



# The Implications of Intergenerational Relationships for Minority Aging: a Review of Recent Literature

Rodlescia S. Sneed<sup>1</sup> · Athena C. Y. Chan<sup>2</sup>

Accepted: 16 December 2022 / Published online: 9 February 2023  
© The Author(s), under exclusive licence to Springer Nature Switzerland AG 2023

## Abstract

**Purpose of Review** This study aims to understand how intergenerational relationships impact minority aging in the USA. We reviewed studies published in the last 5 years that examine both familial and non-familial intergenerational relationships.

**Recent Findings** Intergenerational relationships can have positive and negative implications for minority aging. Minority older adults benefit most from these relationships when they increase social interaction and/or offer social support by reducing acculturative stress, providing emotional closeness, or increasing access to tangible resources. At the same time, these relationships can be sources of strain as they lead to burden among already disadvantaged groups.

**Summary** Future studies should explore the impact of intergenerational relations among more diverse subgroups of older adults and identify mechanisms linking intergenerational relationships to health-related outcomes among minority older adults. Further, longitudinal cohort studies and randomized trials are needed to test mechanisms and evaluate the effectiveness of promising intergenerational interventions.

**Keywords** Intergenerational relationships · Minority aging · Older adults · Grandparent caregiving · Acculturative stress

## Introduction

The US population has aged significantly in the last decade. Between 2009 and 2019, the US population aged  $\geq 65$  years increased 34% [1]. Further, by the year of 2050, it is projected that people who are 65 and older will outnumber those younger than 18 [2]. At the same time, the population is also experiencing increased ethnic and racial diversification. Between 2010 and 2020, the percentage of the population that was Non-Hispanic White decreased from 63 to 57% [3]. Over the same period, the US Hispanic population increased by 23%, and the US Black and Asian populations increased by 5% and 35%, respectively [4]. As the

population experiences these changes, there is an increased need for attention to research focused on the health and well-being of minority older adults. The field of minority aging research has expanded considerably in the last three decades, as numerous scholars have called for an increased focus on diversity issues within the field of gerontology [5, 6]. In response to these calls for more diverse aging research, the National Institute on Aging has sponsored 18 Resource Centers for Minority Aging Research (RCMARs) around the country to train social and behavioral scientists in minority aging and health disparities research [7].

One aspect of minority aging research that deserves attention is the study of intergenerational relationships. Intergenerational relationships are ties between those of different age groups. While research on intergenerational relationships is more established in the family literature, emerging research has focused on non-familial intergenerational relationships within communities. Intergenerational family relationships involve the bonds between different generations in the family, such as older parents and midlife adult offspring, grandparents and grandchildren, and even great grandparents and great grandchildren [8]. Life Course Perspective posits that family lives are linked and interdependent, impacted by both macro-factors (e.g., cultural, economic, and political

---

This article is part of the Topical Collection on *Epidemiology of Aging*

✉ Rodlescia S. Sneed  
sneedrod@wayne.edu

<sup>1</sup> Institute of Gerontology & Department of Psychology, Wayne State University, 87 East Ferry Street, Detroit, MI 48202, USA

<sup>2</sup> Department of Family Social Science, University of Minnesota, St. Paul, MN, USA

environments) and micro-factors (e.g., family history; [9]). Specifically, Silverstein and Bengtson [10] defined six dimensions of intergenerational relations in the family context: (1) associational — type and frequency of social contact, (2) structural — geographical distance that influences the extent of social contact, (3) functional — exchange of instrumental support, (4) affectional — feelings and affections, (5) consensual — agreement between generations on opinions and values, and (6) normative — sense of mutual obligations. In the non-familial context, intergenerational relations often refer to the establishment of bonds between the older and younger generations through participation and sharing of resources in different community settings (e.g. volunteering, mentoring; [11]). Similarly, intergenerational relationships outside the family context involve three domains: contact (type and frequency of shared activities), collective competence of meeting needs of different generations, and expectations of empowerment experiences [11].

