Beyond Lifelong Marriage and Spousal Coresidence: A Research Note on Racial and

Ethnic Differences in Late-Life Family and Living Arrangements

Abstract

We use an innovative Bayesian Multi-State Life Table approach to examine how race, ethnicity,

and sex shape marital status and living arrangements in later life. Using the Health and Retirement

Study (1992–2018), we estimate expected years spent in various marital and living arrangements

after age 50. Our findings reveal stark disparities: White adults largely follow traditional patterns,

spending most of their later years married and living with a spouse. In contrast, Black adults

experience the shortest durations of marriage and spousal co-residence, spending much of later life

alone or with non-spouse family members. Hispanic adults occupy an intermediate position,

maintaining substantial years in marriage while also spending extended time in multigenerational

households. These patterns are further stratified by sex, with minority women experiencing

significantly fewer years married and living with a spouse than men, amplifying their reliance on

alternative family support structures. These findings underscore how the intersection of race,

ethnicity, and sex shapes later-life social and economic security, emphasizing the need for policies

that account for diverse family structures in aging populations.

Key words: Marital status, Living arrangement, Racial and ethnic disparities, Life Expectancies,

Gray divorce.

Introduction

In recent decades, family life among American older adults has become increasingly diverse. Rising rates of late-life divorce, non-marital partnerships, and lifelong singlehood have reshaped traditional marriage patterns (Brown and Lin 2012; Brown et al. 2018, 2019; Carr and Utz 2020). Meanwhile, living arrangements have also shifted: while co-residing with a spouse was once the norm (Pew Research Center 2015), more older adults now live alone (Ausubel 2020) or in multigenerational households due to economic pressures (Cohn and Passel 2018). Examining patterns in both marriage and living arrangements is essential, as these trends reflect broader changes in how older Americans navigate family life, social support and housing choices.

Racial and ethnic differences in late-life marital and living arrangements remain understudied compared to earlier life stages. While much research has focused on marriage formation and dissolution in adulthood (Bulanda and Brown 2007; Cherlin 2010; Raley and Sweeney 2009), emerging evidence—typically relying on cross-sectional analyses of marital status or event-history models of single, one-way transitions—shows that older White adults are most likely to be married and living with a spouse (Carr and Utz 2020; Harawa et al. 2011; Liu, Umberson and Xu 2020), while Black adults experience higher rates of divorce, widowhood, and singlehood, with Hispanic adults falling in between (Bulanda and Brown 2007; Lichter, Qian and Leannam 2006; McNamee and Raley 2011). Living arrangements also vary significantly by race and ethnicity, with White older adults more likely to live alone or with a spouse only, whereas Black and Hispanic older adults more often reside in multigenerational or extended-family households (Kamo 2000; Landale, Oropesa and Bradatan 2006; Pew Research Center 2010; Raymo, Pike and Liang 2019).

Although rarely examined explicitly, an intersectional perspective suggests that race, ethnicity, and sex jointly shape access to marriage, relationship stability, and living arrangements in later life. Structural barriers such as economic insecurity, mass incarceration, and systemic racism contribute to lower marriage rates and higher divorce rates among racial and ethnic minorities, particularly Black adults (Western and Wildeman 2009). These disadvantages persist into later life, with divorced and widowed minority adults less likely to remarry (Lichter et al. 2006; McNamee and Raley 2011; Song 2022). Sex disparities further compound these patterns: women live longer than men and are more likely to spend extended periods without a spouse. This is especially true for Black and Hispanic women, who may be more likely to live alone or in extended-family households due to a mix of cultural norms and economic constraints (Carr and Utz 2020; Kamo 2000; Landale et al. 2006).

A major gap in the literature is the lack of studies that systematically examine long-term transitions in marital status and living arrangements or estimate the number of years older adults spend in each state by race, ethnicity, and sex. Marital- and living arrangement-specific life expectancies offer insights beyond marriage and divorce rates, shedding light on the time spent in different family structures, caregiving needs, and access to spousal or familial support. Life table approaches are required for such estimates, yet only two studies have applied them—both focused solely on living arrangements. Raymo et al. (2019) used a multistate life table to classify coresidence patterns and found that White older adults spent less time living with adult children and more time living farther away compared to Black and Hispanic counterparts. Raymo et al. (2022) used Sullivan's method to estimate life expectancies by living arrangement for older adults with and without children, showing that childless White women and Black men spent the most time living alone. While informative, these studies omit marital transitions, which directly affect living

arrangements and social and financial support (Liang et al. 2005). For example, losing a spouse can lead to living alone, moving in with family, or entering institutional care—trajectories shaped by race, ethnicity, and sex. These studies also overlook traditional arrangements like living alone, with a spouse only, with non-spousal others, or in institutions, all of which are key to understanding support structures in later life (Cornwell, Laumann and Schumm 2008; Fiori, Antonucci and Cortina 2006). Finally, neither study quantifies uncertainty in life expectancy estimates or in the proportion of remaining life spent in each state, limiting valid cross-group comparisons. A joint analysis of marital and living arrangements using life table methods—while incorporating uncertainty—would yield a fuller understanding of how older adults navigate family life across racial, ethnic, and sex groups.

