

Seminar on Kinlessness and Living Alone at Older Ages

National Academies of Sciences, Engineering, and Medicine

Committee on Population

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Virtual Seminar

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Executive Summary

On May 15, 2023, the National Academies of Sciences, Engineering, and Medicine convened an expert panel to address kinlessness and living alone at older ages. The panel's four presenters provided insights into trends of kinlessness and aging alone, consequences of kinlessness and isolation, racial/ethnic disparities in aging alone, and cross-national trends in kinlessness. Presenters emphasized that more measurement and data are needed to better understand kinlessness and its impacts, and to improve support for older adults aging alone.

Aging Alone: Overview, Trends, and Data Sources

Kinlessness and kin availability have been greatly impacted by recent demographic trends, including the decrease in marriage rates, fertility, and mortality and the increase in prevalence of complex families. Only about one percent of the U.S. older adult population lacks all major kin types (i.e., spouse, partner, children, parents, and siblings). However, estimates suggest that nearly one-fourth of older adults report having little to no support system, indicating that kin-based relationships may not sufficiently provide support for all older adults. The number of kinless adults in the United States has increased significantly over the last few decades and estimates suggest that this trend will continue, with kinlessness soon overcoming the number of individuals with diabetes or Alzheimer's disease. In addition, the kinless population is highly heterogeneous across the globe and thus data sources, namely surveys, are highly important to understanding the needs of this population.

Research Opportunities

1. Evaluate kinlessness at various levels, including an individual's network, the closeness and reliance upon that network, and the receipt of care from that network.
2. Interrogate the heterogeneity of the kinless population.
3. Improve understanding of how kinless adults rely on other relationships (e.g., stepchildren, "living apart together" partners).
4. Enhance the ability of surveys to interrogate the impact of incarceration on kinlessness.

Aging Alone: Mechanisms and Consequences

Aging alone can lead to various psychological, economic, social, cognitive, and physical consequences. The harmful effects of kinlessness are well-established, including a higher likelihood of depression and reduced life satisfaction and happiness. Poor physical, cognitive, functional, and mental health, as well as economic and racial privilege and education attainment, can predict outcomes relevant to kinlessness, including ever-partnering, social engagement, and having children. Isolation is also a major factor to consider in the kinless population because isolation can increase the risk of elder abuse, which impacts approximately 10 percent of U.S. older adults. Isolation is also important to consider in the context of climate change and extreme weather because these factors may put older adults at risk of negative outcomes.

Research Opportunities

1. Expand survey questions to include follow-up responses related to questions of preference.
2. Capture more data on non-social forms of integration, neighborhood stability, and personality to understand differences between kinless adults that express varying levels of loneliness.
3. Obtain basic health and socioeconomic data on focal network members, changes in networks, and planning behaviors.
4. Increase the capture of measurements related to elder mistreatment.

Racial/Ethnic and Socioeconomic Disparities in Aging Alone

Black individuals are more likely to be socially isolated due to kinlessness than non-Hispanic white individuals, particularly Black women. However, most survey-based studies of kinlessness have occurred in non-Hispanic white populations and thus more studies involving diverse populations are needed. The National Survey of American Life (NSAL) is a prominent resource for kinlessness-related data in diverse populations, particularly in relation to fictive kin. Using these data, subjective isolation was found to be associated with psychiatric illness and chronic pain, whereas objective isolation was not. Findings from the NSAL also indicated that non-Hispanic White individuals are more likely than both African Americans and Black Caribbeans to live alone, to be childless, and have limited contact with religious congregation members. For African Americans, residing in the South was protective against social isolation. Surveys must be adapted to best serve non-white populations, including more tailored measures and definitions (e.g., living apart together may not be as appropriate as “romantic involvement”).

Research Opportunities

1. Conduct more research on kinlessness and social isolation among African American individuals, as well as other populations.
2. Include questions in surveys to more deeply interrogate non-kin relationships, such as church support, distant kin, racial identity, and immigrant status.
3. Standardize the definition and measurement of “social isolation” across academic fields to enable comparability of study findings.
4. Align spatial sampling strategies across surveys to reduce the impacts of oversampling and increase comparability across surveys.

Cross-National Perspectives and the Role of Public Policy

Across the globe, true kinlessness is rare and thus the term “kinlessness” may inherently exclude the possibility of fictive kin and social networks. Overall, the percentage of individuals living alone has increased in more developed countries; however, this increase is not matched by an increase in loneliness. Cross-national surveys predominantly ask questions about family networks and family-based care. However, not all older adult populations expect or want family members to provide support and having family-based relationships does not equate to receiving appropriate support. Family-based models of care do not capture data on critical non-kin relationships, which causes a substantial cultural and empirical lag in assessing modern social behaviors to update necessary policies.

Research Opportunities

1. Capture data on non-nuclear family-based relationships and networks, including how these networks provide help to older adults.
2. Adapt health care policies to serve the kinless population.
3. Update and refine standard terms, such as “kinlessness.”