Much of the literature on intergenerational relationships can be examined through the lens of role theory, which evaluates how engagement in various social roles impacts the health and well-being of older adults. Two perspectives on role theory dominate the literature. The *role enhancement* perspective suggests that occupying more social roles augments one's privileges, status, and resources in ways that positive impact health and well-being [12]. Alternatively, the *role strain* perspective suggests that social roles can place too many demands on an individual, resulting in either role conflict (i.e., inability to meet expectations of all social roles adequately) or role overload (i.e., not having enough time or resources to fill a particular role) [13].

The purpose of this review is to understand how intergenerational relationships impact minority aging in the USA. Considering how these relationships can be beneficial and/or sources of strain, we review studies that include both familial and non-familial intergenerational relationships. We focus on 3 types of relationships that have been explored in the literature on minority aging in the last 5 years: (1) older parent/adult child relationships within immigrant families, (2) grandparent caregiving, and (3) non-familial intergenerational programs.

## Older Parent/Adult Child Relationships Within Immigrant Families

Non-Whites make up two-thirds of the US foreign born population 65 years and older [14], and issues related to immigrant status and acculturation can negatively impact the well-being of minority older adults. Acculturating to a new country can be a stressful process, and the acculturation experience of older immigrants can be particularly difficult because of conflicts and clashes with younger generations.

Depending on the number of generations and years of immigration to the USA, ethnic minority groups face struggles integrating their own cultural identity by internalizing the mainstream cultural values while retaining their own heritage cultures [15]. Numerous studies have documented strong associations between high acculturative stress and poor mental and physical health among immigrants [16–21]. There has been less research on how acculturation processes impact the association between intergenerational family relationships and healthy aging of ethnic minority immigrants. In general, immigrants of ethnic minority groups in the USA tend to focus on interdependence and social obligations with connection to their families and communities over the life course [22]. The exposure to individualistic worldviews challenges older immigrants' connection with their own families and racial/ethnic group (i.e., to prioritize their own personal goals versus to sacrifice self for families and their racial/ethnic group), which can have potential negative impact of their health and well-being.

Asian Americans typically embrace the cultural value of filial piety, which honors their own families by showing respect to authorities and care for aging parents [23]. Despite heterogeneity among Asian ethnic subgroups, recent studies in this area have only focused on how intergenerational relationships are associated with the health of older Chinese immigrants. Using the Population Study of Chinese Elderly in Chicago (PINE) dataset, these studies considered how the structure and function of intergenerational relationships are differentially associated with mental health and well-being among immigrant Chinese older adults. Lai and colleagues [24••] evaluated how living with adult children, frequency of contact with adult children, and emotional closeness between generations were associated with well-being among older Chinese adults in the process of immigration and acculturation. Specifically, emotional closeness with adult children but not residence and frequency of talking have beneficial effects with respect to the well-being of older Chinese adults in the process of immigration and acculturation [24••]. The traditional family structure (i.e., frequent support exchange, close relationships, and contact) appears to be associated with substantial mental health benefits for older Chinese immigrants, while a departure from the traditional norm of filial piety may present a risk factor for this population's mental health [25]. However, an increasing level of acculturation to the mainstream American culture in older Chinese immigrants may reduce the acculturation gap between generations and family conflicts, which in turn benefits their cognitive functioning [26].

Mexican Americans are another growing group of immigrants where older parents tend to live with and depend on their children for different types of support [27]. Hispanics uphold prevailing cultural values of familism, which involves defining oneself in terms of one's relationship to