A key challenge in estimating marital- and living arrangement-specific life expectancies is accurately quantifying uncertainty to support valid comparisons across racial and ethnic groups. Because overall life expectancy differs by group, reporting only the expected number of years spent in each state can obscure disparities; proportional estimates and confidence intervals are essential for meaningful cross-group comparisons. However, traditional life table approaches using longitudinal panel data—such as bootstrapping or estimating embedded Markov chains—often rely on asymptotic approximations like the delta method and assume normality in the sampling distribution of estimates, which may not accurately capture uncertainty in complex, high-dimensional settings (Lynch and Zang 2022). These methods also struggle with structural zeros—states that cannot be revisited once exited, such as the "never-married" status after first marriage—and are only effective in small state spaces. As the number of marital and living arrangement states increases, the resulting high-dimensional transition matrix poses additional computational challenges. Updated Bayesian approaches, including extensions of methods developed by Lynch

and Brown (2005), provide a more robust framework for addressing these issues, enabling precise uncertainty quantification across a wide range of outcomes.

To address these gaps, we apply an innovative Bayesian Multi-State Life Table (MSLT) approach (Lynch and Zang 2022) to estimate marital- and living arrangement-specific life expectancies and the proportion of remaining life to be spent in each state at age 50, stratified by sex, race, and ethnicity, using data from the Health and Retirement Study (HRS). This method effectively handles high-dimensional transition matrices, making it well-suited for modeling complex marital and living arrangement transitions over time. It provides precise uncertainty estimates for various quantities, including proportions and racial gaps, through credible intervals, enabling statistically valid comparisons across racial and ethnic groups. Additionally, the Bayesian framework properly accounts for structural zeros, ensuring more accurate modeling of transitions that cannot be revisited (Lynch and Zang 2022). In doing so, this study advances prior research not only by applying a novel methodological framework, but more importantly by asking new and meaningful questions—such as how much time older adults spend in different marital and living arrangement states, and how these durations differ by race, ethnicity, and sex. Prior research has not provided this life-course perspective, nor the uncertainty estimates necessary for valid crossgroup comparisons. Our approach enables statistically rigorous evaluations of racial and gender disparities that were previously only suggestive.

Method

Our data came from the HRS 1992-2018. The HRS is a nationally representative longitudinal survey of U.S. adults aged 50 and above. Since 1992, the HRS has been collecting economic, demographic, and health information from non-institutionalized U.S. adults over age 50 biennially, using a multi-stage probability sample of households (RAND Center for the Study of Aging 2019).

In each round of the interviews, respondents report their current marital status and living arrangements. 1 Our units of analysis were transitions between marital statuses or living arrangements. A transition is defined as the change in marital status or living arrangements between survey wave t and wave t+1.

[Figure 1 About Here]

We considered the full range of marital statuses, including married (married, remarried, or partnered), divorced (divorced or separated), widowed, and never-married. In HRS, partnered refers to individuals living with a partner but is not legally married (RAND Center for the Study of Aging 2019). We considered the following living arrangements: living with a spouse, living with non-spouses only, living alone, and living in a nursing home. Living with a spouse was defined as residing in a household with a marital or partnered companion, while living with non-spouses only applied to individuals who did not live in such a couple household but had at least one co-resident who was not their spouse or partner. Adult children make up the majority of non-spouse co-residents across all racial and ethnic groups—81.3% for White, 73.8% for Black, and 81.4% for Hispanic. The remainder include siblings, other relatives, or friends (see Appendix Table A1 for details). Death was the absorbing state. All possible transitions are shown in Figure 1.

After removing individuals missing information on marital status in any wave (N = 159) and those missing information on race and ethnicity (N = 101) and covariates (N = 11), our final sample for the analyses on marital statuses included 26,387 individuals and 132,385 transitions. Among those whose information on living arrangements was available in HRS (N = 21,638), 22

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¹ Since the 1996 wave represented the first year that nursing home information was systematically recorded, our analysis of the living arrangement sample started from 1996 and extended through to 2018.

individuals were missing information on race and ethnicity and 35 individuals were missing covariates. After excluding these missing values, our final sample for the analyses on living arrangements included 21,581 individuals and 111,312 transitions. A tabulation of all transitions is shown in Table 1.

[Table 1 About Here]

Using the Bayesian MSLT method, we first estimated a Bayesian multinomial logit model via Gibbs sampling, controlling for race and ethnicity, sex, and birth cohorts. We stratified all analyses by sex in addition to race and ethnicity. Using estimates from the multinomial logit model, we constructed age-specific transition matrices and generated 1,000 life tables for each combination to compute state expectancies. To quantify uncertainty, we used 84% credible intervals. If two 84% confidence intervals do not overlap, the difference between estimates is statistically significant at the 5% level (Albert and Chib 1993).

We examined the following racial and ethnic groups: non-Hispanic White, non-Hispanic Black, and Hispanic. The covariates included age (continuous), sex (male, female), birth year (categorical), current region (Northeast, South, West, Midwest), and nativity status (U.S.-born, foreign-born). In the HRS, race and ethnicity, sex, and birth cohort are used to construct sampling weights (Hauser and Willis 2004; Ofstedal et al. 2011). Controlling for these characteristics in our model helps maintain the representativeness of the sample (Lynch and Brown 2010; Lynch and Zang 2022; Si, Pillai and Gelman 2015). Table 2 presents descriptive statistics for the full samples.