Meeting Summary

Introduction and Seminar Goals

Elena Fazio, NIA, Emerald Nguyen, NIA, and Anne Pebley, University of California, Los Angeles and Chair of CPOP

Despite a significant increase in the proportion of people living alone over recent decades, individuals in this living arrangement are rarely discussed in research on health and wellbeing. Living alone has various implications for the social, physical, and economic wellbeing of an individual. Kinlessness, or the lack of immediate kin or close relationships with kin, can be an important factor in living alone and can itself play an important role in the overall wellbeing of an individual. The impacts of living alone and kinlessness are particularly important to consider for vulnerable groups, such as older adults.

Across different countries, the number of individuals living alone or who are kinless is driven by various macrosocial, policy, and contextual factors. The National Institute on Aging (NIA) commissioned the Committee on Population (CPOP) to convene a meeting to present findings related to kinlessness and living alone at older ages, which are priority research areas for NIA and the Division of Behavioral and Social Research (BSR). The goal of this seminar aims to explore the mechanisms by which individuals end up living alone or are kinless, as well as the positive and negative health and wellbeing associated with this status. The meeting was held via web conference on May 15, 2023. The meeting agenda and list of participants are included as Appendices 1 and 2, respectively.

Kinlessness and living alone relate to several of NIA's strategic priorities. The [2019 National Advisory Council on Aging \(NACA\) review](#) of BSR emphasized the need to understand macrosocial trends and health disparities in aging and to support research to improve care for persons with dementia and their caregivers. Kinlessness and living alone are two macrosocial trends that may both demonstrate and contribute to health disparities, including in dementia prevalence and care. The impact of kinlessness on older adults is addressed in [NIA's Strategic Directions for Research 2020-2025](#), particularly Goal B, which calls for improving understanding of the effects of personal, interpersonal, and societal factors on aging, including the mechanisms through which these factors exert their effects. This seminar will also complement BSR's other efforts to capture the increasing diversity and complexity of family structures and composition, including the recent Request for Applications (RFA) on "Measures and Methods for Research on Family Caregivers for People Living with Alzheimer's Disease (AD) and Alzheimer's disease-related dementias (ADRD)" ([RFA-AG-23-022](#) and [RFA-AG-23-023](#)). In addition, NIA Research Implementation Milestones related to Care and Caregiving highlight the need for secondary analyses of population-based and intervention data and additional research on the effectiveness and impacts of non-residential and residential care on people with dementia; one success criterion related to these milestones is assessing whether care models are effective in diverse populations, including individuals who live alone.

Aging Alone: Overview, Trends, and Data Sources

Rachel Margolis, University of Western Ontario

Family members play an important role in older adults' wellbeing. They provide older adults with health care and health management, social integration, and economic support. On average, older adults who have family members or friends that occasionally check in receive better care overall. Older adults without family members or friends that provide support are more likely to use institutional care resources. Studying the phenomenon of aging alone is thus key for formulating public policies related to elder care.

Demographic Trends and Kin Availability

In research studies on kinlessness and kin availability, subjects can be characterized as (1) kinless adults, who are adults lacking multiple family ties (e.g., children, spouses, partners, siblings), (2) adults living alone who may or may not have family or social network connections, or (3) elder orphans (i.e., adults living alone with no support system). Several demographic trends have impacted the kin availability of older adults:

- Decrease in currently married adults caused by lower marriage rates, increased cohabitation, and increased gray divorce (i.e., divorce of individuals ≥ 50 years old).
- Decline in fertility caused by increased childlessness and associated prevalence of individuals without siblings and extended family members (e.g., aunts, uncles, cousins).
- Decline in mortality, causing an increase in availability of kin at all ages.
- Increase in the prevalence of complex families caused by increased higher order marriages (e.g., second and third marriages), more step-children, and increased incidence of living apart together (i.e., individuals in a relationship that do not cohabitate).

The pathway to aging alone may be short-term or lifelong, as well as expected or unexpected; these pathways may include divorce, widowhood, childlessness, estrangement, death of a partner or family member, and social ties that do not serve an individual's needs.

Estimates of Kinlessness

Estimates indicate that 38.5 percent of older adults do not have a spouse, 10.5 percent do not have biological children, 79.1 percent do not have living biological parents, and 16.6 percent do not have biological siblings. Approximately 1 percent of the U.S. population lacks all major kin types (i.e., spouse, partner, children, parents, and siblings). Estimates suggest that 22 percent of older adults living in the United States have little to no support system and approximately 27 percent of older adults live alone.

The percent of kinless older adults has increased significantly across birth cohorts, particularly comparing those born between 1931-1941 and those born between 1948-1953. Estimates suggest that kinlessness will continue to increase over time, particularly for Black men and women. These estimates also indicate that the number of kinless older adults in 2060

(approximately 21.3 million) will be greater than the number of older adults affected by diabetes (16.9 million) or Alzheimer's disease (13.8 million).

