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Social Cohesion and Social Engagement among Older Adults Aging in Place: Rural/Urban Differences

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Key Findings

- Rural adults aging in place (remaining in their homes and communities as they age) were significantly more likely to say that people in their community know each other well, compared to urban adults aging in place. Rural and urban residents did not differ in other measures of social cohesion.
- Across most measures of social engagement, activity participation, and barriers to participation, rural and urban older adults aging in place did not differ, with 83% of both rural and urban older adults aging in place reporting that they had participated in their favorite activity in the past year, and at least a third reporting that health had prevented them from performing an activity in the past month.
- Measures of social cohesion among rural older adults aging in place varied by race and ethnicity. Black rural residents were the most likely to say people in their community knew each other well, and white rural residents were the most likely to say people were willing to help each other and that people can be trusted.
- In measures of within-rural activity participation by race and ethnicity, white rural residents aging in place were the most likely to have participated in activities such as visiting friends/family, going out for enjoyment, and exercising, and the least likely to report transportation-related barriers to social participation. Black rural residents aging in place were the most likely to have attended a religious service in the past month.

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Purpose

For older adults aging in place, social cohesion and social engagement are essential to ensuring good health and quality of life. Rural residents may face structural barriers to remaining socially engaged and active as they age; however, differences by rurality are not well understood for older adults aging in place. This policy brief examines rural/urban differences in social cohesion and social engagement for older adults aging in place, as well as within-rural differences by race and ethnicity.

Background and Policy Context

Most older adults in both rural and urban areas want to age in place, that is, remain in their homes and communities as they get older, even if their health changes. 1,2 Part of staying healthy while aging in place is remaining active in social, recreational, and physical activities. Indeed, being socially isolated and/or lonely for prolonged periods of time is associated with poor health outcomes, including mortality. 3–6

Staying socially engaged requires a certain level of social cohesion in one's community, access to social opportunities, sufficient health and functional ability to participate, and transportation to access activities. Social cohesion is a sense of belonging and trust within one's community, which is essential for good health and for facilitating participation in social activities. Health, functional ability, and transportation can all help or hinder the ability to leave one's home to socialize or remain active.

To date, most research on social cohesion has focused on urban areas.⁷ However, a 2021 study found that social cohesion is higher in rural communities,⁷ perhaps a reflection of larger friend and family networks in rural areas.⁸ Other research has demonstrated differences between rural/urban older adults in neighborhood physical environment, transportation availability,

Social Cohesion and Social Engagement among Older Adults Aging in Place: Rural/Urban Differences

and health status,^{9,10} all of which might lead to structural barriers to social engagement.¹¹ Yet, less is known about whether and how differences in social cohesion apply to older adults aging in place. Understanding how social well-being differs for older adults aging in place by rural/ urban location is critical to designing policies and programs to support good health and quality of life. Further, because of the impacts of structural racism on the health and social well-being of rural residents,¹² including older adults,⁸ is it also important to identify within-rural differences in social engagement by race and ethnicity.

Approach

For this study, we used data from Round 9 (2019) of the National Health and Aging Trends Study (NHATS). The NHATS is a nationally-representative survey of Medicare beneficiaries age 65 and older, which has been collected annually since 2011. We limited our analyses to respondents who were living in the community and had not moved from their home since baseline (n=3,343). This means that respondents had not moved since first enrolling in the NHATS (2011 for most respondents). In our sample, respondents reported living in their homes for an average of 27 years.

We conducted bivariate analyses identifying rural/urban differences in three measures of social cohesion; participation in social, physical, and recreational activities; and barriers to participation because of transportation or health status. We used chi-squared tests to detect significant differences by rurality and used survey weights for analyses. We also conducted within-rural analyses by race and ethnicity (non-Hispanic white, non-Hispanic Black, and other; "other" includes Native American/Alaskan Native, Hispanic/Latino ethnicity, Asian, Pacific Islander, and multi-racial; "other" group is used because of the relatively small sample size.) When single sampling unit per strata observations were encountered in this sub-population analysis, we assumed certainty units for standard error calculations. Rural location was defined according of the Office of Management and Budget definition, using non-metropolitan counties to identify rural residence.¹³ This definition of rural was used as it is the measure available in the NHATS public use files.

Results

Table 1 shows differences in three measures of social cohesion by rural/urban location. Rural residents aging in place were significantly more likely to say that people in their community know each other well (89% vs. 83%, p<0.001), but rural and urban residents did not differ in their perception of community members being willing to help each other or whether people in their community can be trusted.

