

12-8-2023

## Current and future perceived needs and concerns for older adults aging in place in Mississippi: Intergenerational perspectives

Muhammad Riaz

Mississippi State University, [mr2062@msstate.edu](mailto:mr2062@msstate.edu)

Follow this and additional works at: <https://scholarsjunction.msstate.edu/td>



Part of the [Development Studies Commons](#), and the [Family and Consumer Sciences Commons](#)

---

### Recommended Citation

Riaz, Muhammad, "Current and future perceived needs and concerns for older adults aging in place in Mississippi: Intergenerational perspectives" (2023). *Theses and Dissertations*. 6023.  
<https://scholarsjunction.msstate.edu/td/6023>

This Dissertation - Open Access is brought to you for free and open access by the Theses and Dissertations at Scholars Junction. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Scholars Junction. For more information, please contact [scholcomm@msstate.libanswers.com](mailto:scholcomm@msstate.libanswers.com).

Current and future perceived needs and concerns for older adults aging in place in Mississippi:

Intergenerational perspectives

By

Muhammad Riaz

Approved by:

Donna Peterson (Major Professor)  
Lori Elmore-Staton (Co-Major Professor/Graduate Coordinator)  
Alisha M. Hardman  
Joe D. Wilmoth  
Julie Parker  
Scott Willard (Dean, College of Agriculture and Life Sciences)

A Dissertation  
Submitted to the Faculty of  
Mississippi State University  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy  
in Human Development and Family Science (HDFS)  
in the School of Human Sciences

Mississippi State, Mississippi

December 2023

Copyright by  
Muhammad Riaz  
2023

Name: Muhammad Riaz

Date of Degree: December 8, 2023

Institution: Mississippi State University

Major Field: Human Development and Family Science (HDFS)

Major Professors: Donna Peterson, Lori Elmore-Staton

Title of Study: Current and future perceived needs and concerns for older adults aging in place in Mississippi: Intergenerational perspectives

Pages in Study 129

Candidate for Degree of Doctor of Philosophy

The study's purpose was to identify the perceived needs and concerns of three generations in a family with an older adult aging in place in Mississippi. This mixed-methods study used snowball sampling in addition to recruitment by community leaders such as Extension agents to collect data through semi-structured interviews and structured questionnaires that asked about current and future problems among aging adults in rural communities in Mississippi. Three generations of Mississippians participated in the study, including older adults (G1;  $n = 22$ ), adult children (G2;  $n = 23$ ), and young adult grandchildren (G3;  $n = 19$ ). Quantitative data were analyzed using SPSS Statistics, while qualitative data were managed with MaxQDA. Physical and mental health concerns were identified across all three generations. Financial concerns, including paying for basics such as food, medical and health care costs, and transportation issues, were most often reported by the two younger generations rather than the older adults. Services that assist with caregiving of older adults, including respite care, home health, and adult daycare options, were identified as services G2 and G3 family members reported as families currently needed or anticipated to need soon. Implications of the findings for families, community leaders, policymakers, non-profit organizations, and for-profit businesses are provided.

**Keywords:** Perceived needs, aging in place, intergenerational relationships, older adults, concerns, quality of life

## DEDICATION

I dedicate this work to the older adults who gave their insights in lived experience to understand ambiance that would have not been possible to grasp. I appreciate the families who spared their time and made three generations available for interviews and questionnaires. I also appreciate religious fellows from the churches, extensions agents, and friends who helped me to reach out to the families. I wish them the best of their lives for good. I appreciate sincere gratitude to my mentors at the university who proved them towering above the surface and guided me through this arduous intellectual journey. I also extend staff at the School of Human Sciences who maintain peaceful environment to accomplish this intellectual work seamlessly. Also, I dedicate this work to my loving children who sacrificed their fatherly affection for a long time.

## ACKNOWLEDGEMENTS

I feel privileged that God bestowed on me courage and His wisdom to help me accomplish this auspicious work for making my contribution to make this world a place for older adults to age in place with their families and familiar environment. I am thankful to my family for their support during stressful work episodes. Special appreciation to my youngest son, Abdul Moiz, who missed me every moment he needed me. I am greatly thankful to all my entire family who shared unconditional love for me. I am greatly indebted to my advisors for their consistent guidance and encouragement to fulfil the requirements of scholarly work. I would also like to acknowledge the advice and academic assistance of my teachers and classmates for their consistent help.