Global Effects of Kinlessness

Kinlessness poses unique challenges in different countries. For example, China has relatively low overall rates of kinlessness. However, the significantly larger male population in China leads to a large number of unmarried heterosexual men and a higher number of older men without living family. On the other hand, estimates suggest that the proportion of women in China who are kinless will dramatically decrease over time. Because elder care in China is predicated on family ties, individuals without those networks (estimated to be 6.35 million individuals) will likely be disadvantaged in obtaining needed care.

In addition to being culturally specific, adult kinlessness is a demographically heterogeneous phenomenon. In some countries, the kinless population is more likely to have low education whereas in others, it is more likely to have higher levels of education. This heterogeneity complicates the ability to study the kinless population across countries.

Data Sources and Gaps

Most data sources in the field of kinlessness are surveys. Although each of these surveys has its own strengths and limitations, they all typically ask for information on partners, children, and grandparents but not about siblings, non-household kin, and support systems. Surveys that collect data relevant to the areas of kinlessness and living alone include the Integrated Public Use Microdata Series (IPUMS), International Social Survey Programme (ISSP), National Social Life, Health, and Aging Project (NSHAP), National Health and Aging Trends Study (NHATS), and Health and Retirement Study (HRS). Dr. Margolis outlined several key data gaps:

- Understanding whether kinless adults substitute within their networks for certain tasks usually completed by kin.
- Evaluating the extent to which step-children, partners who are "living apart together" (i.e., who reside at different addresses), and siblings count as sources of care.
- Determining care gaps caused by living alone.
- Assessing the prospective aspect of kin availability.
- Understanding the impact of not having kin versus having kin but experiencing estrangement, distance, or disconnection from those kin.
- Disentangling the heterogeneity of kinlessness by generating more data.

A better understanding of kinlessness and living alone can (1) help institutions modernize policies to acknowledge that social networks are diverse, (2) improve support for older adults living alone, (3) estimate future health care costs, (4) provide support to combat loneliness, and (5) forecast housing and public transport needs for the future.

Discussion

Levels of Characterizing Kinlessness

Dr. Carr confirmed that kinlessness and aging must be understood at three levels: (1) the composition of an individual's social network, (2) the nature and quality of an older adult's relationship with each member of the network, and (3) receipt of care from one's network.

Survey Resources

Surveys often appropriately address one area related to kinlessness, but not all. The NSHAP is a good source of data related to the composition of an older adult's network, whereas the Survey of Health, Ageing and Retirement in Europe (SHARE) is a good source of data related to support provided to older adults from their networks. The Panel Study of Income Dynamics (PSID) is a longitudinal resource that captures socioeconomic changes in households and data on the presence of stepchildren could be extracted from such a dataset. The National Longitudinal Study of Adolescent to Adult Health (Add Health) may also be a resource for data related to stepchildren.

Dr. Carr agreed to summarize her thoughts on the best sources of information from various surveys at a later date.

Incarceration

Participants discussed the impact of incarceration on kinlessness, noting that incarceration in the United States increased during the 1990s and can lead to network loss. Many previously incarcerated individuals may take surveys, but most surveys do not have questions related to the impact of incarceration. Thus, surveys could improve understanding by incorporating questions on outcomes of incarceration and its relation to kinlessness.

Widowhood

Participants discussed the impact of transitions to kinlessness, noting that substantial literature has interrogated the impact of widowhood. The death of a spouse is associated with increased levels of depression and higher risks of mortality and loneliness.

Aging Alone: Mechanisms and Consequences

Deborah Carr, Boston University

Aging alone can be both a consequence and precursor of psychological, economic, social, cognitive, and physical wellbeing. To fully understand these associations, researchers must specify precisely what they mean by "alone." Studies must assess kin and social networks beyond spouses and children, recognizing that rising numbers of U.S. adults are growing old without a spouse or proximate children. Networks might also include relationships with siblings, nieces, nephews, cousins, friends, fictive kin, and non-coresidential romantic partners such as those in "living apart together" (LAT) relationships. Studies also take consider both the *duration of* and *pathway into* being "alone." The impacts of being alone may differ based on whether one has been alone for decades and thus learns to make appropriate adaptations, those who

become alone through spousal death, or those who choose to live alone and leave a former marriage by choice. For instance, some may seek out alternative supports when a spouse or partner dies, whereas others may recede and become more socially isolated—which can lead to an accumulation of both economic and physical risks of aging alone.

Further, considering the health and economic resources of one's social network members is important. Some network members may be ill-equipped to provide essential support if they themselves lack the economic resources or physical/mental wherewithal to assist. In addition, researchers should think carefully about their comparison group when studying individuals living alone. For instance, should the comparator be persons who live with others, or those who live with others with whom they have high quality relationships? The impacts of living alone may be unclear when these experiences are contrasted with those of a heterogeneous comparison group. Meaningful differences can be concealed if the comparison standard is muddled.

