

How Race, Gender, and Cohort Shape Social Isolation and Loneliness in Older Americans

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Abstract

Older adults' social lives vary by ethno-racial groups, gender, and cohort, and these differences may widen over time. This study used data from four rounds (2005–2023) of the National Social Life, Health, and Aging Project (NSHAP; $N = 4328$) to examine intersectional differences in social isolation and loneliness across two cohorts of Americans: the Silent Generation (born 1928–1945) and Baby Boomers (born 1946–1964). Using random-effects models, we tracked the Silent Generation over 15 years and Baby Boomers over 5 years. At baseline, Silent Generation Black men had higher social isolation than other groups. Silent Generation White women experienced the steepest increase in isolation. Silent Generation Hispanic women and Baby Boomer Hispanic men saw declines in loneliness. These findings highlight the need for targeted, culturally informed interventions to mitigate the ongoing consequences of the COVID-19 pandemic, and the importance of adopting an intersectional lens when studying loneliness and social isolation in older adults.

Keywords

loneliness, race, longitudinal methods, disparities, gender

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What this paper adds

- Trends in loneliness and social isolation vary by gender, race, and generational cohort among American older adults.
- Leveraging almost twenty years of longitudinal data, this study is among the first to provide intersectional descriptions of changes in loneliness and social isolation since the COVID-19 pandemic.

Application of study findings

- As addressing social needs becomes increasingly integrated into clinical care, clinicians must understand how social isolation and loneliness vary by race and gender.
- Ongoing efforts are needed to focus on recovery from the pandemic and co-occurring changes in social isolation.

Introduction

In the United States, current and historical effects of racism and sexism impact older Americans' health in multiple ways (Graetz et al., 2022; Reskin, 2012; Small & Pager, 2020). Social isolation (i.e., an *objective* lack of social contact and activity), and loneliness (i.e., *perceived* deficits in both the quantity and quality of social relationships and interactions), have proven associations with a range of health outcomes (National Academies of Sciences, Engineering, and Medicine, 2020). While loneliness and social isolation are often studied separately, their intersection with race, gender, and cohort is underexplored. These social disadvantages may

widen over time, particularly during events like the COVID-19 pandemic. This study examines changes in isolation and loneliness across two cohorts, considering race, gender, and cohort differences.

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Background

Differences in social isolation between Black and White adults are often attributed to systemic disadvantages, including unemployment, poverty, and incarceration (Cornwell, 2015). That is, Black older adults experience higher levels of social disadvantage because the resources necessary for social connectedness are the same resources that they are *deprived of* by the conditions of systemic and structural racism: time, money, energy, and freedom. Consequently, the social networks of older Black Americans tend to be smaller, and they experience greater social isolation compared to their White counterparts (Kannan & Veazie, 2023; Peek & O'Neill, 2001). Black women, however, experience less social isolation than Black men due to gendered social roles (Pugliesi & Shook, 1998; Schafer, 2018; Taylor et al., 2019). The disadvantages of stigmatized racial status may therefore be *offset* by the roles, responsibilities, and experiences of one's gender identity—at least regarding social isolation.

Studies on loneliness show inconsistent racial patterns, with some finding Black older adults lonelier than Hispanic peers (Hawkley et al., 2019; Taylor et al., 2019), while others find no racial link, suggesting that stronger family and social bonds within their own community might mitigate disadvantages (Tibirić et al., 2022). In short, the literature is inconsistent with respect to what we know about racial inequities in loneliness.

Gender differences also influence social relationships, with women generally having larger networks and reporting less loneliness (Cornwell, 2011). However, this dynamic may vary across racial groups, suggesting that Black and Hispanic men could face compounded disadvantages due to the intersection of race and gender (Collins, 2019; Crenshaw, 1990). For example, if it is generally true that men face greater network disadvantage (e.g., weaker connections, less social support, and more loneliness), it is reasonable to hypothesize that adding the dimension of race could further exacerbate these challenges for Black and Hispanic men. This hypothesis indicates that the intersection of race and gender could multiply adverse outcomes in social networks for these populations, underscoring the need for intersectional analysis.

Generational factors further complicate this picture. The Silent Generation (born 1928–1945) lived through the Great Depression, World War II, and limited opportunities for women and Black Americans (Goldin, 2006; Wolfe et al., 2018), while Baby Boomers (born 1946–1964) grew up during periods of social change, including the Civil Rights Movement and post-war economic prosperity (Frey, 2010; Jones, 1980). For Black women of the Silent Generation, institutionalized racism severely restricted opportunities for status attainment (Wolfe et al., 2018). Many lived in the South and came of age before the end of Jim Crow, the series of laws that legalized racial discrimination in Southern states following the end of slavery in the late 1800s (Woodward, 2002).

In contrast, Baby Boomers, grew up during a period of economic prosperity and were active participants in social movements such as civil rights, feminism, and environmentalism (Frey, 2010; Jones, 1980). Compared to previous generations, Baby Boomers are more highly educated, have a higher percentage of women in the workforce, are more likely to hold professional and managerial positions, and are more racially and ethnically diverse (Frey, 2010).

Recent events such as the COVID-19 pandemic have further impacted social dynamics, particularly along racial and ethnic lines. Although social isolation temporarily increased during the pandemic (Kovacs et al., 2021; Roth, 2024), the disproportionately higher death rates in Black and Hispanic communities may have led to more prolonged social isolation among older adults in these groups (Riley et al., 2024). In terms of loneliness, research suggests there was no overall increase for older adults compared to pre-pandemic levels (Peng & Roth, 2022). Specifically, Black older adults did not experience an increase in loneliness (Nápoles et al., 2023), while the evidence on loneliness among Hispanic older adults is mixed (Holaday et al., 2022; Nápoles et al., 2023). However, older women may have experienced a greater increase in loneliness than older men (Lepinteur et al., 2022).

In summary, while the evidence is inconsistent, it is plausible to hypothesize that racial and gender disparities in isolation and loneliness may have widened during the COVID-19 pandemic. The Silent Generation, being older and more vulnerable to the loss of close network ties, likely experienced greater harms—such as increased isolation and loneliness—compared to younger cohorts like the Baby Boomers. Furthermore, experiencing key events earlier or later in life means there is more or less opportunity for cumulative disadvantage, based on how many years the person lives with the consequences of that potentially harmful experience, thus further necessitating the need to separate cohorts in the analysis. Thus, in this study, we use a large nationally representative cohort with data from both before and after the pandemic, applying an intersectional approach to examine changes in loneliness and social isolation across race, gender, and generational cohorts. We have three hypotheses based on prior literature:

H1: Black men will experience the greatest social isolation and loneliness, compared to all other ethnoracial/gender groups;

H2: Gaps in social isolation and loneliness by race and gender will widen over time, with acceleration after the onset of the COVID pandemic;

H3: Gaps in social isolation and loneliness will widen more for the Silent Generation than for the Baby Boomer Generation after the onset of the COVID pandemic.

