin America and the Caribbean, by contrast, exhibits a high degree of internal similarity, coupled with an overall high level of diversity in living arrangements. In terms of gender differences, Africa shows the highest levels, whereas Asia and Oceania present a distinctive pattern in midlife, where living arrangements tend to converge for men and women.

Analyzing living arrangements from a temporal perspective reveals both shared trends and regional divergences. Overall, nuclear living arrangements have become more common in many contexts, while extended arrangements have generally declined. However, traditional nuclear arrangements involving partners and children have decreased in both Europe and North America and Asia and Oceania. In Asia and Oceania, this decline is partly offset by a rise in the extended version of living with a partner and children, whereas in Europe and North America, it appears more closely tied to an increase in childless arrangements, such as living exclusively with a partner. These developments underscore the growing complexity and diversity of household forms.

In Europe and North America, the trend points toward increasing independence, as adult children are more likely to leave the parental home. In Asia and Oceania, by contrast, living arrangements are evolving in both directions—toward greater independence and toward more extended family living—reflecting a dynamic interplay between persistent traditional norms and the rapid emergence of new residential patterns associated with modernization. In addition to the growth in independent living—such as living alone or only with a partner—there has also been a rise in single-parent households and arrangements in which individuals live exclusively with their children. These trends are particularly marked among women.

Our findings challenge Goode's convergence theory, which posits a global shift toward nuclear family structures. Instead, we find increasing diversity and heterogeneity in living arrangements rather than uniformity. Even within Europe and North America, nuclear families are not the sole dominant form. Independent living, single-parent households, and living only with children are also common, highlighting the multifaceted nature of contemporary living arrangements.

Social, economic, and demographic changes have profound impacts on family structures. In this study, we analyze these transformations without delving into the consequences they may have for society at large. Yet, such consequences are likely to be far-reaching—affecting household functioning, size, the distribution of roles and responsibilities, interpersonal relationships within the family unit, the provision of care, and the organization of direct consumption within the household. Well-known demographic

shifts, such as increased life expectancy and declining fertility rates, may further amplify these changes in the future. The traditional extended family, as once known in many societies, is now under question. However, new forms and motivations for extended living may emerge in response (Esteve & Reher, 2021; Isengard & Szydlik, 2012), potentially coexisting with a simultaneous rise in solo living, as both patterns reflect different adaptations to changing demographic and social conditions. Of particular importance will be to observe the profiles of those living alone, and to assess whether solo living results from personal choice and autonomy or from the fractionalization of the nuclear family and the decline of extended co-residence. Historically, systems of family arrangements were seldom constrained by a lack of kin, since most countries had fertility levels above replacement. Today, however, these conditions have changed. The effects of demographic transformation on kinship availability will likely have a significant impact on co-residence structures. The diversity of living arrangements across groups and regions, and their dynamics over time, reflect population heterogeneity in the organization of family and residence, shaped by demographic, social, and cultural contexts. Variations in living arrangements mirror the diversity and evolution of human needs and carry significant implications for housing, urban planning, and social welfare, highlighting the importance of sustained academic inquiry.

## Reference


Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., & Wacziarg, R. (2003). Fractionalization. *Journal of Economic Growth*, *8*(2), 155–194. https://doi.org/10.1023/A:1024471506938

Asis, M. M. B., Domingo, L., Knodel, J., & Mehta, K. (1995). Living arrangements in four Asian countries: A comparative perspective. *Journal of Cross-Cultural Gerontology*, 10, 145–162. https://doi.org/10.1007/BF00972034

Bales, R. F., & Parsons, T. (2014). *Family: Socialization and interaction process.* Routledge.

Beck, U., & Beck-Gernsheim, E. (2002). *Individualization: Institutionalized individualism and its social and political consequences*. Sage.

Bianchi, S. M. (2014). A demographic perspective on family change. *Journal of Family Theory & Review, 6*(1), 35–44. https://doi.org/10.1111/jftr.12029

Boh, K. (1989). *European family life patterns—A reappraisal*. In K. Boh, M. Bak, C. Clason, M. Pankratova, J. Qvortrup, G. B. Sgritta, & K. Waerness (Eds.), *Changing patterns of European family life: A comparative analysis of 14 European countries* (pp. 265–298). Routledge.