## TABLE OF CONTENTS

DEDICATION .....	ii
ACKNOWLEDGEMENTS .....	iii
LIST OF TABLES .....	viii
CHAPTER	
I. INTRODUCTION .....	1
Statement of the Problem .....	4
Background of Study .....	7
Purpose of the Study/Research Objectives .....	8
Research Questions .....	9
Significance of the Study.....	9
II. REVIEW OF THE LITERATURE .....	10
Theoretical Perspectives .....	11
Advantages of Aging in Place .....	12
Barriers to Aging in Place .....	14
Intergenerational Relationships .....	16
Caregiving Impact on Intergenerational Relationships .....	18
Intergenerational Relationships and the Sandwich Generation.....	21
Aging Theories .....	22
Life Expectancy .....	24
What is Aging? .....	24
Physical Health.....	25
Mental Health .....	27
Well-Being and Quality of Life.....	29
III. METHODOLOGY .....	33
Participants .....	34
Data Collection and Measures .....	38
Questionnaires .....	39
Interviews .....	41
Procedure .....	41
Data Analysis.....	42



Trustworthiness .....	43
IV. RESULTS.....	45
Research Question 1: Current Issues Reported by Older Adults (G1) Aging in Place ...	45
Feeling Lonely or Isolated.....	45
Depression .....	46
Boredom .....	46
Physical Health.....	47
Suitable Housing .....	47
Adequate Health Care.....	47
Transportation.....	48
Having Enough Food to Eat .....	48
Affordable Medications.....	48
Financial Problems .....	48
Everyday Activities Like Bathing or Preparing Meals.....	49
Research Question 2: Future Concerns Related to Older Adults (G1) Aging in Place ...	50
Future Concerns (5+ Years) Reported by Older Adults (G1) Aging in Place.....	50
Physical Health.....	50
Mental Health .....	50
Finding Employment .....	51
Driving on Your Own.....	51
Lack of Transportation .....	51
Affording Basic Needs (Like Food or Rent) .....	51
Affording Medications .....	52
Affording Health Care .....	52
Living Independently.....	52
Ability to Care for Others.....	52
Not Having Someone to Care for You .....	53
Future Concerns (5+ Years) for G1 Reported by G2 .....	53
Physical Health.....	53
Mental Health .....	54
Finding Employment .....	55
Driving on Your Own.....	55
Lack of Transportation .....	55
Affording Basic Needs (Like Food or Rent) .....	56
Affording Medications .....	56
Affording Health Care .....	56
Living Independently.....	57
Not Having Someone to Care for Them.....	57
Future Concerns (5+ Years) for G1 Reported by G3 .....	57
Physical Health.....	58
Mental Health .....	58
Finding Employment .....	58
Driving on Your Own.....	59
Lack of Transportation .....	59

Affording Basic Needs (Like Food or Rent) .....	59
Affording Medications .....	60
Affording Health Care .....	60
Living Independently.....	60
Not Having Someone to Care for Them.....	61
Research Question 3: Perceived Needs and Services Required for Older Adults (G1) to	
Age in Place.....	62
Anticipated Needs for Next 5+ Years by Older Adults (G1) Aging in Place .....	62
Home-Delivered Meals .....	62
Food Stamp Programs .....	62
Tax Preparation .....	63
Financial Planning.....	63
Home Health Care .....	63
Homemaker Service (Help with Chores) .....	63
Repair Services.....	64
Senior Discount Programs.....	64
Information and Referral Services.....	64
Telephone Reassurance .....	64
Transportation Services .....	65
Adult Day Care.....	65
Health Screening .....	65
Physical Fitness/Exercise Programs .....	65
Support Groups.....	66
Nutrition Counseling .....	66
Respite Care (Relief for Caregivers) .....	66
Senior Medicare Patrol .....	66
Anticipated Needs for Next 5+ Years for G1 Reported by G2 .....	67
Home-Delivered Meals .....	67
Food Stamp Programs .....	67
Tax Preparation .....	68
Financial Planning.....	68
Home Health Care .....	68
Homemaker Services (Help with Chores).....	69
Repair Services.....	69
Senior Discount Programs.....	70
Information and Referral Services.....	70
Telephone Reassurance .....	70
Transportation Services .....	71
Adult Day Care.....	71
Health Screening .....	71
Physical Fitness/Exercise Programs .....	72
Support Groups.....	72
Nutrition Counseling .....	72
Respite Care (Relief for Caregivers) .....	73
Anticipated Needs for Next 5+ Years for G1 Reported by G3 .....	73