Methods

Data

The data for this study comes from a national probability sample of community-dwelling older adults enrolled in the National Social Life, Health, and Aging Project (NSHAP), a population-based panel study of adults in the United States born 1920–1965 that began in 2005. Three rounds of data were collected in 2005/2006, 2010/2011, 2015/2016, and 2021–2023 (hereafter, Round 1, Round 2, Round 3, and Round 4). For the Silent Generation, there were 3005, 2299, 1592, and 930 individuals at Rounds 1, 2, 3, and 4, respectively. For the Baby Boomers, there were 1323 and 966 individuals at Rounds 3 and 4, respectively. There were 4328 unique persons in the sample. See Table 1 for weighted descriptive statistics by round and cohort, below. Sample recruitment and characteristics have been reported elsewhere (O’Muircheartaigh et al., 2014). All protocols for the collection of human subject data (Protocol Number: 14.06.01) were approved by National Opinion Research Center at the University of Chicago Institutional Review Board (IRB00000967) under its Federalwide Assurance #FWA00000142 and in compliance with U.S. Department of Health and Human

Services Office for Human Research Protections regulations. All enrolled participants provided written informed consent. NSHAP data used for this study are available in the National Archive of Computerized Data on Aging at the Inter-University Consortium of Political and Social Research, <https://www.icpsr.umich.edu/web/NACDA/series/706>.

Outcome Variables

Social Isolation was measured using a composite index from the following variables: (1) having a social network of size 2 or smaller; (2) socializing with friends and neighbors less than once a month; (3) having 1 or no close family members; (4) having 1 or no friends; (5) living alone; (6) having no sexual/romantic partner; (7) not attending religious services; (8) not volunteering; (9) not attending any local meetings (Stephoe et al., 2013). *Loneliness* was measured using the standard three-item UCLA loneliness scale (Hughes et al., 2004). Isolation was summed up and loneliness was averaged; isolation ranged from 0 to 9 and loneliness ranged from 1 to 3, with higher scores signifying greater isolation and loneliness, respectively.

Table 1. Descriptive Statistics, Weighted.

	Silent generation								Baby boomers			
	Round 1		Round 2		Round 3		Round 4		Round 3		Round 4	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Continuous												
Social isolation	2.00	1.75	1.99	1.67	2.02	1.64	2.48	1.67	2.08	1.79	2.30	1.87
Loneliness	1.33	0.47	1.37	0.48	1.33	0.44	1.33	0.43	1.40	0.51	1.35	0.50
Self-rated health	3.27	1.12	3.26	1.07	3.29	1.01	3.10	0.96	3.26	1.03	3.24	0.96
Age at baseline*	68.02	7.77							61.75	3.42		
Years of education*	13.07	3.83							14.03	3.55		
Discrete	Per cent	Count	Per cent	Count	Per cent	Count	Per cent	Count	Per cent	Count	Per cent	Count
Retired												
No	40.55%	1218	26.38%	613	20.44%	351	11.52%	123	70.09%	1293	36.00%	491
Yes	59.45%	1786	73.62%	1710	79.56%	1365	88.48%	943	29.91%	552	64.00%	872
Married												
No	33.64%	1011	51.86%	1558	58.73%	1448	45.66%	489	37.13%	687	36.25%	497
Yes	66.36%	1994	48.14%	1447	41.27%	1017	54.34%	582	62.87%	1163	63.75%	874
Race and gender*												
White Man	39.24%	1174							37.56%	695		
White Woman	41.46%	1241							37.35%	691		
Black Man	4.42%	132							6.26%	116		
Black Woman	5.45%	163							6.70%	124		
Hispanic Man	3.40%	102							4.24%	78		
Hispanic Woman	3.55%	106							3.23%	60		
Man, else	1.47%	44							2.40%	44		
Woman, else	1.01%	30							2.25%	42		

Note. * indicates non-time-varying covariate, and thus blank for all but first observation for that cohort.

Independent Variables and Covariates

NSHAP uses the following race categories: White, Black, Asian/Pacific Islander, American Indian or Alaskan Native, and All Else. A separate question asks whether the respondent identifies as Hispanic. These responses were recoded into a single variable with the following categories: White, Black, Hispanic, and Else. Respondents in the White and Black categories were considered “non-Hispanic,” so we refer to these groups simply as “White” and “Black.” Categories were combined into “Else” when there were too few respondents for meaningful analysis (160 cases total).

We controlled for educational attainment, cohort, gender, retirement status, and self-rated physical health (SRH) (Cornwell et al., 2008). For SRH, respondents rated their overall physical health on a 5-point scale, with values ranging from 1 (poor) to 5 (excellent), where higher scores denote better perceived physical health. We controlled for marital status in the regressions for loneliness, but not for isolation since partnership status is part of the isolation index. The regressions also included a measure of time (i.e., round of observation).

Analytic Strategy

We assessed the internal reliability of the loneliness scale using Cronbach’s alpha and calculated intraclass correlations (within-person) for both outcomes. To account for the non-independence of repeated measures from the same respondents, we employed random-intercept models. All analyses incorporated NSHAP survey weights, strata, and clusters. Additionally, we created time-varying inverse probability of attrition weights to reflect whether a respondent was too sick to participate in the survey (note: we did not adjust for mortality, as deceased respondents do not contribute observational social factors; see West et al., 2023).

In the random-intercept models (Models 1 and 2, Table 2), we tested H1 (race/gender differences) using an omnibus chi-squared test of race/gender coefficients. H2 and H3 were tested with fully interacted models, which included interactions between time, cohort, race/gender, and three-way interactions among these factors. We also tested interactions between time and time-varying controls (marital status, health, and retirement status). These models are presented in Supplemental Table 1 (Models 3 and 4).

To determine whether changes in social isolation were solely driven by changes in marital status, we estimated fully interacted models for both marital status and social isolation (excluding marital status). Results for these analyses are shown in Supplemental Figures 1 and 2. All analyses were carried out in Stata v. 17, and predicted probabilities from models were visualized using “margins” commands (StataCorp, 2021).

Table 2. Social Isolation and Loneliness Over Time Among Older Americans.