family and maintain obligations to one's parents, siblings, and extended family members in adulthood [28]. Data from the Hispanic Established Population for the Epidemiologic Study of the Elderly (H-EPESE) has shown that two in three Mexican American older adults have mild depressive symptoms, while one in five are moderately or severely depressed [29]. Recent studies have examined how intergenerational relationships are associated with the health of older Mexican American adults in Texas and California [30–32••]. Examining first- and second-generation cohorts of Hispanic older immigrants and their offspring, an increasing level of acculturation to the mainstream American culture benefits older Hispanic immigrants of lower socioeconomic status with better sleep, but harms middle-aged Hispanic immigrants of higher socioeconomic status with shorter sleep duration [30]. The distinct results by generational cohort may be attributable to different sociocultural profiles and age groups. Interestingly, living alone and intergenerational support had differential gender impact on the mental health of older Mexican Americans [32••]. Specifically, living alone, receiving and providing instrumental support from or to adult children, was associated with higher levels of depressive symptoms in older Mexican American men. Moreover, having functional limitations, having more children, and living in the same city with adult children were found to elevate the detrimental effect of widowhood on depressive symptoms, with more salient adverse effects among Mexican American men than women [31]. These unique gender differences are likely associated with traditional kin-keeper and caregiver roles in Mexican American families.

Taken together, studies of both Asian and Hispanic Americans suggest that affectional aspects of relationships with adult children (e.g., emotional closeness) are more positively associated with the well-being of immigrant minority older adults than the structural aspects of those relationships, such as frequency of contact or proximity.

## Grandparent Caregiving

Since the 1990s, social scientists have had interest in the impact of caring for grandchildren on the health and well-being of older adults. Such caregiving is particularly common among minority older adults. More than 7 million grandparents in the USA live with at least one grandchild under the age of 18, and a third of those grandparents are the primary caregivers for their grandchildren [33]. The literature on grandparent caregiving suggests considerable heterogeneity in the impacts of caring for grandchildren on the health and well-being of minority older adults, as these impacts are largely dependent on the structure of the caregiving experience, individual characteristics, and cultural norms. For example, three types of grandparent caregiving

are generally discussed in the literature: (1) skipped-generation custodial caregiving (i.e., grandparents raising minor grandchildren alone in the absence of the children's parents), (2) multigenerational caregiving (i.e., grandparents providing care to their grandchildren while residing in a household with adult children), and (3) nonresidential caregiving (i.e., grandparents providing supplemental support to grandchildren while residing elsewhere). These forms of grandparent caregiving have been differentially associated with health-related outcomes in various racial/ethnic groups.

Cumulative disadvantage is often cited as an important factor in understanding how minority status impacts the grandparent caregiving experience. The cumulative inequality theory [34] posits that inequality accumulates over the life course and that this inequality often persists over multiple generations within a family. Further, this inequality often presents itself in the form of poverty, reduced access to care, racism, and discrimination among racial and ethnic minorities. Throughout their lifetimes, many minority older adults face adverse environmental and social exposures that negatively impact biopsychosocial processes relevant for health and well-being [35]. Providing care to grandchildren is thought to exacerbate this disadvantage.

Much of the literature on grandparent caregiving has focused on African-American caregivers. African-American grandparents are more likely than other racial groups to provide care in skipped-generation households [36]. Both qualitative and quantitative studies suggest that, comparing to non-caregiving grandparents, African-American grandparents providing care in skipped-generation households experience adverse health-related outcomes, including more depression and poorer self-rated health [36]. These adverse outcomes are likely reflective of the adverse circumstances under which African-Americans become skipped generation caregivers. Skipped generation households are often formed under adverse conditions, such as teen pregnancy, parental incarceration, substance use, mental illness, and death [36]. Further, these grandparents often provide care in poverty and face food insecurity and significant financial distress. For these grandparent caregivers, caring for grandchildren appears to cause significant strain [37].

A few recent studies have compared African-American noncustodial grandparent caregivers to their White counterparts. Sneed and Schulz [38] evaluated the association between nonresidential grandparent caregiving and cognitive decline in a nationally representative population-based study over a 4-year period. While White non-residential grandparent caregivers experienced less cognitive decline than their counterparts over the 4-year follow-up, there was no association between grandparent caregiving and cognitive decline among Black grandparents. In another study using a similar sample, Choi [39] found that White grandparents who provided nonresidential care to their grandchildren had

a lower risk of mortality than their noncaregiving counterparts. African-American grandparents, however, had higher mortality than their noncaregiving counterparts when providing the same care. Taken together, both studies suggest that grandparent caregiving may convey health-related benefits for White, but not African-American grandparents. Both studies speculated about potential explanations for the observed racial differences in the impact of grandparent caregiving on health-related outcomes, such as differences in socioeconomic status, grandparenting style, and activities shared between grandparents and their grandchildren; however, none of these explanations were formally tested in either study.