Our main analysis estimates marital status- and living arrangement-specific life expectancy—the expected years spent in each marital status and living arrangement at age 50. Additionally, we conduct two auxiliary analyses: (1) assessing racial and ethnic disparities in these measures, using non-Hispanic White adults as the reference group, and (2) estimating the

proportion of remaining life to be spent in each marital status and living arrangement to account for differences in overall life expectancy across racial, ethnic, and sex groups.

Results

Figures 2–3 show the expected years to be spent in each marital status and living arrangement at age 50 across racial, ethnic, and sex groups. Appendix Table A2-A4 provides detailed estimates, racial disparities, and proportions, with corresponding figures in the Appendix (A2-A4).

Marital Status

As shown in Figure 2, at age 50, White older adults were expected to spend the most years married: 25.47 years for men (CI: 25.14, 25.82) and 18.05 years for women (CI: 17.72, 18.40). Hispanic men and women followed closely, with 23.37 years (CI: 22.60, 24.18) and 15.52 years (CI: 14.86, 16.22), respectively. The Hispanic-White gap was largely due to longer time expected divorced: Hispanic men were expected to spend 1.37 more years divorced than White men (CI: 0.91, 1.83), with a similar pattern among women (see Appendix Table A3).

[Figure 2 About Here]

Black adults had the shortest expected years married: 17.62 for men (CI: 17.09, 18.15) and 9.68 for women (CI: 9.30, 10.08), reflecting Black-White gaps of 7.85 (CI: -8.36, -7.29) and 8.37 years (CI: -8.77, -7.95), respectively. Most of these gaps were explained by longer time expected divorced: 5.99 years for Black men (CI: 5.57, 6.40) vs. 2.73 for White men, and 12.56 years for Black women (CI: 11.96, 13.15) vs. 7.28 for White women. Black adults also had the longest time expected never married—1.31 years for men (CI: 1.16, 1.46) and 1.82 years for women (CI: 1.64, 2.01)—compared to 0.59 and 1.06 years for White men and women.

Proportional estimates confirm these differences (Appendix Table A4). White men were expected to spend the largest share of their remaining life married (81.77%, CI: 81.15, 82.42), followed by Hispanic men (76.43%, CI: 74.81, 78.07) and Black men (64.61%, CI: 63.02, 66.18). Among women, the gaps were starker: White women 52.33% (CI: 51.39, 53.28), Hispanic women 44.77% (CI: 42.75, 46.79), and Black women only 30.99% (CI: 29.79, 32.23).

Across all groups, women were expected to spend fewer years married than men, and more years divorced or widowed. Divorce-related racial gaps were especially large among women. While Black women are more likely to become widowed (Preston, Lim and Morgan 1992; Ruggles 1994), their shorter life expectancy means they were expected to spend less time widowed than White women.

Living Arrangements

As shown in Figure 3, White adults were expected to spend the most years living with a spouse—25.12 years for men (CI: 24.79, 25.47) and 18.05 for women (CI: 17.63, 18.45)—followed by Hispanic men (23.76 years, CI: 22.91, 24.58) and women (14.94 years, CI: 14.21, 15.68). Black adults had the lowest spousal co-residence life expectancies: 18.52 years for men (CI: 17.95, 19.08) and 8.92 for women (CI: 8.50, 9.37), representing gaps of 6.60 and 9.13 years, respectively, compared to Whites. The Hispanic-White gap was largely due to more years expected living with non-spouse family members: 1.46 more years for men (CI: 1.20, 1.74) and 5.24 more for women (CI: 4.51, 5.94), alongside slightly fewer years expected living alone. Black adults were expected to spend significantly more years both living alone and living with non-spouse family members. Compared to White men, Black men were expected to spend 1.35 more years living alone (CI:

1.05, 1.67) and 2.05 more with non-spouse others (CI: 1.84, 2.26). For women, these differences were 0.75 years (CI: 0.28, 1.22) and 5.96 years (CI: 5.22, 6.41), respectively.

[Figure 3 About Here]

Proportional estimates again reflected these disparities (Appendix Table A4). The proportion of remaining life spent living with a spouse was highest for White adults (81.35% for men, 52.49% for women), followed by Hispanics (78.07% for men, 43.18% for women), and lowest for Blacks (67.15% for men, 28.22% for women). Black adults, particularly women, also spent the highest share of life living alone (19.85% for men, 36.03% for women).

Across all groups, women were expected to spend more time living alone or with non-spouse family members than men. Racial disparities in these living arrangements were again more pronounced among women, especially in non-spouse family co-residence.

A Broad Picture: Composition of Life Expectancy at Age 50

Figure 4 highlights clear racial, ethnic, and sex differences in the composition of life expectancy at age 50, with each group following a distinct trajectory shaped by intersecting structural and cultural factors. Across all racial groups, women were expected to spend fewer years married and more years divorced, widowed, living alone, or in non-spouse family arrangements than men—reflecting the compounding effects of gendered life expectancy and partnership patterns. These differences were especially pronounced among women of color. Black women were expected to spend the fewest years married or living with a spouse and the most years unpartnered—whether divorced, never married, or living alone—reflecting cumulative social and health disadvantages over the life course. White adults, especially men, were expected to spend the greatest number of years in marriage and spousal co-residence, reflecting a more traditional

marital and household trajectory. In contrast, Hispanic adults followed a distinct path marked by moderately fewer years in marriage but more years in extended-family living arrangements. Hispanic women, in particular, were expected to spend fewer years alone and more years residing with non-spouse family members, suggesting strong cultural and economic norms around multigenerational support. Rather than falling between the Black and White patterns, the Hispanic trajectory reflects a qualitatively different approach to family and caregiving in later life.