	Social isolation	Loneliness
	Model 1	Model 2
Round		
1 (2005–06)	Ref.	Ref.
2 (2010–11)	0.15***	0.04***
3 (2015–16)	0.34***	0.01
4 (2021–23)	0.82***	–0.02
Race and gender		
White Men	Ref.	Ref.
White Women	–0.03	0.04*
Black Men	0.04	0.07*
Black Women	0.14	0.06
Hispanic Men	0.18	0.02
Hispanic Women	0.19	–0.09**
Men, else	0.38	0.16**
Women, else	0.27	–0.03
Baby Boomer cohort	–0.21*	0.04*
Retired	–0.12**	–0.05***
Physical health	–0.19***	–0.06***
Years of education	–0.12***	–0.00*
Married		–0.21***
Intercept	3.67***	1.57***
Logged error, persons	0.32***	–1.13***
Logged error, person-waves	0.00	–1.11***
Persons	3754	3807
Person-waves	7869	8146

Note. *** $p < .001$; ** $p < .01$; * $p < .05$.

Results

In this study, we used an intersectional approach to describe changes in loneliness and social isolation by race, gender, and generational cohort. We hypothesized that Black men would experience the greatest social isolation and loneliness, compared to all other ethn racial/gender groups (H1). We expected to see a widening of gaps in social isolation and loneliness by race and gender over time, especially after the advent of the COVID pandemic (H2). Additionally, we expected differences in social isolation and loneliness by generational cohort under COVID (H3). Our results show mixed support for our hypotheses.

Descriptive Statistics

Table 1 presents weighted descriptive statistics for the Silent and Baby Boom Generations across multiple survey rounds, highlighting shifts in continuous and discrete variables by round. For continuous measures, social isolation showed an upward trend for both groups, with the Silent Generation recording means of 2.0 (SD = 1.75), 1.99 (SD = 1.67), 2.02 (SD = 1.64), and 2.48 (SD = 1.67) across rounds 1 through 4,

respectively. Baby Boomers showed an increase from 2.084 (SD = 1.79) in Round 3 to 2.30 (SD = 1.87) in Round 4. However, loneliness scores remained relatively stable, with minor fluctuations in both groups. The loneliness scale showed high internal reliability at all time points (R1: $\alpha = .80$; R2: $\alpha = .79$; R3: $\alpha = .79$; R4: $\alpha = .81$). Intraclass correlations were similar for both measures (0.69 for social isolation; 0.65 for loneliness).

The Silent Generation and Baby Boomers show relatively stable SRH health scores throughout the observation period. Despite aging, members of both generations perceive their health as consistent, with only minor declines. For the Silent Generation, SRH slightly decreased from an average of 3.27 in Round 1 to 3.10 by Round 4. Similarly, the Baby Boomers' health ratings remained stable, starting at 3.26 in Round 3 and decreasing only slightly to 3.24 in Round 4. The decline in the Silent Generation's health ratings might reflect normal age-related changes or the accumulation of health issues over time. The smaller-than-expected decline, considering that the group aged 15 years, could be due to selection effects—those who were the sickest may have passed away, leaving only the relatively healthier individuals for subsequent rounds. Additionally, the average age at baseline for the Silent Generation decreased from 68.02 years in earlier rounds to 63.65 years in later rounds, as the oldest participants either died or became too ill to continue in the study.

For discrete variables such as retirement and marital status, the data underscores demographic and lifestyle shifts. A significant portion of the Silent Generation transitioned into retirement over the survey periods, with the percentage of retired individuals in the Silent Generation increasing from 59.45% in Round 1–88.48% in Round 4. Baby Boomers also saw a large increase in retirement from 29.91% in Round 3–64% in Round 4 (more than doubled), though overall retirement levels were much lower than that of the Silent Generation, consistent with their age differences. The data on marital status across generations shows a decline followed by a slight rebound in marriage rates among the Silent Generation over time. In Round 1, 66.36% of this group were married, and this percentage decreased to 48.14% in Round 2 and 41.27% in Round 3. However, by Round 4, the marital rate slightly increased to 54.34%. This pattern suggests that while the Silent Generation experienced a decline in marriage rates due to factors like widowhood or divorce, there was a modest recovery in Round 4, possibly due to the survival of relatively healthier individuals who were more likely to remain married. In contrast, the Baby Boomers maintained relatively stable marriage rates, with 62.87% married in Round 3 and 63.75% in Round 4. This stability could be attributed to their younger age at baseline, meaning they were less affected by widowhood or divorce during the observation period.

Hypotheses Results

Table 2 presents the results of social isolation and loneliness over time among older Americans. The data show a

significant increase in social isolation throughout the study period. Compared to the baseline in 2005–06, social isolation increased by 0.15 units in 2010–11 ($p < .001$), by 0.34 units in 2015–16 ($p < .001$), and by 0.82 units in 2021–23 ($p < .001$), a period that included the pandemic shutdowns. Loneliness also showed a slight increase in 2010–11 by 0.04 units ($p < .001$) but then stabilized, with no significant changes in Round 3 and 4.

While race and gender differences were observed, we found only partial support for our hypothesis (H1) that Black men would experience the greatest social isolation and loneliness compared to all other ethnoracial/gender groups. Compared to White men, Black men showed a significant increase in loneliness ($\beta = 0.07$, $p < .05$). Additionally, the “Men, else” category exhibited a notable increase in loneliness ($\beta = 0.16$, $p < .01$); however, since the specific racial and ethnic identities in the “else” category are unknown, we excluded it from further analyses. No significant changes were found in levels of social isolation for any racial/gender groups.

Figure 1 illustrates the variations in social isolation and loneliness across different races and genders, pooled across time and cohorts, with the “else” category excluded from all figures due to the ambiguity surrounding the specific ethnoracial identities it represents (**160 cases total**). Our chi-squared tests, conducted before adding any interaction terms, revealed significant differences in loneliness by race and gender ($p < .001$), but not in social isolation ($p = .15$) across all cohorts and time points. Specifically, when observing confidence intervals in Figure 1, we can see that among the major racial/ethnic identity groups (White, Black, and Hispanic) and genders, Black men report the highest levels of loneliness, which aligns with our hypothesis H1. However, no clear pattern emerges for social isolation across these groups. We found no support for H2, which hypothesized that gaps in social isolation and loneliness by race and gender would widen over time, with a sharper increase following the onset of the COVID pandemic. As shown in Table 2, the gaps in social isolation and loneliness by race and gender did not significantly expand over time. Although differences between groups were observed, they remained relatively stable throughout the observation periods, without a clear pattern of widening.

Figure 2, based on estimates from a fully interacted model (Supplemental Table 1), visually represents changes in social isolation among different demographic groups from 2005 to 2023. The figure shows an overall increase in social isolation across all groups and cohorts, especially during the pandemic. Contrary to our hypothesis that Black men would experience the steepest rise, the greatest increase in social isolation was observed among White women.