Across most measures of social engagement, activity participation, and barriers to participation, rural and urban older adults aging in place did not differ (Table 2). However, rural older adults aging in place were more likely to have volunteered in the past month (33% vs.

Table 1. Differences in Social Cohesion

	Rural	Urban	P-value
People know each other well	0.89	0.83	< 0.001
People willing to help each other	0.94	0.93	0.566
People can be trusted	0.93	0.92	0.650

Table 2. Differences in Social Engagement and Barriers to Participation

	Rural	Urban	P-value
Visited family or friend that doesn't live with you in last month	0.89	0.87	0.503
Attended religious service in last month	0.61	0.54	0.756
Attended club, class, or other religious service in last month	0.36	0.41	0.174
Go out for enjoyment in the last month	0.82	0.81	0.833
Worked for pay in last month	0.18	0.19	0.760
Did volunteer work in last month	0.33	0.26	<0.05
Was a caregiver for someone else in last month	0.20	0.21	0.659
Walked for exercise in the last month	0.57	0.63	<0.05
Performed vigorous exercise in the last month	0.44	0.44	0.837
Perform their self-reported favorite activity in the last year	0.83	0.83	0.913
Health prevented you from performing activity in last month	0.35	0.33	0.512
Transportation prevented you from performing activity in last month	0.03	0.06	<0.05

Page 2 January 2022

	White	Black	Other	P-value
People know each other well	0.90	0.93	0.80	0.08
People willing to help each other	0.94	0.91	0.85	< 0.001
People can be trusted	0.94	0.88	0.86	<0.01

26%, p<0.05) and less likely to have walked for exercise in the past month (57% vs. 63%, <0.05). Eighty-three percent of both rural and urban older adults aging in place reported that they had participated in their favorite activity in the past year. Rural residents were less likely to report that transportation had prevented them from participating in an activity in the past month (3% vs. 6%, p<0.05), and at least a third of older adults in both locations reported that health had prevented them from performing an activity in the past month.

Within-rural differences in social cohesion by race and ethnicity are shown in Table 3, with significant differences across two of the three measures. Black rural residents aging in place were the most likely to say that people in their community know each other well (93% vs. 90% for white and 80% for other rural residents aging in place, p=0.08). White rural residents aging in place were more likely than Black or other rural residents aging in place to say that people in their community are willing to help each other and can be trusted.

Table 4 shows within-rural differences in social engagement and barriers to participation by race and ethnicity. Again, there were significant differences across most measures. Black rural residents aging in place were the most likely to have attended a religious service

in the past month (73% vs. 61% of white and 47% of "other" rural residents aging in place, p<0.001). White rural residents aging in place were the most likely to have visited family or friends; attended a club, class, or other service; have gone out for enjoyment; volunteered; walked for exercise; performed vigorous exercise; or to have performed their favorite activity in the past year. Across each of those measures, older adults in the "other" race and ethnicity category were the least likely to have participated. White rural residents were significantly less likely than Black or "other" rural residents to report that transportation was a barrier to social engagement (3% vs. 6% and 7%, respectively, p<0.001).

Discussion and Implications

Our analysis of the NHATS data shows that most older adults aging in place are active members of their communities, in both rural and urban areas. Because there was not a significant urban/rural difference among individuals aging in place with regard to perceptions about peoples' willingness to help one another and whether people could be trusted, aging in place may play a role in fostering social cohesion across geo-

Table 4. Within-Rural Differences in Social Engagement and Barriers to Participation by Race and Ethnicity

	White	Black	Other	P-value
Visited family or friend that doesn't live with you in last month	0.90	0.89	0.72	< 0.001
Attended religious service in last month	0.61	0.73	0.47	<0.001
Attended club, class, or other religious service in last month	0.38	0.20	0.28	<0.01
Go out for enjoyment in the last month	0.85	0.66	0.59	<0.001
Worked for pay in last month	0.18	0.10	0.26	<0.05
Did volunteer work in last month	0.36	0.18	0.16	< 0.001
Was a caregiver for someone else in last month	0.21	0.11	0.19	0.104
Walked for exercise in the last month	0.58	0.44	0.49	< 0.001
Performed vigorous exercise in the last month	0.47	0.22	0.22	< 0.001
Perform their self-reported favorite activity in the last year	0.85	0.79	0.58	<0.001
Health prevented you from performing activity in last month	0.34	0.43	0.46	0.078
Transportation prevented you from performing activity in last month	0.03	0.06	0.07	<0.05

Page 3 January 2022



Social Cohesion and Social Engagement among Older Adults Aging in Place: Rural/Urban Differences

graphical contexts. 14,15 However, rural older adults aging in place were more likely to say that people know each other well, and more likely to have volunteered in the past month. But, rural residents aging in place were less likely to have walked for exercise in the past month. This aligns with previous research showing poorer health behaviors among rural residents 16 and may be indicative of structural barriers to activities like walking. Many rural residents lack safe places to walk (e.g., sidewalks) and improvement in such infrastructure may facilitate more active social opportunities for rural older adults aging in place.