[Figure 4 About Here]

Additional Analyses by Nativity

We also examined differences by nativity status, stratifying the sample into U.S.-born and foreign-born adults (see Appendix Figures A5–A6). Notable patterns emerged: U.S.-born adults generally spent fewer years married and divorced than their foreign-born counterparts, likely due to their shorter total life expectancy. For living arrangements, U.S.-born adults spent fewer years living with a spouse or non-spouse family members. Among women, U.S.-born individuals spent more years living alone and in nursing homes compared to foreign-born women. Despite these differences, the overall patterns of racial and ethnic disparities remained consistent within both nativity groups.

Discussion

Our study uses a Bayesian Multistate Life Table (MSLT) approach to examine racial and ethnic disparities in marital status and living arrangements in later life. This method handles complex, high-dimensional transitions, accounts for structural zeros, and provides credible uncertainty estimates—enabling statistically valid comparisons across groups. More than a methodological

advance, it allows us to answer previously unasked questions about the time older adults spend in different family states and to assess whether observed disparities are meaningful. Our findings reveal persistent racial and ethnic differences: White older adults are more likely to follow traditional patterns of stable marriage and spousal co-residence, while Black and Hispanic adults spend more years unmarried and are more likely to live with extended family, such as adult children.

Importantly, our findings highlight distinct patterns in how Black and Hispanic older adults spend their later years in family arrangements. While prior research has often focused on Black-White disparities (Goldscheider and Bures 2003; Morgan et al. 1993), our results underscore that Hispanic older adults follow unique trajectories distinct from both Black and White adults. Hispanic adults maintain relatively stable marriages with durations only slightly shorter than Whites, whereas Black adults are projected to spend the longest years in non-married states. At the same time, Black adults expect the most time living alone, while Hispanic adults expect the least, instead spending more time in extended-family households. These findings highlight the limitations of a Black-White comparative framework and emphasize the need to examine Hispanic family patterns as a distinct trajectory with its own implications for aging and support structures.

These patterns have important implications for social support and caregiving in later life. Black older adults, who expect fewer years with spouses, may rely more heavily on adult children, extended family, and community networks, potentially creating disproportionate caregiving burdens given structural disadvantages many Black communities face, including economic hardship and limited access to formal caregiving resources. Hispanic older adults, on the other hand, benefit from a more diversified support structure—they anticipate substantial years of spousal support due to their relatively stable marriages while also maintaining strong connections

with extended family. This combination may provide Hispanic older adults with more flexible caregiving arrangements, reinforcing the importance of familism as a protective factor in later life. However, while extended-family living arrangements may provide social and economic support, they also raise questions about caregiving equity and intergenerational transfers of resources. Older adults who live with non-spouse family members may receive informal care but may also be expected to contribute financially or provide caregiving to younger generations (Seltzer and Bianchi 2013; Silverstein and Giarrusso 2010). These complexities highlight the bidirectional nature of intergenerational support and the potential vulnerabilities older adults may face within multigenerational households.

Our results further illustrate how sex intersects with race and ethnicity to shape family life in later years. Despite longer life expectancy, women across all racial and ethnic groups expect fewer years married and living with spouses compared to men, instead spending more years divorced, widowed, and living alone or with non-spouses. However, these gendered patterns manifest differently across racial and ethnic groups. White women, while experiencing fewer married years than White men, still maintain relatively long periods of spousal co-residence. In contrast, Black women face compounded disadvantages—structural barriers to marriage formation, coupled with gendered remarriage patterns, result in the shortest expected years in marriage and spousal co-residence among all groups (Angel, Jiménez and Angel 2007). Hispanic women occupy a unique position where cultural traditions of familism may buffer some challenges of unmarried status through extended family living arrangements, even as they face similar gender-based constraints in marriage patterns. These intersecting disadvantages also shape living arrangements in old age. Black women expect not only the longest years living without spouses but also significant periods living alone—a pattern that contrasts with Hispanic women, who are more

likely to integrate into extended-family households when not married. These disparities have critical implications for social isolation, access to caregiving, and financial stability, particularly for Black women who lack both spousal support and consistent extended-family co-residence.

These disparities translate directly into economic insecurity. Data from the 2023 Current Population Survey reveal stark differences in poverty rates by marital status among women aged 65 and older: only 4.3% of married women live in poverty, compared to 13.6% of widowed women, 14.0% of divorced women, and 18.2% of never-married women (U.S. Census Bureau 2024). These vulnerabilities are even more pronounced by race and ethnicity, with nearly half of unmarried Black (46.4%) and Hispanic (47.2%) older women living below 200% of the poverty threshold.