To further investigate, we fit fully interacted models using linear time variables rather than year indicators and computed marginal effects for time for each group (analyses available upon request). In terms of social isolation,

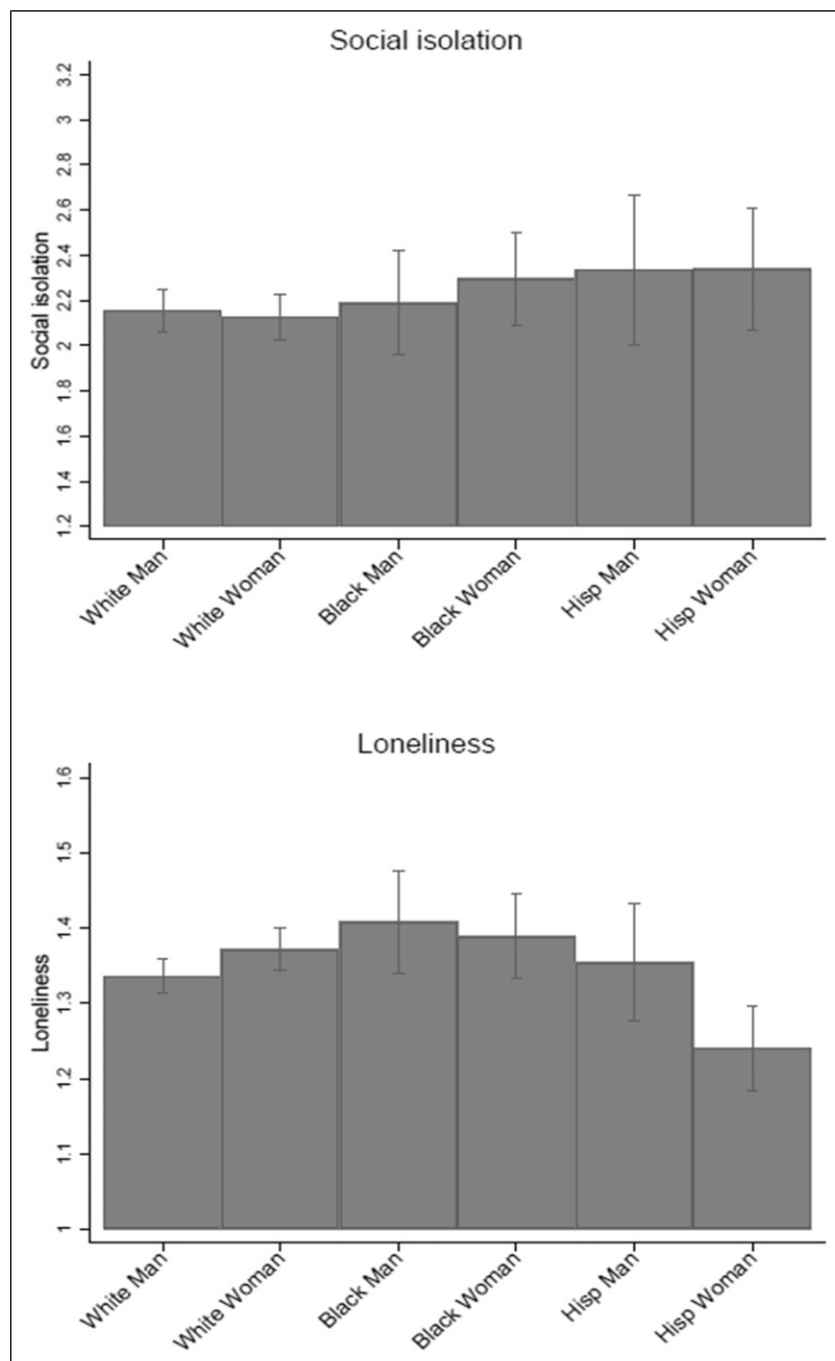


Figure 1. Levels of social isolation and loneliness by race and gender, pooled sample (based on Models 1 and 2 in Table 2).

for the Silent Generation, White women exhibited the strongest time trend, which was highly significant (White Men: $\beta = 0.12$, $p < .001$; White Women: $\beta = 0.36$, $p < .001$; Black Men: $\beta = 0.08$, n.s.; Black Women: $\beta = 0.21$, $p < .05$; Hispanic Men: $\beta = 0.21$, $p < .05$; Hispanic Women: $\beta = 0.29$, $p < .01$).

For the Baby Boomers, where time represents the difference between Round 3 and Round 4, Black women showed a much steeper slope compared to other groups

(White Men: $\beta = 0.19$, $p < .001$; White Women: $\beta = 0.36$, $p < .001$; Black Men: $\beta = 0.30$, n.s.; Black Women: $\beta = 0.73$, $p < .001$; Hispanic Men: $\beta = 0.62$, n.s.; Hispanic Women: $\beta = 0.36$, n.s.). However, this approach obscures non-linearities, which are evident in Figure 2, particularly for Black women. Both cohorts of Black women experienced a sharp rise in social isolation specifically between Rounds 3 and 4. Here as well analyses are available upon request.