Bongaarts, J., & Zimmer, Z. (2002). Living arrangements of older adults in the developing world: An analysis of demographic and health survey household surveys. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 57*(3), S145–S157. https://doi.org/10.1093/geronb/57.3.S145

Buchmann, M. C., & Kriesi, I. (2011). Transition to adulthood in Europe. *Annual Review of Sociology*, *37*, 481–503. https://doi.org/10.1146/annurev-soc-081309-150212

Cámara, A. D., Rodríguez-Guzmán, C., Barroso-Benítez, I., & Morente-Mejías, F. (2021). Sociodemographic analysis of an accelerated transition: The rise of solo living in Spain. *European Societies, 23*(1), 161-189. https://doi.org/10.1080/14616696.2020.1793212

Cherlin, A. J. (2010). Demographic trends in the United States: A review of research in the 2000s. *Journal of Marriage and Family, 72*(3), 403–419. https://doi.org/10.1111/j.1741-3737.2010.00710.x

Cherlin, A. J. (2012). Goode's World Revolution and Family Patterns: A reconsideration at fifty years. *Population and Development Review, 38*(4), 577–607. https://doi.org/10.1111/j.1728-4457.2012.00528.x

Duncan, O. D., & Duncan, B. (1955). A methodological analysis of segregation indexes. *American Sociological Review*, *20*(2), 210–217. https://doi.org/10.2307/2088328

Elder, G. H., Jr. (1994). Time, human agency, and social change: Perspectives on the life course. *Social Psychology Quarterly, 57*(1), 4–15. https://doi.org/10.2307/2786971

Esteve, A., & Reher, D. S. (2021). Rising global levels of intergenerational coresidence among young adults. *Population and Development Review, 47*(3), 691–717. https://doi.org/10.1111/padr.12427

Esteve, A., & Reher, D. S. (2024). Trends in living arrangements around the world. *Population and Development Review, 50*(1), 211–232. https://doi.org/10.1111/padr.12603

Esteve, A., Castro-Martín, T., & Castro Torres, A. F. (2022). Families in Latin America: Trends, singularities, and contextual factors. *Annual Review of Sociology*, *48*, 485–505. https://doi.org/10.1146/annurev-soc-030420-015156

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.

Eurostat. (n.d.). EU Labour Force Survey (EU-LFS). https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey

Fang, H., Galeano, J., & Esteve, A. (2024). Five decades of household change across Asian societies. *Asian Population Studies,* 1–14. https://doi.org/10.1080/17441730.2024.2431752

Fokkema, T., & Liefbroer, A. C. (2008). Trends in living arrangements in Europe: Convergence or divergence? *Demographic Research, 19*(36), 1351–1418. https://doi.org/10.4054/DemRes.2008.19.36

Frankenberg, E., Chan, A., & Ofstedal, M. B. (2002). Stability and change in living arrangements in Indonesia, Singapore, and Taiwan, 1993–99. *Population Studies, 56*(2), 201–213. https://doi.org/10.1080/00324720215928

Galeano, J., & Esteve, A. (2025). *CORESIDENCE_GLAD: The global living arrangements database, 1960–2021* (Version V1) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.15038210

Giuliano, P. (2007). Living arrangements in Western Europe: Does cultural origin matter? *Journal of the European Economic Association, 5*(5), 927–952. https://doi.org/10.1162/JEEA.2007.5.5.927

Glick, P. C. (1947). The family cycle. *American Sociological Review, 12*(2), 164–174. https://doi.org/10.2307/2086982

Goode, W. J. (1963). *World revolution and family patterns*. The Free Press.

Henrich, J. P. (2020). The WEIRDest people in the world: How the West became psychologically peculiar and particularly prosperous.

Hogan, D. P., & Kitagawa, E. M. (1985). The impact of social status, family structure, and neighborhood on the fertility of Black adolescents. *American Journal of Sociology, 90*(4), 825–855. https://doi.org/10.1086/228146

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. https://doi.org/10.1177/0164027511428455

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. https://doi.org/10.1007/s10680-024-09696-5

Kamo, Y. (1990). Husbands and wives living in nuclear and stem family households in Japan. *Sociological Perspectives*, *33*(3), 397–417. https://doi.org/10.2307/1389067

Kuijsten, A. C. (1996). Changing family patterns in Europe: A case of divergence? *European Journal of Population/Revue Européenne de Démographie, 12,* 115–143. https://doi.org/10.1007/BF01797080

Laslett, P., & Wall, R. (Eds.). (1972). *Household and family in past time*. Cambridge University Press.