This economic vulnerability stems largely from policies that favor traditional marriages, disproportionately disadvantaging minority women who experience shorter marriage durations. Social Security spousal benefits require marriages lasting at least ten years (Social Security Administration 2014), limiting access for women with fewer married years who must instead rely on their own earnings records—often lower due to racial and gender wage gaps. Furthermore, policy changes such as the elimination of the Retirement Earnings Test encourage older adults—especially unmarried women—to claim Social Security benefits earlier, resulting in permanently reduced monthly payments (Figinski and Neumark 2018). Since minority women spend substantial portions of later life unmarried, these policy structures systematically exclude them from key benefits, increasing their likelihood of poverty. These structural issues highlight how social safety nets fail to support the diverse family pathways that minorities women increasingly follow, reinforcing economic penalties for non-traditional family patterns.

Our study has several limitations. First, due to limited sample sizes, we were unable to include Asian American, Pacific Islander, and Indigenous older adults. Second, our life table

estimates for racial and ethnic minorities may be conservative due to sample attrition. Respondents with only a single observation—who were disproportionately racial and ethnic minorities (Appendix Table A5)—had to be excluded, potentially causing us to miss transitions out of marriage or exits from couple-headed households that occurred after attrition. Third, our data measured transitions using two-year intervals, potentially missing shorter-term marital and living arrangement changes occurring between survey waves. Finally, we grouped marital and partnered statuses together in our primary analyses; although sensitivity analyses in Appendix Figure A7 suggest this had minimal impact on our overall conclusions, future studies with larger samples could examine these statuses separately to better capture distinct partnership dynamics.

As the U.S. aging population becomes increasingly diverse in racial and ethnic composition (U.S. Census Bureau 2023), our findings imply that existing social policies built around lifelong marriage assumptions may systematically disadvantage minority, particularly older women. These disparities highlight the urgent need for policies that broaden eligibility criteria for spousal benefits, improve housing access for unmarried older adults, and develop interventions sensitive to cultural and community-based caregiving arrangements, with the purpose of recognizing the diverse pathways through which older adults experience family life. While this study is primarily descriptive, future research should investigate underlying factors shaping these disparities, particularly intersectional vulnerabilities of minority women, to improve economic security and well-being for an increasingly diverse aging population.

References

- Albert, J.H.and Chib, S. (1993). Bayesian analysis of binary and polychotomous response data. *Journal of the American statistical Association*, 88(422), 669-679.
- Angel, J.L., Jiménez, M.A., and Angel, R.J. (2007). The Economic Consequences of Widowhood for Older Minority Women. *The Gerontologist*, 47(2), 224-234. https://doi.org/10.1093/geront/47.2.224
- Ausubel, J. (2020). Older people are more likely to live alone in the U.S. than elsewhere in the world.
- Brown, S.L.and Lin, I.F. (2012). The gray divorce revolution: rising divorce among middle-aged and older adults, 1990-2010. *J Gerontol B Psychol Sci Soc Sci*, 67(6), 731-741. https://doi.org/10.1093/geronb/gbs089
- Brown, S.L., Lin, I.F., Hammersmith, A.M., and Wright, M.R. (2018). Later Life Marital Dissolution and Repartnership Status: A National Portrait. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences*, 73(6), 1032-1042. https://doi.org/10.1093/geronb/gbw051
- —. (2019). Repartnering Following Gray Divorce: The Roles of Resources and Constraints for Women and Men. *Demography*, 56(2), 503-523. https://doi.org/10.1007/s13524-018-0752-x
- Bulanda, J.R. and Brown, S.L. (2007). Race-ethnic differences in marital quality and divorce. *Social Science Research*, *36*(3), 945-967.
- Carr, D.and Utz, R.L. (2020). Families in Later Life: A Decade in Review. *Journal of Marriage and Family*, 82(1), 346-363. https://doi.org/https://doi.org/10.1111/jomf.12609
- Cherlin, A.J. (2010). *The Marriage-Go-Round: The State of Marriage and the Family in America Today*. Knopf Doubleday Publishing Group. https://books.google.com/books?id=LHvr6ySZ8FwC
- Cohn, D.v.and Passel, J.S. (2018). A record 64 million Americans live in multigenerational households.
- Cornwell, B., Laumann, E.O., and Schumm, L.P. (2008). The Social Connectedness of Older Adults: A National Profile*. *Am Sociol Rev*, 73(2), 185-203. https://doi.org/10.1177/000312240807300201
- de Vos, S.and Arias, E. (2003). A Note on the Living Arrangements of Elders 1970–2000, with Special Emphasis on Hispanic Subgroup Differentials. *Population Research and Policy Review*, 22(1), 91-101. https://doi.org/10.1023/A:1023504322396
- Figinski, T.and Neumark, D. (2018). Does Eliminating the Earnings Test Increase the Incidence of Low Income Among Older Women? *Res Aging*, 40(1), 27-53. https://doi.org/10.1177/0164027516676877
- Fiori, K.L., Antonucci, T.C., and Cortina, K.S. (2006). Social Network Typologies and Mental Health Among Older Adults. *The Journals of Gerontology: Series B*, 61(1), P25-P32. https://doi.org/10.1093/geronb/61.1.P25
- Goldscheider, F.K.and Bures, R.M. (2003). The racial crossover in family complexity in the United States. *Demography*, 40(3), 569-587. https://doi.org/10.1353/dem.2003.0022
- Harawa, N.T., Leng, M., Kim, J., and Cunningham, W.E. (2011). Racial/ethnic and gender differences among older adults in nonmonogamous partnerships, time spent single, and