Home-Delivered Meals .....	73
Food Stamp Programs .....	74
Tax Preparation .....	74
Financial Planning .....	74
Home Health Care .....	74
Homemaker Services (Help with Chores) .....	75
Repair Services .....	75
Senior Discount Programs .....	75
Information and Referral Services.....	76
Telephone Reassurance .....	76
Transportation Services .....	76
Adult Day Care.....	76
Health Screening .....	77
Physical Fitness/Exercise Programs .....	77
Support Groups.....	77
Nutrition Counseling .....	78
Respite Care (Relief for Caregivers) .....	78
V. CONCLUSION .....	80
Limitations.....	85
Recommendations for Future Research.....	86
Summary and Implications.....	86
REFERENCES .....	88
APPENDIX	
A. IRB APPROVAL .....	99
B. QUESTIONNAIRES AND INTERVIEW PROTOCOLS .....	103
C. INFORMED CONSENT FORMS .....	125

## LIST OF TABLES

Table 3.1	Participant Characteristics Overall and by Generation .....	36
Table 4.1	Current Concerns Reported by G1 ( $N = 18$ ).....	49
Table 4.2	Anticipated Concerns for G1 Aging in Place in the Next 5+ Years.....	61
Table 4.3	Anticipated Services Needed for G1 to Age in Place in the Next 5+ Years. ....	78

## CHAPTER I

### INTRODUCTION

Older adults (i.e., 65 years and older) make up 9% of the world's population and are one of the fastest-growing segments of the American population (United Nations, 2020). In comparison to the growth of the total population over the last 100 years in America, the 65 and older population has grown nearly five times faster, according to the 2020 Census. In 2019, there were 54.1 million people (i.e., 16% of the population) in the United States aged 65 and older and, by 2040, that number is expected to increase by more than 5% (Link, 2015). By 2030, all baby boomers will be considered older adults, and one in five Americans will be eligible for retirement (U.S. Census Bureau, 2020). While this population is growing rapidly, understanding how to support older adults best as they age is not well understood, especially in rural communities with high poverty rates.

The shift in age and the associated decline in health status of the population has ripple effects on both families and communities (Ratnayake et al., 2022). Also, this will have ongoing ripple effects on communities. For example, built environments without adequate support services, such as senior centers, pharmacies, or healthcare facilities, pose a challenge for older adults. Family members are typically the immediate source of help for older family members, so understanding the perceived needs of multigeneration of caregivers is critical to developing strategies of support for the aging population.

As people grow old, they see time left with them as short that shifts their motivation to select fewer and short-term goals that are very meaningful to them (Carstensen, 2006). As opposed to younger people who see time as an expansive with them, they pursue extensive goals that are comparatively long term. Further, older adults, because they perceive time short, select fewer friends and social circles that are meaningful to them and bring them instant gratification. On the other hand, younger people pursue knowledge and skills related goals and expand their social contacts extensively. So, socioemotional selectivity theory (Carstensen, 2006) explains older adults' needs, services that provide them satisfaction to live a successful life during late adulthood.

According to the National Institute on Aging (2017), aging in one's own home, referred to as aging in place, provides physical resources that help older adults keep up with home tasks like yard work, laundry, grocery shopping, and running errands to avoid stress and anxiety during old age. In addition, neighborhoods, familiar places, and people provide resources to fend off loneliness and feelings of isolation during aging. Aging in place might provide protective factors against common age-related conditions, for instance, hearing loss, reduced vision efficiency, back and neck pain, depression, and dementia (Saxon et al., 2021). In addition, aging in place might provide scaffolding to live a happy life because older adults are familiar with people, places, and public spaces. Moreover, older adults have family members or friends to care for them. Humans become part of the ecology and, most importantly, adjust themselves to live happy lives using their physical strengths and mobility. As people grow, older adults' physical strength becomes less effective due to aging. According to AARP in 2021, most of the older adults (77%) would like to age in place because of the social respect, sense of ownership, and

agency they earned over their lifetime (Davis, 2021). Aging in place provides older adults with life satisfaction, self-esteem, and quality of life.

As communities prepare for the increase in the older adult population, many factors, including those of individuals, families, and communities, must be considered. Older adults have unique needs compared to other age groups, highlighting the importance of identifying those needs and how they may vary over time. Rural communities have different resources and infrastructure compared to urban communities. Infrastructure according to Sullivan and Sheffrin (2003) includes physical facilities that are needed by the community, for instance roads, health services, and governance. Needs vary based on the financial health of an individual, family, or community, a consideration that must be accounted for when creating safety nets within communities for older adults and their families.