Harmful Impact of Aging Alone

Empirical studies of the physical, cognitive, functional, psychological, and economic consequences of living alone need to fully address issues of social selection. Factors including low socioeconomic status, and other social factors can undermine one's likelihood of ever marrying, remaining married, remarrying, and engaging in meaningful formal and informal social relationships. Thus, researchers need to carefully interrogate the extent to which associations between aging alone and well-being reflect patterns of social selection versus social causation.

Additionally, researchers need to recognize that patterns of social selection can change over time. For example, in recent decades persons with higher levels of education and educational attainment are more likely to ever-marry and remain married. However, in the early 20th century, highly educated women were slightly less likely to marry, relative to their peers with fewer years of schooling. Thus, studies of aging alone and its impact need to thoughtfully recognize larger sociodemographic and historical contexts.

Likewise, the role of health-related selection needs to be seriously considered. Poor physical and mental health can predict kinlessness, as health problems reduce the likelihood of marrying, remaining married, and maintaining high quality relationships with kin. Conversely, social relationships are among the most well-established predictors of physical and emotional health, as strong social relationships are a source of health-enhancing supports. Family, friends, and romantic partners can encourage healthy and hinder unhealthy behaviors and assist with activities of daily living (ADLs), such as driving to a medical appointment. These supports are especially important for men. In addition, limited levels of socioemotional engagement (e.g., conversations, visits, walks) are associated directly and indirectly with poorer health outcomes, as well. If people living alone do not have sources of social, emotional, and instrumental support, they may have greater difficulty managing daily stresses. Unmanaged daily stress can

increase cortisol and inflammation levels which, in turn, are associated with increased disease risk. The mental health consequences of aging alone are less well-established, although several studies show that being alone is linked with increased loneliness, anxiety, and depressive symptoms and reduced life satisfaction and happiness. However, the quality rather than the mere presence of social ties is what matters for mental health. Marital and parental statuses have relatively weak associations with emotional loneliness, in part because some ties do not provide adequate emotional support and closeness. For instance, as many as one-third of married persons report emotional loneliness, meaning that their emotional needs are not adequately met. Further, changes in one's relationships also can trigger symptoms of poor well-being. For instance, the loss of a spouse through death or marital dissolution through divorce is associated with social loneliness, at least in the early stages post dissolution. However, divorce is significantly related to social loneliness.

Isolation, Vulnerability, and Elder Abuse

Isolation from kin or social networks is a major risk factor for elder abuse. Approximately 10 percent of older adults in the United States have experienced a form of elder abuse, which can encompass neglect or emotional, physical, financial, or sexual abuse. In the majority of cases, as many as two-thirds, the perpetrator is a spouse or a child. Reports of elder abuse increased to 20 percent during the COVID-19 pandemic, due in part to heightened levels of family conflict, intensified by the stress of the pandemic. Isolated older adults are more likely to be dependent on a caregiver, lack the social network to detect and report abuse, and are at risk of abuse by a paid caregiver or long-term care staff. Abusers can also intensify an individual's isolation by cutting off ties between the older adult and their family, and taking away lifelines like the telephone.

Isolation and Climate Change

Isolated older adults are particularly vulnerable to the consequences of climate change. Temperature extremes are harmful to older adults in general; such extremes reduce individuals' capacity to thermoregulate and can lead to dehydration that is exacerbated by medications commonly taken by older adults. Yet isolated older adults face additional challenges in evacuating due to extreme weather events, locating and accessing cooling and heating centers, noticing symptoms triggered by temperature extremes, seeking treatments at a hospital, and completing heating, ventilation, and air conditioning maintenance. Older adults often require assistance in carrying out these personal adaptations to temperature extremes and extreme weather events. The prevalence of these challenges is likely to rise, as the areas with the highest projected older adult populations in 2050 are also areas with the highest daily maximum temperatures in the United States.

Data Gaps

Dr. Carr outlined several data needs in the field of aging alone and kinlessness:

- Expanded measures of loneliness on large population-based surveys.

- Basic health and socioeconomic characteristics of focal network members because these measures capture the network members' capacity to provide care.
- Changes in networks, including the reasons for those bereavements, such as deaths or relocations.
- Measurements and data on elder mistreatment in large population-based surveys
- Measures of planning behaviors and strategies for those aging alone, including plans for climate-related adaptations.
- Strategic data linkages to area-level indicators of climate, social services, walkable neighborhoods and other factors linked with social integration and isolation.
- Obtaining qualitative data on "solo agers" across different subtypes, in order to ensure their concerns and adaptations are represented in research efforts.