Le Play, F. (1871). *L'Organisation de la famille*. Alfred Mame & fils.

Lesthaeghe, R. (2010). The unfolding story of the Second Demographic Transition. *Population and Development Review, 36*(2), 211–251. https://doi.org/10.1111/j.1728-4457.2010.00328.x

Lesthaeghe, R. J. (2022). The second demographic transition: also a 21st century Asian challenge*? China Population and Development Studies, 6*(3), 228-236. https://doi.org/10.1007/s42379-022-00119-8

Lloyd, C. B., & Desai, S. (1992). Children's living arrangements in developing countries. *Population Research and Policy Review, 11*(3), 193–216. https://doi.org/10.1007/BF00124937

Marini, M. M. (1978). The transition to adulthood: Sex differences in educational attainment and age at marriage. *American Sociological Review, 43*(4), 483–507. https://doi.org/10.2307/2094774

Minnesota Population Center. (n.d.). Integrated Public Use Microdata Series, International [Data set]. IPUMS. https://international.ipums.org/

Reher, D. S. (2004). The demographic transition revisited as a global process. *Population, Space and Place, 10*(1), 19–41. https://doi.org/10.1002/psp.313

Reher, D. S., & Requena, M. (2018). Living alone in later life: A global perspective. *Population and Development Review, 44*(3), 427–454. https://doi.org/10.1111/padr.12149

Ruggles, S. (1997). The rise of divorce and separation in the United States, 1880–1990. Demography, 34(4), 455–466. https://doi.org/10.2307/3038300

Ruggles, S. (2007). The decline of intergenerational coresidence in the United States, 1850 to 2000. *American Sociological Review, 72*(6), 964–989. https://doi.org/10.1177/000312240707200606

Schoon, I., & Lyons-Amos, M. (2016). Diverse pathways in becoming an adult: The role of structure, agency and context. *Research in Social Stratification and Mobility*, *46*, 11–20. https://doi.org/10.1016/j.rssm.2016.02.008

Schwanitz, K., & Mulder, C. H. (2015). Living arrangements of young adults in Europe. *Comparative Population Studies*, *40*(4). https://doi.org/10.12765/CPoS-2015-14

Sullivan, D. F. (1971). A single index of mortality and morbidity. *HSMHA Health Reports*, *86*(4), 347–354.

Therborn, G. (2004). *Between sex and power: Family in the world, 1900–2000*. Routledge.

Thornton, A. (2001). The developmental paradigm, reading history sideways, and family change. *Demography, 38*(4), 449–465. https://doi.org/10.1353/dem.2001.0039

Tomassini, C., Glaser, K., Wolf, D. A., Van Groenou, M. B., & Grundy, E. (2004). Living arrangements among older people: An overview of trends in Europe and the USA. *Population Trends,* (115), 24–35.

United Nations Department of Economic and Social Affairs (UN DESA). (2024). *World Population Prospects 2024: Summary of Results.* United Nations. https://population.un.org/wpp/