Mississippi is the state with the highest percentage of citizens living in poverty (U.S. Census Bureau, 2020) and is considered mostly rural (i.e., 65 of its 82 counties deemed as rural). Although the percentage of persons over 50 in Mississippi is similar to the overall U.S. rate, the median age is considerably lower than the overall rate (U.S. Census Bureau, 2020). Given the unique characteristics of Mississippi, it is imperative to assess the needs of the aging population in Mississippi, as well as that of their family caregivers, to better inform communities of how to best support this growing population.

According to Administration on Aging (AOA) profile of older Americans, 16% of the total population in Mississippi are older adults (age 65 years and above), about 12.4% living below poverty (Administration for Community Living, 2020a). This population has increased by 29% between 2008 to 2018, adding to the existing challenges of the older adults who live below the poverty line. Almost 28% (14.7 million) of all older adults in the United States live alone

(about 5 million men and 9.7 million women). Additionally, nearly 1 in 10 people aged 65 and older (9.7% or 5.1 million) live below the poverty level. With an increase in age, older Mississippians are more likely to live alone, as 44% of women aged 75 and older live alone.

### **Statement of the Problem**

While aging in place is the primary choice for older adults (Hooyman & Kiyak, 2010), trends in the aging population (e.g., Baby Boomers), reduced birthrates (e.g., declining numbers since 2008), and living arrangements pose challenges to this preference. Aging in place means “the ability to live in one’s own home and community safely, independently, and comfortably, regardless of age, income, or ability level” (Centers for Disease Control and Prevention, 2009, p. 1). During late adulthood, older adults may not have adequate resources to live a completely independent life because of physical limitations, reduced relationships, and limited retirement income. Thus, the possibility of aging in place often depends on help from others, most often family members.

By the year 2030, all baby boomers will have reached the standard retirement age of 65 years, and one in every five Americans will be age 65 or older (Colby & Ortman, 2014). Also, according to the SCAN Foundation report (2012), by 2050, the number of Americans needing long-term care is expected to rise from 12 to 27 million, mainly due to an aging baby boomer population. Furthermore, the Federal Commission on Long-Term Care (2013) warns of the challenges posed by a longer life span, including a higher rate of chronic conditions, fewer family caregivers, and increasingly limited federal, state, and family resources that restrict the elderly’s ability to afford long-term care.



Older adults may need care and assistance to age in place successfully, particularly from their immediate family members, due to potential age-related morbidities. Understanding what possible personal and environmental changes may be needed to help during this time is important (Wahl & Lang, 2004). This study will consider the aging-in-place needs recognized by the older adults and two subsequent generations of family members.

Atkinson (2015) noted that older adults' displacement might include feelings of resentment, anger, and nostalgia because of lost connections and social relations. Furthermore, unexpected displacement may be associated with a sense of loss and grief (Davidson, 2009). Aging in place may provide older adults the feeling of being connected and relevant to their community. That attachment to a community may offer them a sense of legacy and continuity. However, some communities may be better suited for aging in place than others. Hash and colleagues (2015) note remote rural areas have limited government services, poor health care, and retail food stores that are hard to access for older adults with limited physical and infrastructure resources. Therefore, impoverished communities, particularly in rural areas, may have more pronounced caregiving needs.

Family members make aging in place possible by providing assistance to older adults in the family at the time of need. However, migration of children, particularly from rural areas to cities for economic reasons, has left older adults with fewer caregivers. Reduced access to caregivers may mean that the bulk of the responsibility for caregiving may fall to one or two family members.

It is possible to understand interdependence and interconnectedness among families and their members by drawing on family systems approaches (Broderick, 1993). It is also evident that social and emotional connections are meaningful and beneficial for older adults (Carstensen,

2006). It is likely that emotional connections with significant others are more rewarding than the relationships that are created through retirement communities and villages.

Aging in place requires multiple factors including the availability of any family member available at the time of need, the readiness and sacrifice of time, energy, and personal freedom required for a successful aging in place. Family members share and exchange services and resources out of natural altruism and reciprocity. Reciprocity—i.e., sharing, and mutual benefits, and exchanging resources within the kin network—may provide a solid basis for intergenerational relationships. Social exchange theory suggests that lack of reciprocity from the care recipient incurs poorer outcomes for caregivers (Dwyer et al., 1994). Reciprocity norms vary by both cultural and family expectations. For instance, families that foster differentiation (i.e., the ability to maintain a sense of self in the context of relationships) among family members promote both individual autonomy and close relationships. As Donorfio and Sheehan (2001) note in their qualitative study, daughters from undifferentiated families feel more incapacitated due to the perceived imminent death of their parents than balanced differentiated children.