Discussion

Factors in Planning for Isolation's Climate Risks

Participants acknowledged that living alone can reduce the frequency of check-ins for older adults, which can become critical in extreme weather conditions. However, some individuals may be unable or unwilling to evacuate their household when a major weather event, such as extreme temperatures or a hurricane, is forecasted. Many older adults have a strong preference for aging and dying in their current household, which may affect their actions during weather-related evacuations. Dr. Carr noted that most surveys do not interrogate preferences on this or other topics and those that do may not capture data rigorously. Exploring such preferences could be helpful; the approach of providing vignettes with follow-up questions may be one useful approach.

Dr. Carr reported on recent research demonstrating that areas of the United States that experience higher temperatures have adapted to provide appropriate cooling mechanisms, yet these areas also have the most rapidly growing populations of individuals 65 years old or greater. Thus, these regions need to adapt to the particular needs of older adults in ever-rising numbers. Conversely, in historically older parts of the United States, temperatures historically have been cooler but are now increasing at the steepest rates. Thus, the infrastructure may not be appropriately adapted for warmer temperatures. One future direction is to assess changes in energy usage for air conditioning in relation to temperature in order to identify adaptations related to older adult needs in different regions, or measuring older adults' migration intentions, and the extent to which climate issues (relatively to other factors like cost and proximity to family) drive their decisions.

Positive Outcomes in Aging Alone

Many studies have elucidated the negative outcomes related to kinlessness and aging alone, but some positive outcomes have also been identified. In particular, women who are aging alone report having protective friendships, autonomy, and an ability to make decisions related to spending time and money. Most of these women are in the baby boom cohort and prepared well for self-independence by entering the labor force, saving money, and creating fulfilling social connections. Little data has been captured on men related to this topic.

Tradeoffs of Isolation for Different Health Metrics

Participants discussed tradeoffs related to social isolation. In the case of the COVID-19 pandemic, social isolation was associated with improved wellbeing and health of older adults. However, isolation was also associated with poorer cognitive and social integration outcomes, as well as an increase in family conflict. Participants agreed that evaluating these trends can help identify approaches to benefit older adults during a possible future public health emergency.

Capturing Heterogeneity

To address the heterogeneity of the older adult population, new kinds of data must be captured. Data related to non-social forms of integration (e.g., work relationships), neighborhood stability, and personality/disposition would help to better characterize older adults' networks and preferences. For example, some older adults prefer to live alone and do not report loneliness, while some report feeling lonely despite having a robust social network. Understanding the differences between these populations can help inform future care paradigms, studies, and policies. Strategic oversampling of subgroups such as never married persons and childfree persons also may be instructive.

Racial/Ethnic and Socioeconomic Disparities in Aging Alone

Robert Joseph Taylor, University of Michigan

Very few studies have assessed kinlessness and aging alone in diverse populations. Certain racial kinship differences may impact the likelihood of aging while living alone: (1) white individuals are more likely to have living parents and grandparents than Black individuals; (2) white individuals are more likely to have full siblings, whereas Black individuals typically have more half siblings; (3) white individuals are more likely to be married; and (4) Black individuals have more grandchildren and cousins than white individuals. Demographic data also show racial differences in living arrangements. Black women are at the highest risk for kinlessness, with approximately 9.3 percent reporting no spouse or biological children between 1998-2010 compared to 6.7 percent of non-Hispanic white women, 6.3 of non-Hispanic white men, and 7.0 percent of Black men. Overall, Black individuals are more likely to be socially isolated due to kinlessness than non-Hispanic white individuals, with one out of five Black individuals isolated from adult children, family, and friends. These available data point to the need for more data on these groups' experiences of aging alone.

National Survey of American Life and Kinlessness

One study that has provided evidence of the incidence and impact of kinlessness in African American populations is the National Survey of American Life (NSAL). The NSAL includes 6,199 adult interviews, including 3,570 with African American adults, 1,623 Black-Caribbean adults, and 1,006 non-Hispanic whites. Sampling for the NSAL occurred throughout the United States, but was more concentrated in the South to reflect the distribution of the African American population.

Using data from NSAL, Dr. Taylor and colleagues conducted analyses of objective measures (e.g., frequency of contact with family and friends) and subjective measures (e.g., closeness with family members) of social isolation. They found no racial differences in objective social isolation measures and no association between living alone and objective isolation. In addition, only 4.2 percent of African Americans and Black-Caribbean individuals (95 percent) reported objective isolation from both family and friends and only 2.1 percent reported subjective isolation from family and friends.

Impact of Isolation on Mental Health and Pain

Assessments of Center for Epidemiologic Studies Depression Scale (CES-D) and Serious Psychological Distress (SPD; Kessler-6 scale) score data indicate that both objective and subjective isolation from family and friends is associated with depressive symptoms and psychological distress. The more an individual is isolated, the more likely that individual is to experience mental health issues. Analysis of NSAL data indicates more specifically that subjective isolation from family and friends is associated with psychiatric illness, whereas objective isolation is not. A similar analysis found that subjective social isolation from family was associated with a higher likelihood of chronic pain, whereas objective isolation was not.