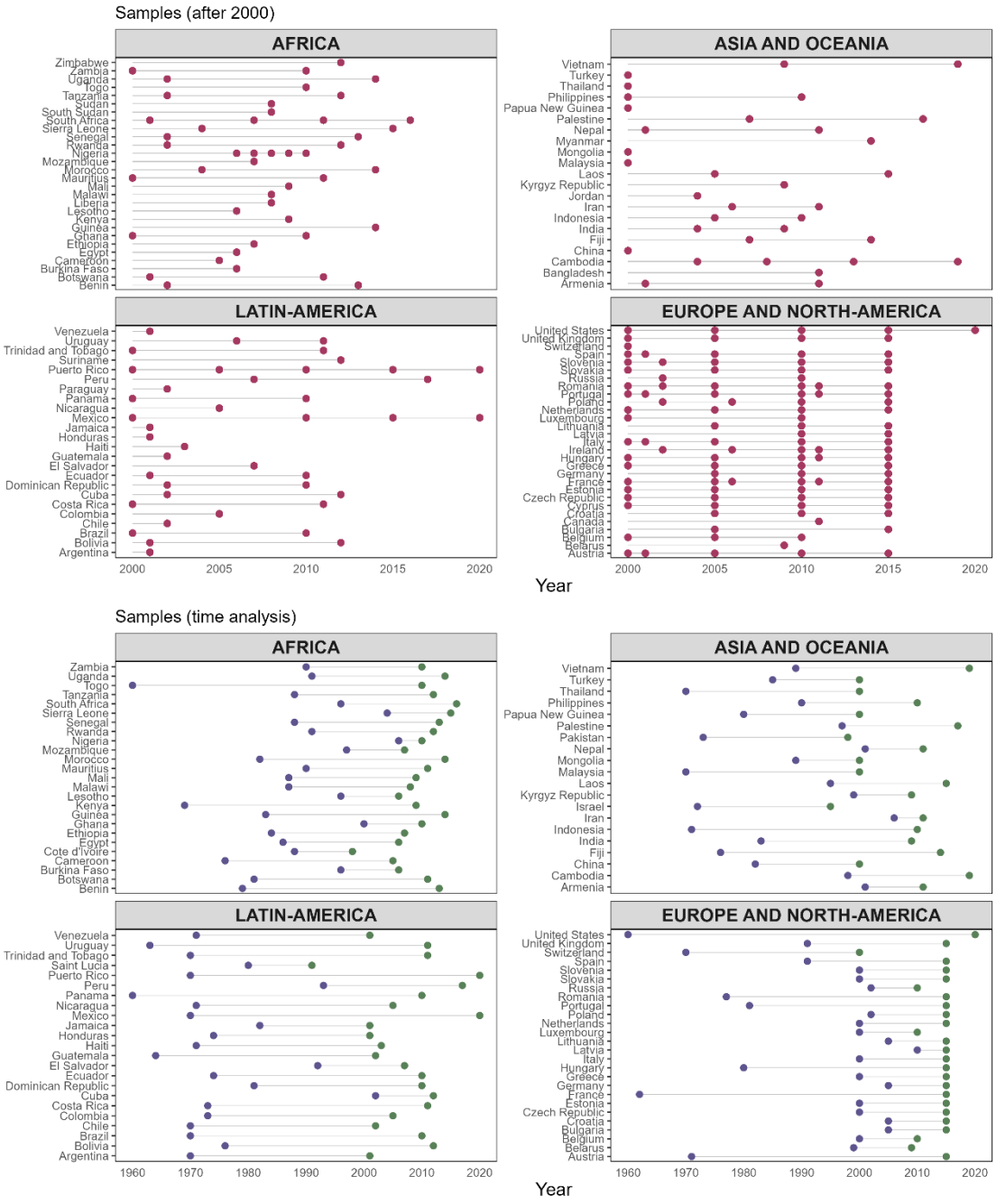
United Nations Department of Economic and Social Affairs, Population Division. (2022). *Database on the Households and Living Arrangements of Older Persons 2022*. United Nations. https://www.un.org/development/desa/pd/data/living-arrangements-older-persons

United Nations. (1999). *Standard country or area codes for statistical use (M49)*. United Nations Statistics Division. https://unstats.un.org/unsd/methodology/m49/

Vespa, J., Lewis, J. M., & Kreider, R. M. (2013). *America's families and living arrangements*: *2012*. (Current Population Reports, P20–570). U.S. Census Bureau. https://www.census.gov/library/publications/2013/demo/p20-570.html

Yount, K. M. (2005). The patriarchal bargain and intergenerational coresidence in Egypt. *The Sociological Quarterly, 46*(1), 137–164. https://doi.org/10.1111/j.1533-8525.2005.00007.x

**Figure 1. List of countries and sample years used in this research**




Source: Data from the GLAD database, previously processed from census microdata available in IPUMS and from labor force surveys available in the EU-LFS Eurostat.