Samuel and colleagues [40•] evaluated how grandchild characteristics were associated with well-being among African-American grandparent caregivers. Using a cross-sectional design, they observed that African-American grandparent caregivers providing care to grandchildren with psychiatric or behavioral problems reported more negative health impacts from the caregiving experience than those caring for grandchildren without such problems.

Hispanic grandparents provide care to grandchildren for reasons like those of African-American grandparents. Notably, they also often provide care to grandchildren whose parents may live out of the country [41]. Like African-American grandparents, Hispanic grandparents also often provide care under adverse conditions. Poor grandparent health [42], language barriers [43, 44], and financial challenges [43, 44] are cited as factors that negatively impact the grandparenting experience. Skipped generation households are not common in Hispanic households; however, grandparent-headed Hispanic households are often multigenerational, with adult children who are not the parents of the grandchildren often living in the home and providing care or emotional support [45]. There has been a paucity of research on Hispanic grandparents in the past few years. Further, existing research has focused primarily on Mexican–American grandparents. Although Mexican-Americans make up more than 60% of Hispanics in the USA [46], there are also sizable US-based Puerto Rican, Cuban, Central, and South American populations that have not been studied.

In families of Asian origin, grandparents are commonly involved in providing care to their grandchildren, as providing such care is a part of older adults' familial obligations [47]. In rural China, for example, grandparents often take primary responsibility for their grandchildren while the children's parents migrate to more urban areas for employment that might improve the family's overall financial situation. Studies conducted in mainland China estimate that one-third of Chinese older adults provide some care to grandchildren [48]. In a study using data from the China Health and Retirement Longitudinal Study, Choi and colleagues [49] found that Chinese grandparents providing care in skipped

generation households demonstrate fewer depressive symptoms than grandparents providing no care; however, there was no association between depressive symptoms and providing care in a multigenerational home or providing non-resident care to grandchildren.

Research on grandparent caregiving among US dwelling older adults of Asian descent is limited. Grandparent caregiving is common among Asian-American older adults, who often provide daycare while their adult children are at work [50]. Using data from a population-based study of community-dwelling Chinese older adults in the Greater Chicago area, Xu et al. [51] found a negative association between time spent providing care to grandchildren and depressive symptoms. Perceived burden moderated this association, as caregiving time was only associated with fewer depressive symptoms among those reporting less caregiving burden.

## Intergenerational Programs

Outside the familial context, intergenerational programs refer to social service programs that provide interaction opportunities for different generations (typically the old and the young) to come together to share their experiences, knowledge, and skills in ways that foster positive long-term relationships [52]. A recent review of theories call for the application of theoretical perspectives to fully understand intergenerational practice and relationships [11]. Social capital theory [53] suggests that intergenerational programs create positive social environments that facilitate the establishment of social relationships and thus prevents social isolation and loneliness among older adults. Such programs may be particularly helpful for minority older adults, as they often reside in neighborhoods with concentrated disadvantage (e.g., poverty, unemployment) that offer little opportunity for community social participation [54]. Further, depending on program design, intergenerational programs can help minority older adults to improve their skills or offer needed tangible resources (e.g., financial aid, food assistance).