Indicators of Social Isolation

Dr. Taylor seeks to determine which family and friend groups play the most important roles in specific racial and ethnic groups' social isolation. Compared to African American individuals, non-Hispanic white individuals' isolation is more often produced by lower rates of contact with members of their religious congregation, childlessness, and living alone. For both African Americans and Black Caribbeans, being female is protective against social isolation, but for both populations, men are more likely to be married or have a romantic partner. For African Americans, residing in the South is also protective against social isolation. In addition, incarceration plays a role in social isolation of impacted individuals; those who have been previously incarcerated report being less close to their family and contacting them less frequently.

Data Gaps

Overall, more research is needed on kinlessness and social isolation among African Americans, including studies on within-group differences and across race/ethnicity groups. Studies must address non-kin relationships, church support, friends, distant kin, and racial identity. Studies must also evaluate the growing immigrant population, including African immigrants. More qualitative research and national probability studies in each of these proposed areas will provide a better understanding of kinlessness in African American and African populations.

Some considerations that should shape this research includes:

- Unmarried does not mean no romantic involvement.

- Religious service attendance is an inaccurate proxy for isolation from congregation members (e.g., an individual may attend church but not interact with any other congregation member).
- Fictive kinship ties have been measured only through the NSAL; approximately 87 percent of NSAL respondents reported having fictive kin.
- Individuals who desire to live alone are not included in most surveys, including NSAL.
- The term “romantic involvement” is more appropriate for Black Americans than “living apart together.”
- Oversampling minority groups is cost-effective but may reduce accuracy of findings.

Discussion

Ambiguities in Causal Direction

Dr. Taylor emphasized that social isolation could cause the onset of specific disorders, including mental health conditions, but that such disorders could also be the cause of social isolation. Understanding the causal and directional relationships between health and social isolation is critical. In some cases, understanding that these relationships are bidirectional is important.

Military Service Impact

Participants discussed the impact of military service on social isolation, noting that more research is needed to draw significant conclusions. Dr. Taylor noted that military service can cause individuals’ political views to become more conservative and changes in political views can alter interpersonal relationships and family bonds, leading to more social isolation.

Socioeconomic Status Impact

Participants asked whether groups with certain levels of socioeconomic and educational attainment are particularly at risk for kinlessness and social isolation. Dr. Taylor noted that he has performed some analyses in this area but these analyses have identified few group differences in kinlessness and social isolation risk. He found that no socioeconomic status differences were observed in objective isolation from family, friends or congregational members, but education was positively associated with isolation from neighbors and neighborhood groups.

Methodological Challenges

One challenge to evaluating social isolation across fields is inconsistent use of the term “social isolation.” For example, in poverty-focused studies, researchers typically discuss social isolation between neighborhoods, which can be misleading because the social networks within an “isolated” neighborhood could be strong. Standardization of terms or establishment of new terms may help to reduce confusion when comparing across studies.

Participants also discussed challenges related to oversampling African American and Hispanic populations in studies. Oversampling, particularly if it occurs in specific regions, can lead to inaccurate representation of a population. For example, African Americans living in the South may have different living patterns than those living in the Northeast, such as different levels of

substance use disorder and different likelihood of attending church services. The NSAL sample, like its predecessor the National Survey of Black Americans (NSBA), was based on the distribution of the African American population in the U.S. and not the distribution of the total population: half of the respondents in the NSAL and NSBA resided in the South. Similarly, large cities such as Boston, Seattle, and Pittsburgh that have low percentages of African American residents are automatically included in most national probability surveys. However, given their low percentages of African American residents, they may not be included in surveys that are meant to reflect the distribution of the Black population. Conversely, Atlanta would be consistently included in national surveys that are based on the distribution of the Black population. This issue should be kept in mind when drawing conclusions about African Americans that are based on from surveys of the total population.

Cross-National Perspectives and the Role of Public Policy

Christine A. Mair, University of Maryland, Baltimore County

Despite the language commonly used in research on “kinlessness” and “living alone,” being truly “alone” or “kinless” are quite rare. Better definitions, and to some extent better terms, are needed to advance research on these social conditions and aging. Ensuring that relevant survey questions are asked and that information is captured is critical to understanding a meaningful definition of “alone.” Beyond that, researchers should consider that individuals may be living alone but not experiencing significant loneliness. Similarly, the term “kinlessness” excludes the possibility of fictive kin and other social networks. Many groups—including immigrants; the lesbian, gay, bisexual, transgender, queer (LGBTQ) community; and individuals brought to the United States through slavery—have had to adapt their social networks for various reasons, including geographic distance or estrangement from their families, and “kinlessness” may omit those critical, adapted networks.

Global Trends in Living Alone and Kinlessness

Between 1960 and 2018, the percentage of one-person households significantly increased in more developed and wealthier countries but not substantially in lower income countries. Countries in central and northern Europe and the United States have some of the highest percentages of one-person households, as well as higher rates of kinlessness. Interestingly, global patterns of living alone and kinlessness do not directly correlate to feelings of loneliness.