- human immunodeficiency virus testing. *Sex Transm Dis*, 38(12), 1110-1117. https://doi.org/10.1097/OLQ.0b013e31822e614b
- Hauser, R.M.and Willis, R.J. (2004). Survey design and methodology in the Health and Retirement Study and the Wisconsin Longitudinal Study. *Population and Development Review*, *30*, 209-235.
- Himes, C.L., Hogan, D.P., and Eggebeen, D.J. (1996). Living arrangements of minority elders. *J Gerontol B Psychol Sci Soc Sci*, 51(1), S42-48. https://doi.org/10.1093/geronb/51b.1.s42
- Kamo, Y. (2000). Racial and Ethnic Differences in Extended Family Households. *Sociological Perspectives*, 43(2), 211-229. https://doi.org/10.2307/1389794
- Landale, N., Oropesa, R.S., and Bradatan, C. (2006). Hispanic Families in the United States: Family Structure and Process in an Era of Family Change. In M.F. Tienda M (Ed.), *Hispanics and the Future of America*. National Research Council (US) Panel on Hispanics in the United States.
- Liang, J., Brown, J.W., Krause, N.M., Ofstedal, M.B., and Bennett, J. (2005). Health and living arrangements among older Americans: does marriage matter? *J Aging Health*, 17(3), 305-335. https://doi.org/10.1177/0898264305276300
- Lichter, D.T., Qian, Z., and Leannam, M.M. (2006). Marriage or Dissolution? Union Transitions among Poor Cohabiting Women. *Demography*, 43(2), 223-240. http://www.jstor.org/stable/4137195
- Liu, H., Umberson, D., and Xu, M. (2020). Widowhood and mortality: gender, race/ethnicity, and the role of economic resources. *Ann Epidemiol*, *45*, 69-75 e61. https://doi.org/10.1016/j.annepidem.2020.02.006
- Lynch, S.M. and Brown, J.S. (2010). Obtaining multistate life table distributions for highly refined subpopulations from cross-sectional data: A bayesian extension of sullivan's method. *Demography*, 47(4), 1053-1077. https://doi.org/10.1007/bf03213739
- Lynch, S.M.and Zang, E. (2022). Bayesian Multistate Life Table Methods for Large and Complex State Spaces: Development and Illustration of a New Method. *Sociological Methodology*, *52*(2), 254-286. https://doi.org/10.1177/00811750221112398
- McNamee, C.B.and Raley, R.K. (2011). A note on race, ethnicity and nativity differentials in remarriage in the United States. *Demographic Research*, 24(13), 293-312. https://doi.org/10.4054/DemRes.2011.24.13
- Morgan, S.P., McDaniel, A., Miller, A.T., and Preston, S.H. (1993). Racial Differences in Household and Family Structure at the Turn of the Century. *American Journal of Sociology*, 98(4), 799-828. http://www.jstor.org/stable/2781236
- Ofstedal, M.B., Weir, D.R., Chen, K.-T., and Wagner, J. (2011). Updates to HRS sample weights. *Ann Arbor: University of Michigan*.
- Pew Research Center. (2010). *The Return of the Multi-Generational Family Household*. —. (2015). *The America Family Today*. Pew Research Center.
- Preston, S.H., Lim, S., and Morgan, S.P. (1992). African-American marriage in 1910: beneath the surface of census data. *Demography*, 29(1), 1-15. https://www.ncbi.nlm.nih.gov/pubmed/1547897
- Raley, R.K.and Sweeney, M.M. (2009). Explaining race and ethnic variation in marriage: Directions for future research. *Race and Social Problems*, *1*, 132-142.
- RAND Center for the Study of Aging, R.C.f.t.S.o.A. (2019). Health and Retirement Study.

- Raymo, J.M., Pike, I., and Liang, J. (2019). A New Look at the Living Arrangements of Older Americans Using Multistate Life Tables. *J Gerontol B Psychol Sci Soc Sci*, 74(7), e84-e96. https://doi.org/10.1093/geronb/gby099
- Raymo, J.M., Xu, X., Kim, B., Liang, J., and Ofstedal, M.B. (2022). Later-Life Living Arrangements of Americans With and Without Children: A Life Table Approach. *J Gerontol B Psychol Sci Soc Sci*, 77(1), 181-190. https://doi.org/10.1093/geronb/gbab133
- Ruggles, S. (1994). The origins of African-American family structure. *American Sociological Review*, 136-151.
- Seltzer, J.A. and Bianchi, S.M. (2013). Demographic change and parent-child relationships in adulthood. *Annual review of sociology*, *39*(1), 275-290.
- Si, Y.J., Pillai, N.S., and Gelman, A. (2015). Bayesian Nonparametric Weighted Sampling Inference. *Bayesian Analysis*, 10(3), 605-625. https://doi.org/10.1214/14-Ba924
- Silverstein, M.and Giarrusso, R. (2010). Aging and family life: A decade review. *Journal of Marriage and Family*, 72(5), 1039-1058.
- Social Security Administration. (2014). *Marriage Trends and Women's Benefits: Differences by Race-Ethnicity and Nativity*. https://www.ssa.gov/policy/docs/research-summaries/marriage-trends-race-ethnicity.html
- Song, H.M. (2022). Women's Divergent Union Transitions After Marital Dissolution in the United States. *Population Research and Policy Review*, 41(3), 953-980. https://doi.org/10.1007/s11113-021-09677-0
- U.S. Census Bureau. (2023). 2023 National Population Projections Tables: Main Series. https://www.census.gov/data/tables/2023/demo/popproj/2023-summary-tables.html
- —. (2024). Current Population Survey 2023 Annual Social and Economic (ASEC) Supplement https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar23.pdf
- Western, B.and Wildeman, C. (2009). The black family and mass incarceration. *The ANNALS of the American Academy of Political and Social Science*, 621(1), 221-242.