**Figure 2. Overview of the living arrangements typology applied in this research**

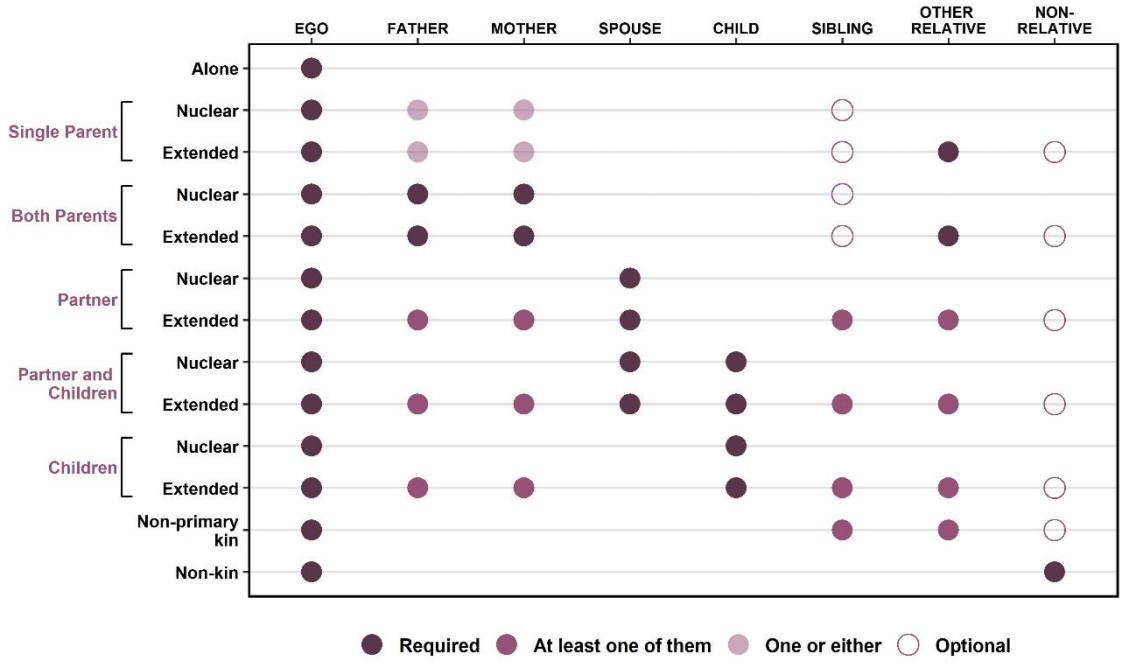
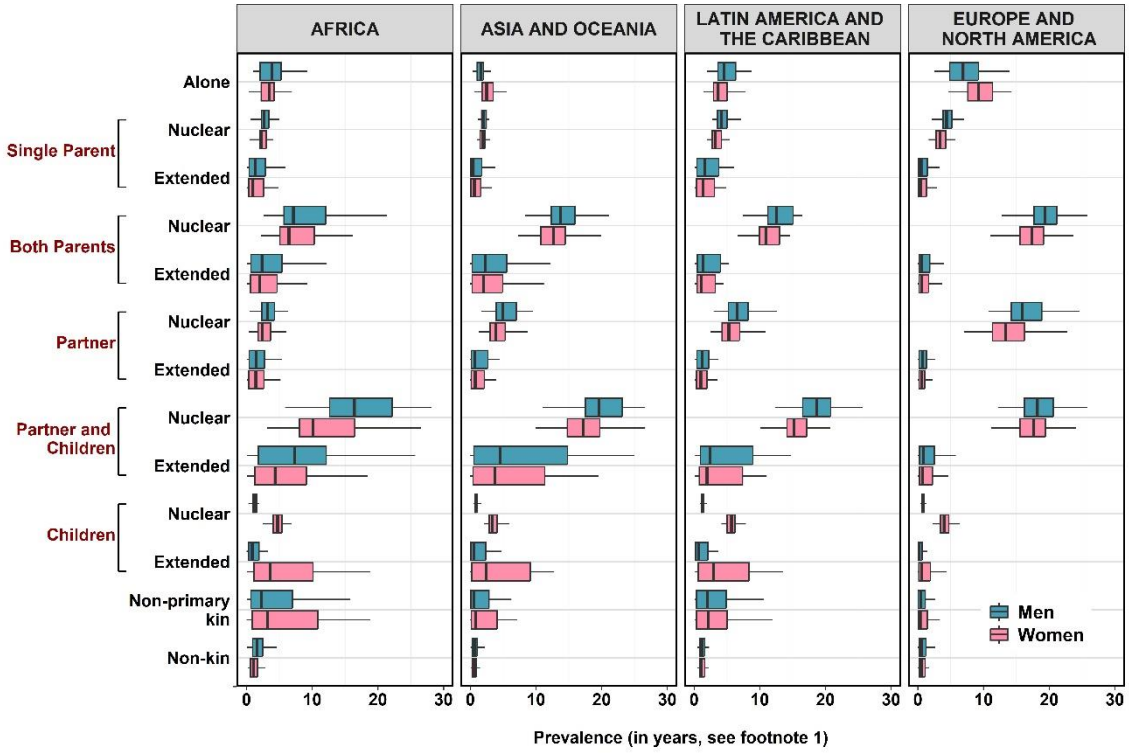