One potential mechanism underlying the cross-national variation observed in rates of living alone is economic development. Studies have demonstrated that countries with more one-person households tend to have higher gross domestic product (GDP) per capita, whereas countries with fewer one-person households tend to have lower GDP per capita. However, using GDP as a contextual and comparative measure can be challenging because it may not appropriately encompass contextual factors relevant to living alone, including economic development, funding allocation, public policy, values, and cultural norms. Global contextual data can also be evaluated by reviewing the quality of social security programs in a country, travel time to the nearest health care facility, or levels of secularism and self-expression in

cultural values; yet one measure is insufficient to evaluate the notion of living alone on a global scale and thus the best approach may be to evaluate a range of contextual data sources together.

Family-Based Assumptions and Context

Dr. Mair outlined several family-based assumptions about aging that are not empirically supported by contextualized cross-national data:

- **Assumption 1:** “Living with children is beneficial for an older adult’s health.” Dr. Mair’s work illustrates that in Southern and Eastern Europe, older adults and children living together is indeed normative and beneficial for both parties. However, in Northern and Western Europe, older adults and children are more likely to live together when the older adult has significant financial or health needs, and therefore co-residence may be less voluntary.
- **Assumption 2:** “People prefer that family be responsible for the care of older adults.” Although most people across the globe prioritize family involvement, preferences about how and to what extent family should be involved in care varies substantially cross-nationally. Dr. Mair’s work indicates that higher income countries and countries in North Europe, for example, express lower support for family-based care and populations across the globe are in favor of government-based support for care. Furthermore, compared to men, women are less likely to agree that family should be the primary source of care for older adults, perhaps because women are the ones who will be providing that care and understand the value of additional support from governments.
- **Assumption 3:** “Older adults with nuclear families have support and the kinless are unsupported.” Having family does not equate to having support; both families and kinless individuals must be evaluated to determine their met and unmet needs. Dr. Mair’s work reveals the importance of friends in the support networks of kinless older adults as well as cases of lack of support from partners and children among those who have traditional nuclear families.
- **Assumption 4:** “Older adults without children have poorer health.” Dr. Mair and her colleagues evaluated data from 20 European countries and found substantial variation in the association between childlessness and health, with childless older adults having better health in many countries.
- **Assumption 5:** “Older adults who are kinless were lonelier during the COVID-19 pandemic.” Dr. Mair and her team noted that older adult loneliness during the pandemic related mostly to whether the adults were partnered or not, regardless of the presence or absence of children.
- **Assumption 6:** “Kinless older adults will have more medically intense end-of-life experiences.” Associations between kinlessness and end-of-life experiences is understudied, yet preliminary evidence suggests substantial cross-national variation. For example, Dr. Mair and her colleagues found that in the highly individualized and non-family-based healthcare system of Denmark, kinless older adults do not appear to have more intensive end-of-life experiences, yet more comparative work is needed.

- **Assumption 7:** “Older adults who are kinless are less likely to be able to die at home.” Dr. Mair and her team performed an analysis of data from over 20 countries and found that likelihood of an individual dying at home is highly regional and largely not predicted by family structure and kinlessness.

Conceptual and Measurement Gaps in Data Collection

Data collection methods are predominantly structured around family-based models of care and thus available datasets are biased toward people with traditional nuclear families and neglect the needs of those without traditional families. Furthermore, the use of family-based models and measurements perpetuate biases and assumptions about kinlessness, living alone, loneliness, and family. Current limits in conceptualization and measurement result in an inability to assess existing and growing heterogeneity in family structure, family experiences, social networks, and healthcare needs. Thus, the continued use of family-based models in conceptualization, measurement, and healthcare policy will result in substantial cultural and empirical lag in assessing modern social behaviors and policy needs.

The relative roles of family and friends in individuals’ social networks is particularly important to understanding these needs. Approximately 90-95 percent of World Values Survey respondents report that family is very important, but in many countries with rising rates of kinlessness, respondents also reported that friends are very important. In addition, not having a child or partner in one’s confident network dramatically increases the likelihood that an individual will report a friend in their closest confidant network. However, friends may not provide the caregiving relationship typically provided by family. Thus, capturing data related to friends and the closeness of those relationships, as well as preparing new policies to address the potential gap in family-provided health care, remains critical.

Discussion

Future Models of Care

Dr. Mair emphasized that currently, structuring data collection around family-based models of care does capture information on important non-family relationships among older adults. Researchers often highlight that certain older adults are at risk of poorer outcomes because they are kinless; however, these older adults may be at risk because surveys to define their needs and public policies to respond to those needs have not adapted to best serve this population.

Help-Related Survey Questions

Many surveys frame questions about receiving help in the context of family members, a partner, or an “other” individual or “other relative.” However, this information is not detailed enough to understand who specifically provides this help, such as an extended family member, friend, neighbor, or other social tie. Furthermore, across the globe, surveys of older adults’ health often do not include questions about the role of friends. Without collecting this information, important information about care needs and care options remains lost.