Overall, approximately one-third of all older adults, in both rural and urban locations, said that health prevented them from participating in an activity in the last month. This highlights the importance of supporting good health among older adults aging in place so that they can remain active and socially engaged. It also underscores the importance of providing activity options that are accessible to a range of physical abilities and health statuses;¹⁷ such as online exercise classes, book clubs, and other virtual activities spurred on by the COVID-19 pandemic. However, providing such options in rural areas requires improving equitable access to affordable, reliable broadband Internet.¹⁸

Perhaps counterintuitively, rural residents aging in place were less likely than urban residents to say that transportation barriers had prevented them from participating in an activity. It is possible that rural residents aging in place are more likely to get rides from friends and neighbors, owing to the stronger social cohesion that they report. Rural residents are also more likely to drive themselves somewhere, even if they have a health condition that makes doing so less safe.¹⁹ Meanwhile, urban older adults may be more likely to experience challenges with parking, traffic congestion, and public transportation. It is also possible that rural residents aging in place have fewer activities to choose from or choose opportunities closer to home, making them less likely to report missing out on activities because of transportation. The intersection between transportation and social well-being among rural residents aging in place is an important area of future research.

Finally, the differences we identified among rural residents by race and ethnicity highlight an important opportunity to improve equitable access to social well-being for older adults aging in place. With the exception of participation in religious services, Black rural residents aging in place reported lower rates of participation in social activities than white rural residents. And, rural residents in the "other" race and ethnicity

category reported the lowest social cohesion and participation in activities. We also found that white rural residents aging in place were less likely than their Black or "other" rural counterparts to report transportation barriers to social engagement.

These results may be indicative of structural racism, in which communities with higher proportions of Black, Indigenous, and other people of color (BIPOC) tend to be systematically deprived of resources. 12 This may manifest in terms of access to social infrastructure, community amenities, transportation access, and quality of the built environment for rural BIPOC older adults aging in place.²¹ For example, non-Hispanic white rural residents aging in place were significantly more likely to have attended a club or class, walked for exercise, or exercised vigorously in the past month. This is likely indicative of inequitable access to safe places to engage in such opportunities, such as sidewalks, community gathering places, and recreational centers. More research is needed in this area, especially as the sample size of rural older adults aging in place, particularly in the "other" race and ethnicity category, was relatively small in this study. Additional data are needed to better understand nuance within that category and across rural residents.

Overall, this study showed that older adults aging in place are socially engaged and place high amounts of trust in their communities, especially in rural areas. Rural older adults aging in place are vital members of their communities, particularly as many rural places have experienced outmigration of younger adults and declining birth rates. Ensuring the social well-being and quality of life of rural older adults aging in place is paramount to ensuring the vitality of their communities as a whole. Future research and policy discussions should emphasize the importance of social well-being among rural and urban adults in promoting good health outcomes.

References

- Henning-Smith C, Mulcahy J, Lahr M, Tanem J. Preferences for Long-Term Care Arrangements among Rural and Urban Older Adults. Minneapolis, MN; 2021. https://rhrc.umn.edu/publication/preferences-for-long-term-care-arrangements-among-rural-and-urban-older-adults/. Accessed May 21, 2021.
- 2. Henning-Smith CE, Shippee TP. Expectations about future use of long-term services and supports vary by current living arrangement. *Health Aff (Millwood)*. 2015;34(1):39-47. doi:10.1377/hlthaff.2014.0556 [doi]
- 3. Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. Loneliness and Social Isolation as Risk Factors

Page 4 January 2022



Social Cohesion and Social Engagement among Older Adults Aging in Place: Rural/Urban Differences