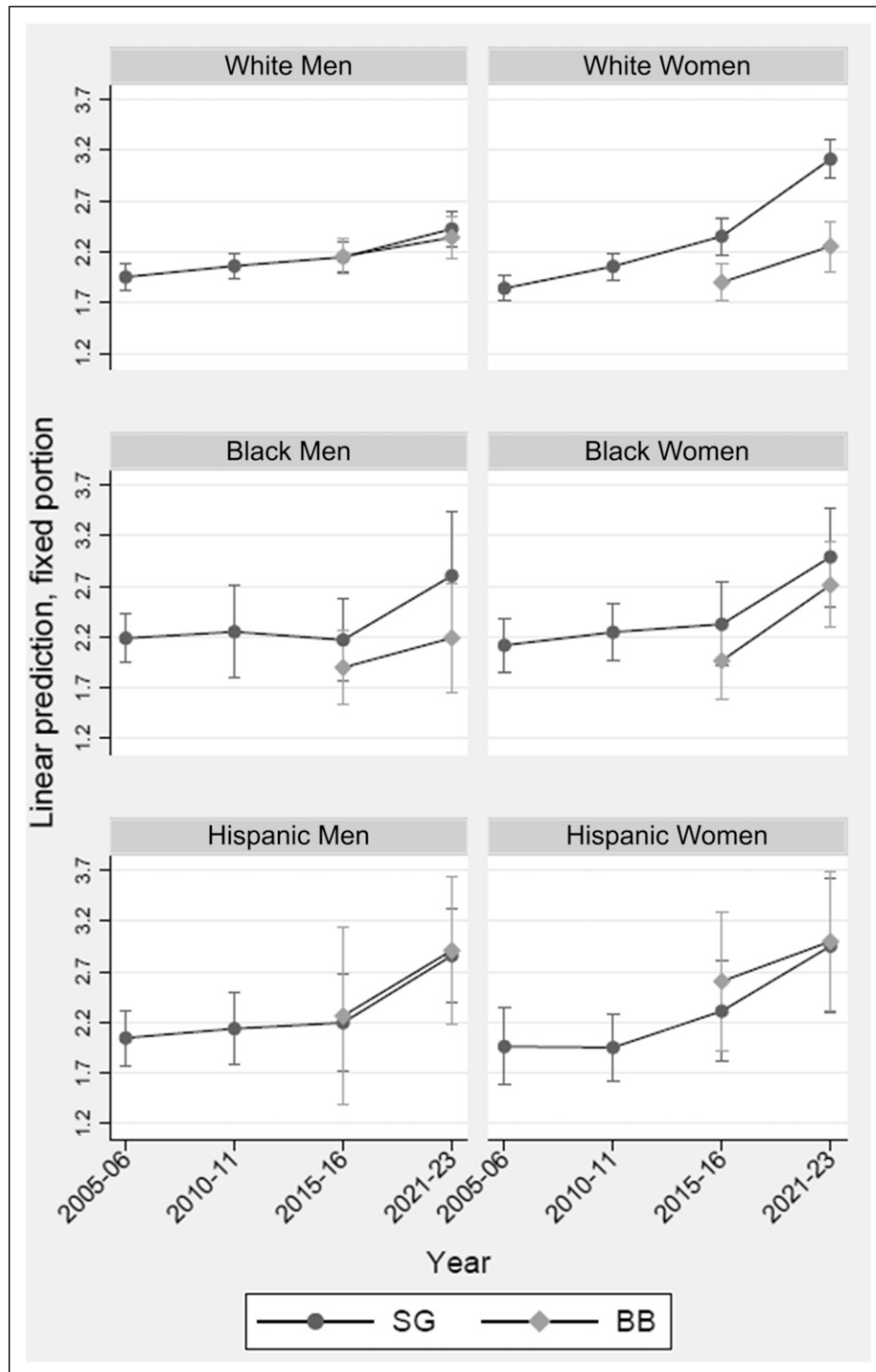


Figure 2. Changes in social isolation over time by race, gender, and generation (SG = Silent Generation; BB = Baby Boomers). Estimated from model 3 in [Supplemental Table 1](#).

Returning to [Figure 2](#), we see that for the Silent Generation, White women had the lowest levels of social isolation in Round 1 but the highest levels by Round 4. This trend suggests that racial and gender gaps in social isolation may narrow over time, as groups that were previously less isolated, such as

White women, begin to experience levels comparable to other groups. Among Baby Boomers, the changes in social isolation for White women were less dramatic, but Black women and Hispanic men experienced significant increases in social isolation between Rounds 3 and 4.

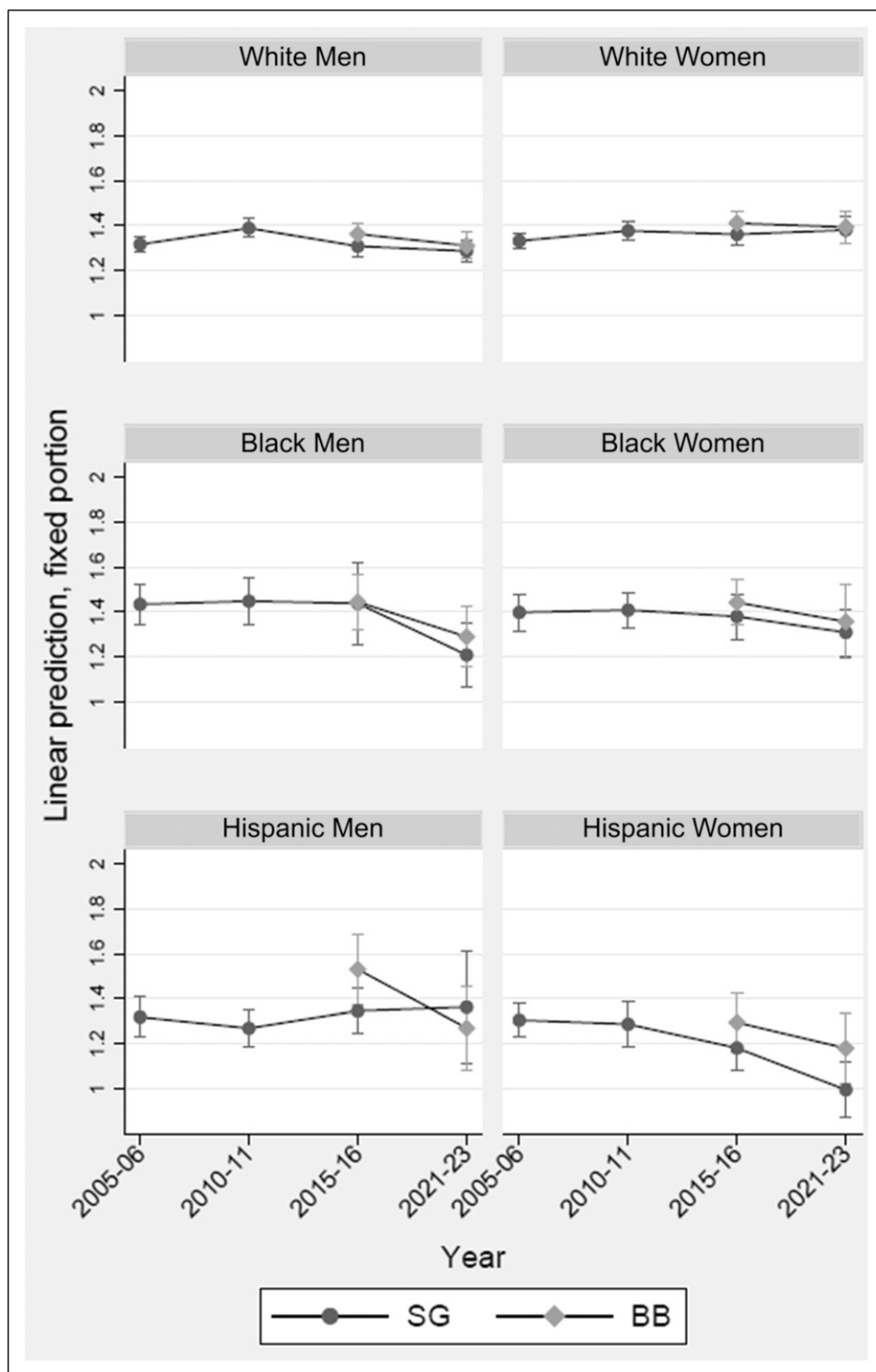


Figure 3. Changes in loneliness over time by race, gender, and generation (SG = Silent Generation; BB = Baby Boomers). Estimated from model 4 in Supplemental Table 1.