The Impact of Stigma on Surveys about Family Support

Some cross-national surveys may be impacted by reporting biases related to stigmatized behaviors. For example, in the culture of many eastern Asian and Latin American countries, family members are expected to provide support to older adults and therefore, people are unlikely to report or express otherwise, and older adults in these regions may be more dissatisfied with non-family care compared to regions such as Northern Europe, where non-family care is more common and more desired by older adults.

Understanding these differences can help survey developers construct appropriate questions for specific groups, as well as follow-up questions, to capture more in-depth information that may be missed on current surveys. Surveys must be able to interrogate these differences across groups to identify the needs of kinless adults in countries. Kinless adults in countries where kinlessness is less common may be at highest risk because they are more likely to experience stigma and less likely to have access to non-family healthcare resources due to lack of policy aimed at supporting kinless populations.

Panel Discussion

Moderator: Fernando Riosmena, University of Texas at San Antonio

Data Needs

Dr. Riosmena outlined several data needs that emerged during this meeting:

- Better and more measures of kin beyond the nuclear family, including extended kin and fictive kin and how they relate to social support, interaction, and integration.
- Improved understanding of heterogeneity in and degrees of kinlessness.
- Characteristics of individuals connected to older adults and the perceptions of connectedness.
- Increased focus on institutions through which older adults may connect.
- Balance between customizing measures vs. ensuring comparability of measures in cross-cultural studies and in the context of cultural changes.
- Identification of what data are not being measured but should be.
- Improved survey capture of information related to paid support.

Overall, a greater depth and breadth of data are needed to better understand the full spectrum of kinlessness and social networks of older adults. Participants also noted that greater spatial granularity is needed to uncover findings relevant beyond the county level.

Balancing Survey Additions and Participant Burden

The incorporation of additional questions into a survey should not impose a prohibitive burden on the respondent. One strategy would be to create supplemental, shorter surveys that could be administered digitally to collect additional data types. Another strategy would be to include more social media data in research studies.

Appendix 1. Meeting Agenda

- 1:00** Welcome and Introductions; Goals for the Seminar
Elena Fazio, National Institute on Aging (NIA)
Emerald Nguyen, NIA
Anne Pebley, University of California, Los Angeles and Chair of Committee of Population
- 1:15** Session 1: Aging Alone—Overview, Trends, and Data Sources
Rachel Margolis, University of Western Ontario
- 2:05** Session 2: Aging Alone: Mechanisms and Consequences
Deborah Carr, Boston University
- 2:45** Break
- 3:00** Session 3: Racial/Ethnic and Socioeconomic Disparities in Aging Alone
Robert Joseph Taylor, University of Michigan
- 3:45** Session 4: Cognitive and Psychological Effects of Climate Change on Older Adults
Christine A. Mair, University of Maryland, Baltimore County
- 4:30** Wrap-Up Discussion
Fernando Riosmena, Moderator, University of Texas at San Antonio
- 5:00** Adjourn

Appendix 2. List of Participants

Presenters

Deborah Carr, Boston University
Christine A. Mair, University of Maryland, Baltimore County
Rachel Margolis, University of Western Ontario
Robert Joseph Taylor, University of Michigan

CPOP Members

Emily Agree, Johns Hopkins University
Deborah Balk, Baruch College of the City University of New York
Courtney Coile, Wellesley College
Sonalde Desai, University of Maryland
Dana Gleib, Georgetown University
Robert Hummer, University of North Carolina
Hedwig (Hedy) Lee, Washington University in St. Louis
Jenna Nobles, University of Wisconsin-Madison
Anne Pebley, University of California Los Angeles
Fernando Riosmena, University of Texas at San Antonio

National Institute on Aging

Lis Nielsen, Division Director, DBSR
Jessica Boten, Social Science Analyst, DBSR
Elena Fazio, Program Official, DBSR
Melissa Gerald, Program Official, DBSR
Emily Hooker, Program Officer, DBSR
Theresa Kim, Program Official, DBSR
Charlie Le, Social Science Analyst, DBSR
Kaitlyn Lee, Health Specialist, DBSR
Kriti Jain, Program Official, DBSR
Laura Major, Health Specialist, DBSR
Liz Necka, Program Official, DBSR
Emerald Nguyen, Social and Behavioral Science Administrator, DBSR
Priscilla Novak, Program Officer, DBSR
John Phillips, Branch Chief, DBSR
Janine Simmons, Branch Chief, DBSR
Melissa Treviño, Program Director, DBSR

CPOP Staff

Malay Majmundar, Director
Nafeesa Andrabi, Science & Technology Policy Fellow
Iliya Gutin, Program Officer
Anthony Mann, Program Associate

Rose Li & Associates, Inc. (Contractor)

Bethany Stokes, Science Writer