A few pilot studies of intergenerational programs have been conducted among minority older adults in the last few years, and all suggest that these programs convey some benefits for health and well-being. These studies, however, have significant limitations due to small sample sizes, lack of control groups, and/or reliance on pre-post designs. Seeman and colleagues [55•] conducted a 9-month social genomics pilot study that placed primarily African-American older adults in elementary schools as volunteers who could support student's academic development and address behavioral issues. The primary outcome for the study was expression of a gene associated with increased inflammation and



reduced antiviral defenses. Blood samples collected from study participants ( $n=18$ ; mean age 68.0; range 60.1–80.7) showed a significant reduction in gene expression from baseline to follow-up, suggesting that the program may have positive effects on immune cell gene regulation. In another study, Senteio and colleagues [56•] examined the feasibility of using a community-based health education session that fostered intergenerational technology transfer to promote diabetes self-management among Black older adults ( $n=39$ ; mean age = 61.46; SD 6.83) in urban communities in Michigan. Older adults with diabetes shared insights on living with diabetes with younger adults ( $n=26$ ; mean age 31.08; SD 8.30); they selected from their personal networks, while the younger adults showed older adults how to access health information on smartphones. Changes in pre- and post-session responses showed that older adult participants had improvements in their confidence with technology and dietary behaviors after participating in the study. Finally, Bruce and colleagues [57] conducted a qualitative pilot study that examined the impact of an intergenerational summer meal program. Twenty-four older adults (21% Asian, 45% Hispanic) were interviewed about their experiences with food insecurity and with the intergenerational meal program. Older adult participants reported social, financial, and nutritional benefits from participating in the program, including increased social interaction with a younger generation, reduced financial burden because of the supplemental meals, and the opportunity to have healthy food options that could support disease management. While these programs all show promise, larger studies using randomized controlled designs are needed to establish effectiveness.

## Conclusion

Intergenerational relationships can have positive and negative implications for minority aging. Minority older adults benefit most from these relationships when they increase social interaction and/or offer social support by reducing acculturative stress, providing emotional closeness, or increasing access to tangible resources. Such benefits are consistent with the *role enhancement* perspective because they are resources that might not otherwise be available. Alternatively, intergenerational relationships can also be a source of *role strain* insofar as they are burdensome. Caring for grandchildren, for example, can negatively impact minority older adults who provide this care amid poverty, significant financial strain, or poor health.

There are numerous opportunities for expansion of the literature in this area. First, most of the extant literature focuses on particular racial/ethnic groups (e.g., Chinese-Americans, African-Americans, Mexican-Americans), largely neglecting other minority groups (e.g., Indian-Americans,

Caribbean-Americans, South Americans). There is a great deal of heterogeneity among those of Asian, Hispanic, and African descent with respect to cultural norms and family structure, which may have implications for how intergenerational relationships impact well-being. Future studies should examine the impact of this heterogeneity. Second, many studies offer potential explanations for observed effects; however, there is limited formal testing of factors that may mediate associations between intergenerational relationships and well-being. Longitudinal studies that evaluate mechanisms are needed. Further, while the impact of the COVID-19 pandemic on intergenerational relationships has been explored in the general US population [58–60], there has been little examination of the impact of the pandemic on the intergenerational relationships of minority older adults. Given racial/ethnic differences in disease susceptibility and disease-related morbidity/mortality, such examination is needed. Finally, while promising intergenerational interventions have been developed in recent years to maximize the positive impact of intergenerational relationships, these studies typically involve small samples that use pre and post-test designs without control groups. Large-scale randomized trials are needed to evaluate the effectiveness of such interventions.

**Funding** Dr. Sneed's participation was supported by The Michigan Center for Urban African American Aging Research through a grant from the National Institutes of Health (P30 AG015281).

## Declarations

**Conflict of Interest** The authors declare no competing interests.

## References

Papers of particular interest, published recently, have been highlighted as:

- Of importance
  - Of major importance
1. Administration for Community Living. 2020 Profile of older Americans, 2021; Retrieved from [https://acl.gov/sites/default/files/aging%20and%20Disability%20In%20America/2020ProfileOlderAmericans.final\\_.pdf](https://acl.gov/sites/default/files/aging%20and%20Disability%20In%20America/2020ProfileOlderAmericans.final_.pdf).
  2. Pew Research Center. America in 2050. 2019; Retrieved from <https://www.pewresearch.org/social-trends/2019/03/21/america-in-2050/>.
  3. U.S. Census Bureau. 2020 U.S. Population more racially and ethnically diverse than measured in 2010. 2021; Retrieved from <https://www.census.gov/library/stories/2021/08/2020-united-states-population-more-racially-ethnically-diverse-than-2010.html>.
  4. U.S. Census Bureau. Improved race and ethnicity measures reveal U.S. population is much more multiracial. 2021; Retrieved