Tables

Table 1. Observed Transitions of Marital Statuses and Living Arrangements, the Health and Retirement Study (1992-2018)

Transition Start (Wave t)		Transitio	n End (Wave $t+1$)			
Marital Status ↓	NM	M	D	W	Dead	Total
Never-married (NM)	6,059	102	0	0	398	6,559
Married (M)	0	66,937	1,355	2,623	3,593	74,508
Divorced (D)	0	1,149	21,588	0	1,342	24,079
Widowed (W)	0	505	0	22,896	3,838	27,239
Living Arrangement ↓	LA	LS	LNS	NH	Dead	Total
Live Alone (LA)	24,716	757	2,434	626	2,824	31,357
Live with Spouse (LS)	2,100	54,139	918	237	2,960	60,354
Live with Non-spouses Only (LNS)	2578	455	13238	196	1552	18,019
Nursing Home (NH)	90	35	31	710	716	1,582

Note: A total of 132,385 marital status transitions and 111,312 living arrangement transitions (including same-state transitions) are included. "Married" includes individuals who report being currently married, remarried, or partnered. "Divorced" includes those who are either divorced or separated. "Live with spouse" includes respondents residing with either a spouse or a partner. "Live with Nonspouses only" refers to respondents who do not live with a spouse or partner but have at least one co-resident, such as adult children, siblings, other relatives, or friends. Wave t and Wave t+1 represent consecutive biennial survey waves from 1992 to 2018. Each row displays the distribution of transitions from a respondent's status at Wave t to their status at the next wave (Wave t+1), approximately two years later.

Table 2. Descriptive Statistics of Marital Status and Living Arrangement Samples, the Health and Retirement Study (1992-2018)

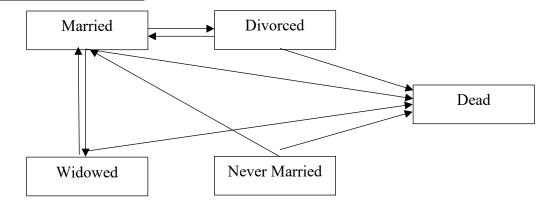
	Marital Status Sample	Living Arrangement Sample
Age at Baseline, Mean (SD)	61.4 (10.7)	63.5 (10.9)
Sex, n (%)	, ,	•
Female	14,175 (53.7)	11,851 (54.9)
Male	12,212 (46.3)	97,30 (45.1)
Nativity Status, n (%)		. ,
Foreign-born	3,513 (13.3)	2,681 (12.4)
US-born	22,874 (86.7)	18,900 (87.6)
Race/Ethnicity, n (%)		
Non-Hispanic White	16,691 (63.3)	14,304 (66.3)
Non-Hispanic Black	5,551 (21.0)	4,277 (19.8)
Hispanic	3,188 (12.1)	2,397 (11.1)
Other	957 (3.6)	603 (2.8)
Current Region, n (%)		
Northeast	4,601 (17.4)	3,798 (17.6)
Midwest	5,826 (22.1)	4,927 (22.8)
South	11,048 (41.9)	8,884 (41.2)
West	4,912 (18.6)	3,972 (18.4)
Number of Individuals	26,387	21,581
Number of Person-wave Observations	158,675	132,795

Note: Data is from the Health and Retirement Study (HRS) spanning from 1992 to 2018. The marital status sample includes all HRS waves from 1992 to 2018. The living arrangement sample is drawn from the HRS waves from 1996 to 2018, as the 1996 wave marked the initial year that nursing home information was systematically recorded.

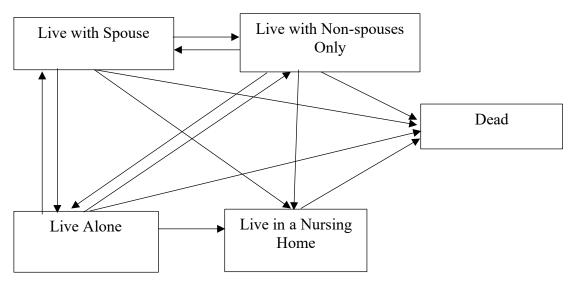
Figures

Figure 1. State Space Diagrams for Transitions in Marital Status and Living Arrangements

Panel A. Marital Status



Panel B. Living Arrangements



Note: "Married" includes individuals who report being currently married, remarried, or partnered. "Divorced" includes those who are either divorced or separated. "Live with spouse" includes respondents residing with either a spouse or a partner. "Live with Non-spouses only" refers to respondents who do not live with a spouse or partner but have at least one co-resident, such as adult children, siblings, other relatives, or friends. Very few individuals transition out of nursing homes unless they pass away. Therefore, we assume that individuals remain in a nursing home unless they experience a transition to death. These marital status and living arrangement transitions were observed across waves of the Health and Retirement Study from 1992 to 2018, with each wave occurring approximately every two years. At each wave t, respondents reported their marital status and living arrangement. Transitions are measured by comparing their status at wave t with their status at the subsequent wave t+1. The arrows in the figure represent the possible transitions that respondents could experience between two consecutive HRS waves.