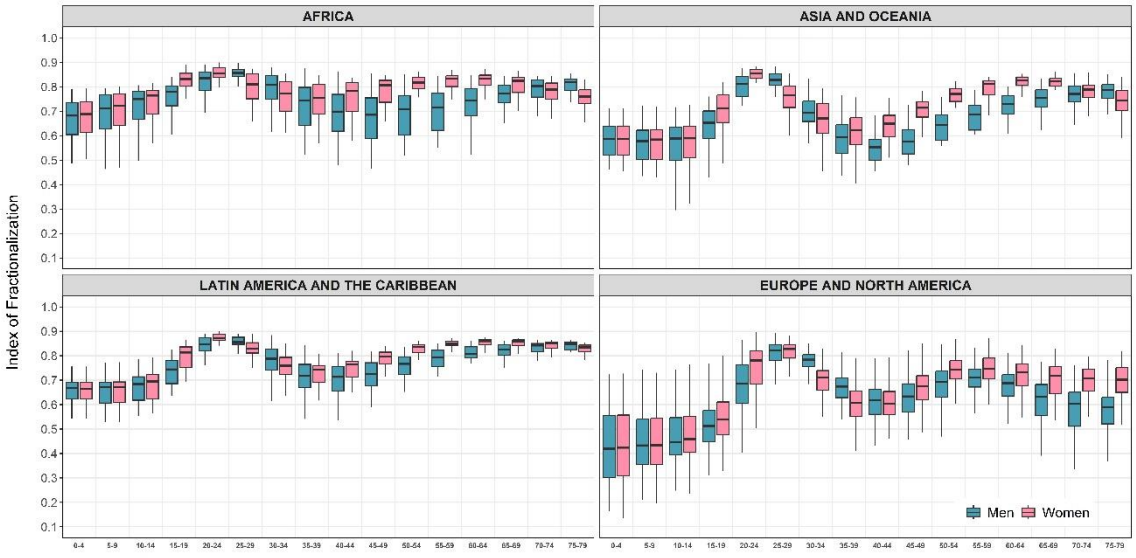
**Figure 3. Variation between countries in the prevalence of living arrangements among the population aged 0 to 80 by sex and continental region. Available data since 2000. 102 countries.**




Prevalence (in years)

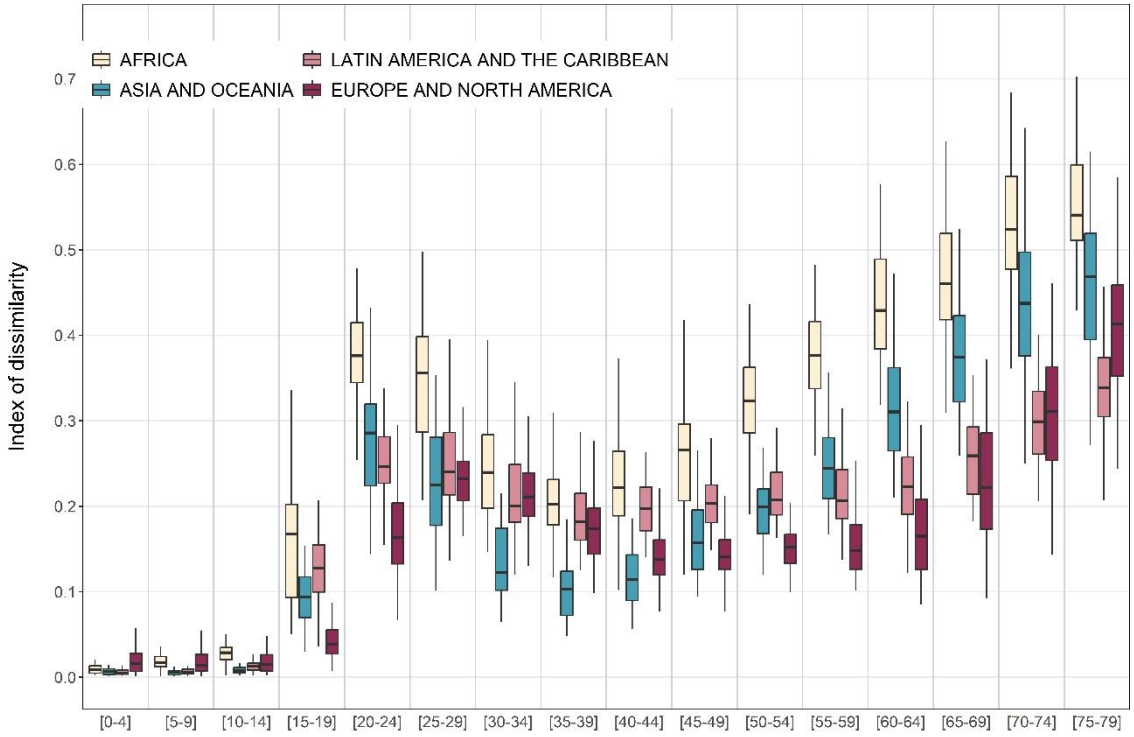
Source: Data from the GLAD database, previously processed from census microdata available in IPUMS and from labor force surveys available in the EU-LFS Eurostat.