- from <https://www.census.gov/library/stories/2021/08/improved-race-ethnicity-measures-reveal-united-states-population-much-more-multiracial.html>.
5. Thorpe RJ, Whitfield KE. Advancing minority aging research. *Res Aging*. 2017;39(4):471–5.
  6. Burton LM, Dilworth-Anderson P, Bengtson VL. Creating culturally relevant ways of thinking about diversity and aging: Theoretical challenges for the twenty-first century. In *Diversity: New approaches to ethnic minority aging*; New York, NY: Routledge; 2019. p. 129–142
  7. UCLA Center for Health Policy Research. 2023. Resource Centers for Minority Aging. Retrieved from: <https://rcmar.org/>.
  8. Fingerman KL, Huo M, Birditt KS. A decade of research on intergenerational ties: *technological, economic, political, and demographic Changes*. *J Marriage Fam*. 2020;82(1):383–403.
  9. Elder GH, Johnson MK, Crosnoe R. The emergence and development of life course theory. In: *Handbook of the life course*. Springer; 2003. p. 3–19.
  10. Silverstein M, Bengtson VL. Intergenerational solidarity and the structure of adult child-parent relationships in American families. *Am J Sociol*. 1997;103(2):429–60.
  11. Kuehne VS, Melville J. The state of our art: a review of theories used in intergenerational program research (2003–2014) and ways forward. *J Int Relationships*. 2014;12(4):317–46.
  12. Moen P, Robison J, Dempster-McClain D. Caregiving and women's well-being: a life course approach. *J Health Soc Behav*. 1995;36(3):259–73.
  13. Goode WJ. A theory of role strain. *Am Socio Rev*. 1960;25:483–96.
  14. U.S. Census Bureau. The older foreign-born population in the United States: 2012–2016. 2019; Retrieved from <https://www.census.gov/library/publications/2019/acs/acs-42.html>.
  15. Berry JW. Acculturative stress. In: *Handbook of multicultural perspectives on stress and coping*. Springer; 2006. p. 287–98.
  16. Guo M, et al. Is migration at older age associated with poorer psychological well-being? Evidence from Chinese older immigrants in the United States. *Gerontologist*. 2019;59(5):865–76.
  17. Serafica R, Lekhak N, Bhatta T. Acculturation, acculturative stress and resilience among older immigrants in United States. *Int Nurs Rev*. 2019;66(3):442–8.
  18. Miller AM, Chandler PJ. Acculturation, resilience, and depression in midlife women from the former Soviet Union. *Nurs Res*. 2002;51(1):26–32.
  19. Wrobel NH, Farrag MF, Hymes RW. Acculturative stress and depression in an elderly Arabic sample. *J Cross Cult Gerontol*. 2009;24(3):273–90.
  20. Diwan S. Limited English proficiency, social network characteristics, and depressive symptoms among older immigrants. *J Gerontol B Psychol Sci Soc Sci*. 2008;63(3):S184–91.
  21. Jang Y, Chiriboga DA. Living in a different world: acculturative stress among Korean American elders. *J Gerontol B Psychol Sci Soc Sci*. 2010;65(1):14–21.
  22. Schwartz SJ, et al. Communalism, familism, and filial piety: are they birds of a collectivist feather? *Cultur Divers Ethnic Minor Psychol*. 2010;16(4):548.
  23. Yeh KH, Bedford O. A test of the dual filial piety model. *Asian J Soc Psychol*. 2003;6(3):215–28.
  - 24.●● Lai DW, et al. The impact of intergenerational relationships on health and well-being of older Chinese Americans. *Journal of the American Geriatrics Society*. 2019;67(S3):S557–63. **This study evaluated the implications of several dimensions of intergenerational solidarity theory for the well-being of older Chinese Americans, finding that emotional closeness (but not coresidence or frequency of contact) was associated with increased well-being.**