Figure 3 presents changes in loneliness over time for each group. Contrary to our H2 hypothesis, there was a slight decline in loneliness for Black men, as well as for Hispanic women, indicating trends that diverge from our initial predictions. Notably, Hispanic men from the Baby Boomer generation

experienced a dramatic decrease in loneliness between Rounds 3 and 4, despite a marked increase in social isolation during the same period. This divergence from expected associations between loneliness and social isolation confounds our analysis. In fact, for most groups, loneliness either declined or remained

stable between Rounds 3 and 4, even as social isolation increased during this timeframe. This complicates understanding the pandemic's impact on social isolation and loneliness, which we will explore further in the Discussion.

We also examined linear time associations for loneliness and found no significant trends for most cohorts and ethnoracial gender groups, except for Baby Boomer Hispanic men ($\beta = -0.26, p < .01$) and Silent Generation Hispanic women ($\beta = -0.09, p < .001$), both of whom experienced declines in loneliness.

Regarding H3, we expected the greatest increases in isolation and loneliness to occur in the Silent Generation. However, the data did not support this hypothesis. As shown in Table 2, the Baby Boomer cohort exhibited lower social isolation than the Silent Generation ($\beta = -0.21, p < .05$) but slightly higher loneliness ($\beta = 0.04, p < .05$). A notable exception is White women from the Silent Generation, who experienced a faster rate of increase in social isolation compared to their Baby Boomer counterparts, particularly during the COVID period. Black men from the Silent Generation also showed greater increases in social isolation than their Baby Boomer counterparts, though the differences were less pronounced than those for White women. These findings suggest that age alone does not determine increased isolation or loneliness; gender, ethnicity, and race all influence how aging affects social isolation and loneliness.

Lastly, we checked whether changes in marital status over time fully explain our findings on social isolation. Supplemental Figures 1 and 2 show that the overall patterns remain similar, although the slope for White women is not as steep. White women also show significant increases in being unmarried over time, suggesting that their distinctively steep increases in social isolation may be driven by higher rates of spousal loss and possibly by their higher survivorship, which means they remain in the sample longer after losing their spouse.

In terms of practical significance, this is unfortunately unclear, as the exact clinical consequences of, for instance, a one-standard-deviation change in either measures is difficult to identify. However, we can point to high-profile meta-analyses that state that associations between high versus low isolation, and high versus low loneliness, are comparable to smoking in terms of their impact on mortality (Holt-Lundstad et al., 2010; Holt-Lundstad et al., 2015), and so the downstream consequences of these differences are likely nontrivial.

Discussion

In this national study, we examined nuanced changes over time in loneliness and social isolation by gender, race, and generation; the latter portion of the 18-year period studied included the COVID-19 pandemic. Across time and cohorts, social isolation generally increased, and there were some important differences by race and gender. Although we expected to find that older Black men would experience the

greatest increases in social isolation (H2), especially for Silent Generation Black men under COVID (H3), our analysis showed that the changes observed were roughly comparable to that of other cohorts. Social media use may have played a role in maintaining connections, especially among the more educated and affluent. However, it is perhaps more likely that they relied on a relatively small group of confidants, a pattern commonly observed among older adults (Carstensen, 2021; English & Carstensen, 2014; Wrzus et al., 2013). Additionally, lonely people tend to have higher mortality rates (Hawkey, 2022; Holt-Lundstad et al., 2015), so those who participated in Rounds 3 and 4 may represent a more socially connected group due to this selection effect. It is also noteworthy that, despite the pandemic causing significant objective social isolation, its impact on loneliness was more muted, consistent with what others have found (Luchetti et al., 2020) and highlighting the distinct nature of these two concepts (Hawkey & Cacioppo, 2010).

Contrary to our expectations, the greatest increase in social isolation between Rounds 1 and 4 occurred among White women from the Silent Generation. While we anticipated observing an *accumulation of disadvantage* over time among marginalized groups, this was not the case. Instead, we saw a *loss of advantage* for what had been the least-isolated group: White women.

Several factors may explain the significant increase in social isolation observed among White women. One possibility is that the social advantages gained through status (e.g., wealth and power) may become less impactful in later life, as health concerns and mortality take precedence. Additionally, because women tend to outlive men, the loss of spouses and other close family members can leave them especially vulnerable to isolation.

Our findings reveal that White women show notable increases in being unmarried over time, suggesting that their rising levels of social isolation may be linked to higher rates of spousal loss. Moreover, early socialization that emphasized family may heighten their sense of isolation in later life, particularly as family support declines.

Although our hypotheses regarding social isolation were not fully supported by our results, our data did indicate that Black men were the loneliest group studied, offering partial support for H1 (see Table 2 and Figure 1). Despite this partial confirmation, we were surprised to find that loneliness among Black men decreased over time, especially as they entered the 2020s. Loneliness for all other cohorts either decreased or remained stable over time as well.

The contrast between the notable increases in social isolation over time and the decreasing or stable levels of loneliness is striking. This disparity may reflect that perceptions of social connection can follow age-related trajectories that do not necessarily align with the objective realities of social isolation. Specifically, older adults tend to retain more positive memories and focus on positive experiences compared to younger adults (Mather & Carstensen, 2005). As

a result, even if social isolation increases, including inequities in isolation, older adults' perceptions of their social world may not deteriorate in the same way.

Another potential explanation is that while older adults may have experienced greater isolation, they might have adapted to their circumstances through increased use of technology or other coping strategies, which could mitigate the emotional impact of isolation on feelings of loneliness. Additionally, the finding that Hispanic women reported significantly lower loneliness compared to their White counterparts may be influenced by cultural factors, such as strong family ties and community support, which can buffer against loneliness despite higher levels of social isolation.

These findings suggest the need to reconceptualize how disadvantage unfolds across different groups in relation to disconnection and loneliness within specific cohorts. The assumption that Black older adults, particularly older Black men, experience the greatest disadvantage in loneliness and social isolation may not hold true for newer cohorts, as our findings did not support this expectation. It is possible, however, that our results were impacted by selection effect, where the Black men who were the loneliest also had shorter life spans compared to their less lonely counterparts.

The observed declines in loneliness among Hispanic participants suggest that strong community and family bonds may play a protective role. For instance, marriage may serve as an especially important source of support for those whose families live outside the U.S., as highlighted by a recent study that found a strong link between marital satisfaction and lower depressive symptoms (Nazario-Acevedo et al., 2024).