**Figure 4. Variation between countries in levels of fractionalization of living arrangements by age, sex, and continental region. Available data since 2000. 102 countries.**



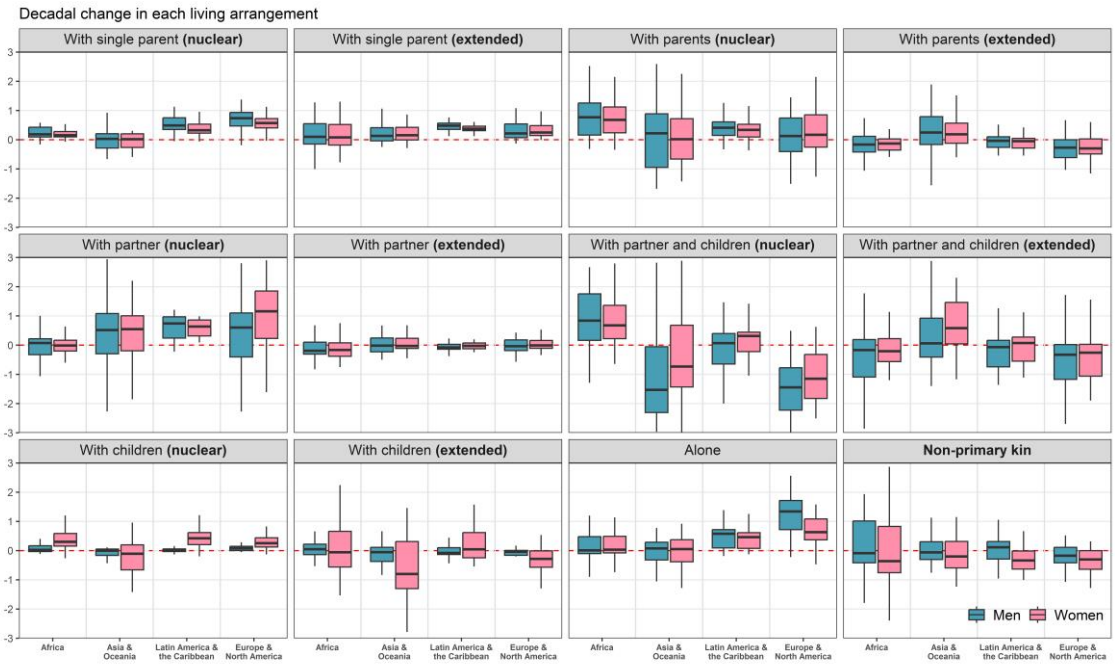

Source: Data from the GLAD database, previously processed from census microdata available in IPUMS and from labor force surveys available in the EU-LFS Eurostat.

**Figure 5. Variation between countries in the dissimilarity index of living arrangements between men and women by age and continental region. Available data since 2000. 102 countries.**




Source: Data from the GLAD database, previously processed from census microdata available in IPUMS and from labor force surveys available in the EU-LFS Eurostat.

**Figure 6. Variation between countries in changes in the prevalence of living arrangements by type, sex, and continental region. Changes measured between the earliest and most recent observations, adjusted to a decade of change. 94 countries.**




Source: Data from the GLAD database, previously processed from census microdata available in IPUMS and from labor force surveys available in the EU-LFS Eurostat.