- for Mortality. *Perspect Psychol Sci.* 2015;10(2):227-237. doi:10.1177/1745691614568352
- Holt-Lunstad J, Smith TB, Layton JB, et al. Social Relationships and Mortality Risk: A Meta-analytic Review. Brayne C, ed. PLoS Med. 2010;7(7):e1000316. doi:10.1371/journal.pmed.1000316
- Steptoe A, Shankar A, Demakakos P, Wardle J. Social isolation, loneliness, and all-cause mortality in older men and women. Proc Natl Acad Sci U S A. 2013;110(15):5797-5801. doi:10.1073/ pnas.1219686110
- National Academies of Sciences Engineering and Medicine. Social Isolation and Loneliness in Older Adults. National Academies Press; 2020. doi:10.17226/25663
- 7. Avery EE, Hermsen JM, Kuhl DC. Toward a Better Understanding of Perceptions of Neighborhood Social Cohesion in Rural and Urban Places. *Soc Indic Res* 2021 1572. 2021;157(2):523-541. doi:10.1007/S11205-021-02664-0
- Henning-Smith C, Moscovice I, Kozhimannil K. Differences in Social Isolation and Its Relationship to Health by Rurality. J Rural Heal. January 2019. doi:10.1111/jrh.12344
- Tuttle C, Tanem J, Lahr M, Schroeder J, Tuttle M, Henning-Smith C. Rural-Urban Differences among Older Adults. Minneapolis, MN; 2020. https://rhrc.umn.edu/wp-content/uploads/2020/08/Rural-Urban-Older-Adults_Chartbook_Final_8.25.20.pdf. Accessed September 16, 2020.
- Henning-Smith C, Evenson A, Kozhimannil K, Moscovice I. Geographic variation in transportation concerns and adaptations to travel-limiting health conditions in the United States. *J Transp Heal*. November 2017. doi:10.1016/j.jth.2017.11.146
- 11. Henning-Smith C. Meeting the Social Needs of Older Adults in Rural Areas. *JAMA Heal Forum*. 2020;1(11):e201411. doi:10.1001/jamahealthforum.2020.1411
- Henning-Smith CE, Hernandez AM, Hardeman RR, Ramirez MR, Kozhimannil KB. Rural Counties With Majority Black Or Indigenous Populations Suffer The Highest Rates Of Premature Death In The US. Health Aff. 2019;38(12):2019-2026. doi:10.1377/ hlthaff.2019.00847
- Cromartie J. Urban Influence Codes Documentation. USDA Economic Research Service. https://www.ers.usda.gov/data-products/urban-influence-codes/documentation.aspx. Published 2019.
- 14. Williams AJ, Maguire K, Morrissey K, Taylor T, Wyatt K. Social cohesion, mental wellbeing and health-related quality of

- life among a cohort of social housing residents in Cornwall: A cross sectional study. *BMC Public Health*. 2020;20(1). doi:10.1186/S12889-020-09078-6K
- KL, PJ C. Neighborhood Disorder, Perceived Social Cohesion, and Social Participation Among Older Americans: Findings From the National Health & Aging Trends Study. J Aging Health. 2018;30(1):3-26. doi:10.1177/0898264316665933
- 16. Matthews KA. Health-Related Behaviors by Urban-Rural County Classification United States, 2013. *MMWR Surveill Summ*. 2017;66. doi:10.15585/MMWR.SS6605A1
- 17. Henning-Smith C. Addressing Social Isolation and Loneliness Among Older Adults: From Screening to Structural Change. Milbank Memorial Fund Blog. https://www.milbank.org/2020/11/addressing-social-isolation-and-loneliness-among-older-adults-from-screening-to-structural-change/. Published November 16, 2020. Accessed May 7, 2021.
- 18. Kozhimannil KB, Henning-Smith C. Improving Health among Rural Residents in the US. *JAMA J Am Med Assoc.* 2021;325(11):1033-1034. doi:10.1001/jama.2020.26372
- Henning-Smith C, Evenson A, Kozhimannil K, Moscovice I. Geographic variation in transportation concerns and adaptations to travel-limiting health conditions in the United States. *J Transp Heal*. November 2017. doi:10.1016/J.JTH.2017.11.146
- 20. Chong M, Habib A, Evangelopoulos N, Park HW. Dynamic capabilities of a smart city: An innovative approach to discovering urban problems and solutions. *Gov Inf Q*. 2018;35(4):682-692. doi:10.1016/J.GIQ.2018.07.005
- 21. Egede LE, Walker RJ. Structural Racism, Social Risk Factors, and Covid-19 A Dangerous Convergence for Black Americans. https://doi.org/101056/NEJMp2023616. 2020;383(12):e77. doi:10.1056/NEJMP2023616

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Page 5 January 2022