  25. Guo M, Byram E, Dong X. Filial expectation among Chinese immigrants in the United States of America: a cohort comparison. *Ageing Soc*. 2020;40(10):2266–86.
  26. Li M et al. Family type and cognitive function in older Chinese Americans: acculturation as a moderator. *Aging Ment Health*. 2021;26:1–12.
  27. Landale NS, Oropesa RS, Bradatan C. Hispanic families in the United States: family structure and process in an era of family change. *Hispanics and the Future of America*. 2006;5:1–30.
  28. Sabogal F, et al. Hispanic familism and acculturation: what changes and what doesn't? *Hisp J Behav Sci*. 1987;9(4):397–412.
  29. Salinas JJ, Gonzalez JMR, Al Snih S. Type 2 diabetes, depressive symptoms and disability over a 15-year follow-up period in older Mexican Americans living in the Southwestern United States. *J Diabetes Compl*. 2018;32(1):75–82.
  30. Martinez-Miller EE, et al. US acculturation and poor sleep among an intergenerational cohort of adult Latinos in Sacramento, California. *Sleep*. 2019;42(3):zsy246.
  31. Pei Y, Cong Z, Wu B. Risk and resiliency in the relationship between widowhood and depressive symptoms among older Mexican Americans. *J Cross Cult Gerontol*. 2019;34(2):149–70.
  - 32.●● Pei Y, Cong Z, Wu B. The impact of living alone and intergenerational support on depressive symptoms among older Mexican Americans: does gender matter? *The Int J Aging Human Dev*. 2020;90(3):255–80. **This study found that living alone and intergenerational support had differential gender impact on the mental health of older Mexican Americans. Specifically, living alone, receiving and providing instrumental support from or to adult children was associated with higher levels of depressive symptoms in older Mexican American men.**
  33. AARP, 2018. Grandparents today national survey. 2019; Retrieved from [https://www.aarp.org/content/dam/aarp/research/surveys\\_statistics/life-leisure/2019/aarpgrandparenting-study.doi.10.26419-2Fres.00289.001.pdf](https://www.aarp.org/content/dam/aarp/research/surveys_statistics/life-leisure/2019/aarpgrandparenting-study.doi.10.26419-2Fres.00289.001.pdf).
  34. Ferraro KF, Shippee TP, Schafer MH. Cumulative inequality theory for research on aging and the life course, in *Handbook of theories of aging*. New York, NY: Springer Publishing Company; 2009. p. 413–33.
  35. Forrester SN, et al. Advances in understanding the causes and consequences of health disparities in aging minorities. *Current Epidemiology Reports*. 2020;7(2):59–67.
  36. Hayslip B, Fruhauf CA, Dolbin-MacNab ML. Grandparents raising grandchildren: what have we learned over the past decade? *Gerontologist*. 2017;57(6):1196.
  37. Baker LA, Mutchler JE. Poverty and material hardship in grandparent-headed households. *J Marriage Fam*. 2010;72(4):947–62.
  38. Sneed RS, Schulz R. Grandparent caregiving, race, and cognitive functioning in a population-based sample of older adults. *J Aging Health*. 2019;31(3):415–38.
  39. Choi S-WE. Grandparenting and mortality: how does race-ethnicity matter? *J Health Soc Behav*. 2020;61(1):96–112.
  - 40.● Samuel PS, et al. Impact of grandchild caregiving on African American grandparents. *Occupational Therapy in Health Care*. 2017;31(1):1–19. **Using a cross-sectional design, the authors of this study observed that African-American grandparent caregivers providing care to grandchildren with psychiatric or behavioral problems reported more negative health impacts from the caregiving experience than those caring for grandchildren without such problems.**
  41. Burnette D. Grandparent caregiving in Caribbean Latino families: correlates of children's departure from care. *J Int Relat*. 2009;7(2–3):274–90.