On the other hand, the increase in isolation among White women of the Silent Generation points to potential vulnerabilities by cohort that merit further exploration. These findings highlight the importance of intersectional research to better understand the nuances of social isolation and loneliness across different demographic groups. We anticipate future investigations will continue to explore these complex dynamics.

Our findings also have practical implications. As the integration of social needs into clinical care continues to evolve, clinicians should recognize the dynamic nature of social isolation and loneliness across different ethno-racial and gender groups, as well as across generations. This understanding can inform the development of culturally and contextually appropriate interventions and support advocacy for policies that address structural factors contributing to inequities in social well-being.

Beyond individualized approaches, interventions could include culturally specific or faith-based community-based programs, technology training (particularly for the Silent Generation), and initiatives aimed at strengthening intergenerational connections (Kotwal & Meier, 2022). Culturally sensitive community-based engagement efforts could begin with the formation of community advisory boards to co-govern targeted outreach strategies, in order to ensure that delivery of care is responsive to community needs—and is

capable of dynamically evolving in the context of needs shifting over time. Service delivery in health and social care settings could also benefit from these shared governance structures, formed by members of groups constituted of intersecting identities. These strategies can help ensure that interventions are both inclusive and effective in addressing the diverse needs of older adults across varying demographic groups.

Our study should be interpreted in light of several limitations. First, the observational design restricts our ability to infer causality between social isolation, loneliness, and intersectional subgroups. Second, while the sample size is nationally representative, it may not fully capture the diversity of experiences within racial and gender groups, particularly for smaller subpopulations. Additionally, the sample size was not sufficient to examine the experiences of Asian Americans and other ethnic or racial groups in detail.

Conclusions

This study is one of the first to provide intersectional descriptions of changes in loneliness and social isolation since the COVID-19 pandemic, which placed immense strain on familial and broader social networks. The findings emphasize the need for ongoing efforts focused on recovery from the pandemic and mitigating the harmful downstream effects of social isolation. Moreover, we stress the importance of adopting an intersectional lens when studying loneliness and social isolation in older adults, as this approach can inform both clinical practices and policy interventions aimed at improving social well-being. This emphasis on intersectional identities should be expanded in future projects, especially beyond the conventionally considered categories in this paper (White, Black, and Hispanic); the social wellbeing of men and women in various South Asian, East Asian, and Indigenous communities would be particularly welcome, as the population of older adults continues to diversify.

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Ethical Approval

All protocols for the collection of human subject data (Protocol Number: 14.06.01) were approved by National Opinion Research Center at the University of Chicago Institutional Review Board (IRB00000967) under its Federalwide Assurance #FWA00000142 and in compliance with U.S. Department of Health and Human Services Office for Human Research Protections regulations.

Consent to Participate

All enrolled participants provided written informed consent under #14.06.01.

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Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Data Availability Statement

NSHAP data used for this study are available in the National Archive of Computerized Data on Aging at the Inter-University Consortium of Political and Social Research, <https://www.icpsr.umich.edu/web/NACDA/series/706>.

Supplemental Material

Supplemental material for this article is available online.

References

- Carstensen, L. L. (2021). Socioemotional selectivity theory: The role of perceived endings in human motivation. *The Gerontologist*, 61(8), 1188–1196. <https://doi.org/10.1093/geront/gnab116>
- Collins, P. H. (2019). *Intersectionality as critical social theory*. Duke University Press.
- Cornwell, B. (2011). Independence through social networks: Bridging potential among older women and men. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 66(6), 782–794. <https://doi.org/10.1093/geronb/gbr111>
- Cornwell, B. (2015). Social disadvantage and network turnover. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 70(1), 132–142. <https://doi.org/10.1093/geronb/gbu078>
- Cornwell, B., Laumann, E. O., & Schumm, L. P. (2008). The social connectedness of older adults: A national profile. *American Sociological Review*, 73(2), 185–203. <https://doi.org/10.1177/000312240807300201>
- Crenshaw, K. (1990). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241. <https://doi.org/10.2307/1229039>
- English, T., & Carstensen, L. L. (2014). Selective narrowing of social networks across adulthood is associated with improved emotional experience in daily life. *International Journal of Behavioral Development*, 38(2), 195–202. <https://doi.org/10.1177/0165025413515404>
- Frey, W. (2010). Baby boomers and the new demographics of America's seniors. *Generations*, 3(10), 28–37.
- Goldin, C. (2006). The quiet revolution that transformed women's employment, education, and family. *American Economic Review*, 96(2), 1–21. <https://doi.org/10.1257/000282806777212350>
- Graetz, N., Boen, C. E., & Esposito, M. H. (2022). Structural racism and quantitative causal inference: A life course mediation framework for decomposing racial health disparities. *Journal of Health and Social Behavior*, 63(2), 232–249. <https://doi.org/10.1177/00221465211066108>
- Hawkey, L. C. (2022). Loneliness and health. *Nature Reviews Disease Primers*, 8(1), 22. <https://doi.org/10.1038/s41572-022-00355-9>
- Hawkey, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine*, 40(2), 218–227. <https://doi.org/10.1007/s12160-010-9210-8>
- Hawkey, L. C., Wroblewski, K., Kaiser, T., Luhmann, M., & Schumm, L. P. (2019). Are U.S. Older adults getting lonelier? Age, period, and cohort differences. *Psychology and Aging*, 34(8), 1144–1157. <https://doi.org/10.1037/pag0000365>
- Holaday, L. W., Oladele, C. R., Miller, S. M., Dueñas, M. I., Roy, B., & Ross, J. S. (2022). Loneliness, sadness, and feelings of social disconnection in older adults during the COVID-19 pandemic. *Journal of the American Geriatrics Society*, 70(2), 329–340. <https://doi.org/10.1111/jgs.17599>
- Holt-Lundstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine*, 7(7), e1000316. <https://doi.org/10.1371/journal.pmed.1000316>
- Holt-Lundstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science: A Journal of the Association for Psychological Science*, 10(2), 227–237. <https://doi.org/10.1177/1745691614568352>
- Hughes, M. E., Waite, L. J., Hawkey, L. C., & Cacioppo, J. T. (2004). A short scale for measuring loneliness in large surveys: Results from two population-based studies. *Research on Aging*, 26(6), 655–672. <https://doi.org/10.1177/0164027504268574>
- Jones, L. Y. (1980). *Great expectations: America and the Baby Boom generation*. Coward, McCann & Geoghegan.
- Kannan, V. D., & Veazie, P. J. (2023). US trends in social isolation, social engagement, and companionship - nationally and by age, sex, race/ethnicity, family income, and work hours, 2003–2020. *SSM - Population Health*, 21, Article 101331. <https://doi.org/10.1016/j.ssmph.2022.101331>
- Kotwal, A. A., & Meier, D. E. (2022). A Paradigm shift – loneliness as a root cause of symptom distress among older adults. *Journal of the American Geriatrics Society*, 70(8), 2201–2204. <https://doi.org/10.1111/jgs.17880>
- Kovacs, B., Caplan, N., Grob, S., & King, M. (2021). Social networks and loneliness during the COVID-19 pandemic. *Socius: Sociological Research for a Dynamic World*, 7, 2378023120985254. <https://doi.org/10.1177/2378023120985254>
- Lepinteur, A., Clark, A. E., Ferrer-i-Carbonell, A., Piper, A., Schröder, C., & D'Ambrosio, C. (2022). Gender, loneliness and happiness during COVID-19. *Journal of Behavioral and Experimental Economics*, 101, Article 101952. <https://doi.org/10.1016/j.socec.2022.101952>