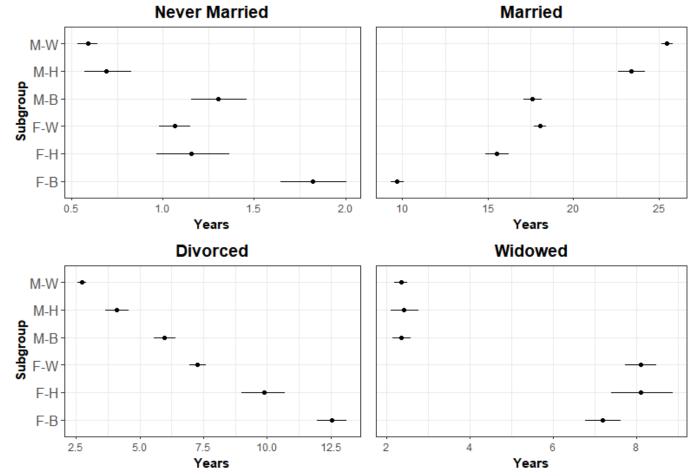


Figure 2. Expected Years in Each Marital Status at Age 50 by Racial, Ethnic, and Sex Groups

Note: "Married" includes those who report their current marital status as married, remarried, or partnered. "Divorced" includes those who are either divorced or separated. "M-W," "M-H," and "M-B" denote White, Hispanic, and Black males, respectively, while "F-W," "F-H," and "F-B" represent White, Hispanic, and Black females, respectively.

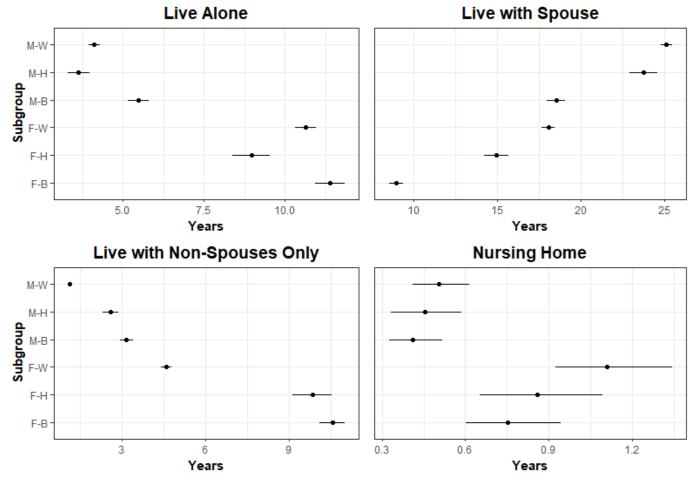
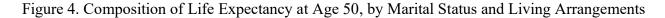
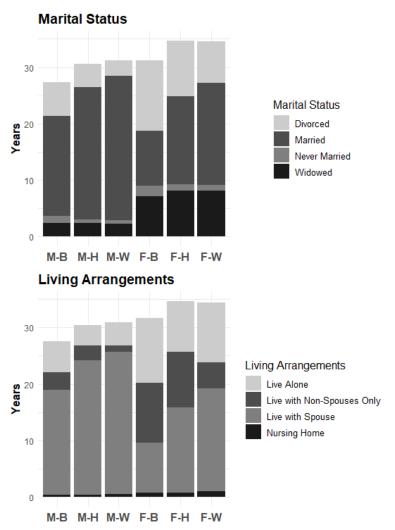


Figure 3. Expected Years in Each Living Arrangement at Age 50 by Racial, Ethnic, and Sex Groups

Note: "Live with spouse" includes respondents who reside with either a spouse or a partner. "Live with non-spouses only" refers to respondents who do not live with a spouse or partner but have at least one co-resident, such as adult children, siblings, other relatives, or friends. The abbreviations "M-W," "M-H," and "M-B" represent White, Hispanic, and Black males, respectively, while "F-W," "F-H," and "F-B" denote White, Hispanic, and Black females, respectively.





Note. "Married" includes those who report their current marital status as married, remarried, or partnered. "Divorced" includes those who are either divorced or separated. "Live with spouse" includes respondents who reside with either a spouse or a partner. "Live with non-spouses only" refers to respondents who do not live with a spouse or partner but have at least one co-resident, such as adult children, siblings, other relatives, or friends. "M-W," "M-H," and "M-B" denote White, Hispanic, and Black males, respectively, while "F-W," "F-H," and "F-B" represent White, Hispanic, and Black females, respectively.