42. Whitley DM, Fuller-Thomson E. Latino solo grandparents raising grandchildren: health risks and behaviors. *Hispanic Health Care International*. 2018;16(1):11–9.
43. Bullock K. Chapter 7: Ahora le voy a cuidar mis nietos: rural Latino grandparents raising grandchildren of alcohol and other drug abusing parents. *Alcoholism Treatment Quarterly*. 2005;23(2–3):107–30.
44. Fuller-Thomson E, Minkler M. Mexican American grandparents raising grandchildren: findings from the Census 2000 American community survey. *Fam Soc*. 2007;88(4):567–74.
45. Goodman CC, Silverstein M. Latina grandmothers raising grandchildren: acculturation and psychological well-being. *The International Journal of Aging and Human Development*. 2005;60(4):305–16.
46. U.S. Census Bureau. American Community Survey: Hispanic or Latino origin by specific origin. 2019; Retrieved from <https://www.census.gov/acs/www/about/why-we-ask-each-question/ethnicity/>.
47. Burnette D, Sun J, Sun F. A comparative review of grandparent care of children in the US and China. *Ageing Int*. 2013;38(1):43–57.
48. Sun J. Grandparents raising grandchildren in China and its effects on the quality of life of older people. *Innov Aging*. 2017;1(Suppl 1):1295.
49. Choi S-WE, Zhang Z. Caring as curing: grandparenting and depressive symptoms in China. *Social Science & Medicine*. 2021;289:114452.
50. Yoon SM. The characteristics and needs of Asian-American grandparent caregivers: a study of Chinese-American and Korean-American grandparents in New York City. *J Gerontol Soc Work*. 2005;44(3–4):75–94.
51. Xu L, et al. Grandparent caregiving and psychological well-being among Chinese American older adults—the roles of caregiving burden and pressure. *J Gerontol Series A: Biomed Sci Med Sci*. 2017;72(S1):S56–62.
52. Department of Health and Human Services. White House conference on aging. 1981; Retrieved from <https://files.eric.ed.gov/fulltext/ED215259.pdf>.
53. Coleman JS. Social Capital in the creation of human capital. *Am J Sociol*. 1988;94:S95–120.
54. Taylor HO, Tsuchiya K, Nguyen AW, Mueller C. Sociodemographic factors and neighborhood/environmental conditions associated with social isolation among black older adults. *J Aging Health*. 2022;35:294–306.
55. Seeman T, et al. Intergenerational mentoring, eudaimonic well-being and gene regulation in older adults: a pilot study. *Psychoneuroendocrinology*. 2020;111:104468. **This pilot study showed that older adults who participated in a school mentoring program showed reduced expression of a gene implicated in increased inflammation and reduced viral defenses. This study provides initial evidence of a potential biological mechanism for linkages between intergenerational programs and health.**
56. Senteio CR, et al. Intergenerational technology transfer: enhancing African American older adults' self-efficacy for diabetes self-management. *Prog Commun Health Partnerships: Res, Educ Action*. 2021;15(4):453–62. **This pilot study demonstrated that older and younger adults can mutually benefit from programs designed to support intergenerational social exchange, technology transfer, and chronic disease management.**
57. Bruce JS, et al. Examination of an intergenerational summer meal program for children and older adults. *J Community Health*. 2022;47(6):902–13.
58. Xu Y, et al. Material hardship and parenting stress among grandparent kinship providers during the COVID-19 pandemic: the mediating role of grandparents' mental health. *Child Abuse Negl*. 2020;110(Pt 2): 104700.
59. Noble LW, et al. The social bridging project: intergenerational phone-based connections with older adults during the COVID-19 pandemic. *Gerontol Geriatric Med*. 2022;8:23337214221083470.
60. Xu Y, et al. Risk and protective factors associated with grandparent kinship caregivers' psychological distress in COVID-19: kinship license status as a moderator. *Child Fam Soc Work*. 2022;27(1):41–54.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.