- Luchetti, M., Lee, J. H., Aschwenden, D., Sesker, A., Strickhouser, J. E., Terracciano, A., & Sutin, A. R. (2020). The trajectory of loneliness in response to COVID-19. *American Psychologist, 75*(7), 897–908. <https://doi.org/10.1037/amp0000690>
- Mather, M., & Carstensen, L. L. (2005). Aging and motivated cognition: The positivity effect in attention and memory. *Trends in Cognitive Sciences, 9*(10), 496–502. <https://doi.org/10.1016/j.tics.2005.08.005>
- Nápoles, A. M., Stewart, A. L., Strassle, P. D., Alhoms, A., Quintero, S., Ponce, S., Wilkerson, M., & Bonilla, J. (2023). Depression symptoms, perceived stress, and loneliness during the COVID-19 pandemic among diverse US racial-ethnic groups. *Health Equity, 7*(1), 364–376. <https://doi.org/10.1089/heq.2022.0178>
- National Academies of Sciences, Engineering, and Medicine (with Committee on the Health and Medical Dimensions of Social Isolation and Loneliness in Older Adults, Board on Health Sciences Policy, Board on Behavioral, Cognitive, and Sensory Sciences, Health and Medicine Division, Division of Behavioral and Social Sciences and Education, & National Academies of Sciences, Engineering, and Medicine). (2020). *Social isolation and loneliness in older adults: Opportunities for the health care system*. National Academies Press. <https://doi.org/10.17226/25663>
- Nazarío-Acevedo, J. M., Yamashita, T., Bulanda, J. R., & Brown, J. S. (2024). Marital quality and depressive symptoms among older Hispanic adults in the United States. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 79*(5), Article gbae032. <https://doi.org/10.1093/geronb/gbae032>
- O'Muircheartaigh, C., English, N., Pedlow, S., & Kwok, P. K. (2014). Sample design, sample augmentation, and estimation for Wave 2 of the NSHAP. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 69*(Suppl 2), S15–S26. <https://doi.org/10.1093/geronb/gbu053>
- Peek, M. K., & O'Neill, G. S. (2001). Networks in later life: An examination of race differences in social support networks. *International Journal of Aging & Human Development, 52*(3), 207–229. <https://doi.org/10.2190/F1Q1-JV7D-VN77-L6WX>
- Peng, S., & Roth, A. R. (2022). Social isolation and loneliness before and during the COVID-19 pandemic: A longitudinal study of U.S. Adults older than 50. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 77*(7), e185–e190. <https://doi.org/10.1093/geronb/gbab068>
- Pugliesi, K., & Shook, S. L. (1998). Gender, ethnicity, and network characteristics: Variation in social support Resources1. *Sex Roles, 38*(3), 215–238. <https://doi.org/10.1023/A:1018733116398>
- Reskin, B. (2012). The race discrimination system. *Annual Review of Sociology, 38*(1), 17–35. <https://doi.org/10.1146/annurev-soc-071811-145508>
- Riley, A. R., Hawkey, L. C., & Piedra, L. M. (2024). Unequal loss: Disparities in relational closeness to a COVID-19 death among U.S. older adults. *Journal of the American Geriatrics Society, 72*(5), 1–8. <https://doi.org/10.1111/jgs.18755>
- Roth, A. R. (2024). Social isolation in America? A 20-year snapshot. *Socius: Sociological Research for a Dynamic World, 10*, Article 23780231241228445. <https://doi.org/10.1177/23780231241228445>
- Schafer, M. H. (2018). Gendered life course transitions: The case of driving cessation and social networks. In D. F. Alwin, D. H. Felmler, & D. A. Kreager (Eds.), *Social networks and the life course: Integrating the development of human lives and social relational networks* (pp. 245–262). Springer International Publishing. https://doi.org/10.1007/978-3-319-71544-5_12
- Small, M. L., & Pager, D. (2020). Sociological perspectives on racial discrimination. *The Journal of Economic Perspectives, 34*(2), 49–67. <https://doi.org/10.1257/jep.34.2.49>
- StataCorp. (2021). *Stata statistical software: Release 17* [Computer software]. StataCorp LLC.
- Stephoe, A., Shankar, A., Demakakos, P., & Wardle, J. (2013). Social isolation, loneliness, and all-cause mortality in older men and women. *Proceedings of the National Academy of Sciences of the United States of America, 110*(15), 597–5801. <https://doi.org/10.1073/pnas.1219686110>
- Taylor, R. J., Chatters, L. M., & Taylor, H. O. (2019). Race and objective social isolation: Older African Americans, Black Caribbeans, and non-hispanic whites. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 74*(8), 1429–1440. <https://doi.org/10.1093/geronb/gby114>
- Tibiriça, L., Jester, D. J., & Jeste, D. V. (2022). A systematic review of loneliness and social isolation among Hispanic/Latinx older adults in the United States. *Psychiatry Research, 313*, Article 114568. <https://doi.org/10.1016/j.psychres.2022.114568>
- West, B. T., McCabe, S., & Si, Y. (2023, May 11). *The use of weights when fitting trajectory models to longitudinal survey data: A simulation study with applications to substance use and misuse research*. 78th Annual AAPOR Conference. <https://aapor.confex.com/aapor/2023/meetingapp.cgi/Paper/1201>
- Wolfe, J. D., Bauldry, S., Hardy, M. A., & Pavalko, E. K. (2018). Multigenerational attainments, race, and mortality risk among silent generation women. *Journal of Health and Social Behavior, 59*(3), 335–351. <https://doi.org/10.1177/0022146518784596>
- Woodward, C. V. (2002). *The strange career of Jim Crow* (Commemorative ed). Oxford University Press.
- Wrzus, C., Hänel, M., Wagner, J., & Neyer, F. J. (2013). Social network changes and life events across the life span: A meta-analysis. *Psychological Bulletin, 139*(1), 53–80. <https://doi.org/10.1037/a0028601>