Gaining a better understanding of aging in place in rural areas considering the increase in longevity of older adults is a current research need. Little research uses data from three generations, particularly in the United States rural context, a novel contribution of the present study. Additionally, the present study used a quantitative and qualitative approach to establish authenticity and understand lived experiences of families from rural Mississippi currently supporting an older adult aging in place was conducted to understand lived experiences using a mixed method approach—quantitative and qualitative, simultaneously—to establish authenticity.

Most current studies use either quantitative or qualitative approaches. However, to have in-depth insights into the lives of human experiences embedded in the social context, this study's

data were collected, analyzed, and corroborated data using quantitative and qualitative approaches, following a concurrent research method (Morse, 1991). Triangulation, multiple methods, and multi-data collections (Fielding & Fielding, 1986) were used to document the findings' validity (Morgan, 1998). To examine aging in place, three generations, including grandparents, adult children, and grandchildren, were included in the study to examine their perspectives using a semi-structured interview protocol and questionnaires.

### **Background of Study**

This study focused on the perceived concerns and needs of three generations of family members living in rural Mississippi as it related to supporting older adults in their family to age in place. Aging in place has been a preferred arrangement for most older adults, yet successful aging in place requires a combination of supports from caregivers (usually family members), communities, and the government, and these supports may vary depending on the demographic area and/or financial resources (Veron, 2020).

The rapid aging of industrial societies has prompted policymakers to ponder programs and services to meet the complex and diverse needs of their elderly populations that are frail, ill, and functionally challenged. Older adults desire to age in their familiar places during their late adulthood. In addition, aging in place may potentially enhance self-worth of older adults and a sense of attachment to their familiar environment. In addition, aging in place may provide older adults with the feeling of being connected and relevant to the community. That attachment to a community offers them a sense of legacy and continuity.

Older adults may age in place being functional in the community with some personal and environmental changes (Wahl & Lang, 2004) to help stay functional in the community. These changes may include a regular routine and changes in the house to help older adults move safely.

Family members are the immediate source of help that provide care for older family members. Intergenerational relationships have been impacted by structural and relational changes in families, filial norms, and obligations through legacy (Bowen, 1978) over time due to historical and cultural advancements. The family, an emotional unit of interacting personalities, experiences different relationships among themselves—positive, negative, or both simultaneously. The well-being of individuals is closely linked with these relationships (Umberson, 1992), and generally, aging parents and their adult children experience tensions with one another during the caregiving context (Fingerman, 2001; Umberson, 1992). For example, older children often face dual stress in caregiving. On the one hand, they care for their parents who have chronic illnesses and disabilities. On the other side, they deal with their children's demands, including the economic downturn, prolonged education, and slow transition to adulthood (Arnett, 2000). Understanding the needs and concerns of family members caring for the aging population is critical in creating environments that support healthy aging.

Displacing older adults can be traumatic (Fullilove, 2004) and might lead to resentment, anger, and nostalgia because of lost connections and social relations (Atkinson, 2015). Older adults have deep rooted connection with the environment where they have spent most of their life, and it becomes hard to disassociate from the environment. It may be even more challenging when it is untimely. So, unexpected removal from the residence might be associated with loss and grief (Davidson, 2009).

### **Purpose of the Study/Research Objectives**

This mixed-methods study investigates experiences of older adults aging in Mississippi, including the perceptions of two generations of family members caring for them. The study aims to explore problems faced by older adults in rural Mississippi and to understand concerns and

services from a multigenerational perspective needed to help older adults age in place. The results of this study can be used to inform policymakers, families, communities, and governmental agencies to help older adults age in place. Based on previous research conducted in rural areas, it was expected that older adults may live independently, but the challenges they face in achieving this goal as perceived by three generations of a family have not been confirmed.

### **Research Questions**

The research questions this study sought to answer include:

- 1) What current issues do older adults (G1) aging in place face?
- 2) Within the same family, how do three generations (G1, G2, G3) perceive future concerns related to older adults (G1) aging in place?
- 3) Within the same family, how do three generations (G1, G2, G3) perceive needs and services required for older adults (G1) to age in place?

### **Significance of the Study**

This study has multiple implications for policymakers, community leaders, and, most importantly, families of older adults in rural Mississippi who want to age in place. First, this study will fill a literature gap in understanding the current and future concerns and perceptions of needs to assist the older adult aging in place in Mississippi. Second, this study will identify services needed to facilitate aging in place in Mississippi. Third, this study will inform agencies, families, professionals, and philanthropists involved with caregiving responsibilities and services to create a better environment for older adults aging in place in Mississippi.

## CHAPTER II

### REVIEW OF THE LITERATURE

Aging in place is an alternative for older adults to live in their own homes is to ensure older adults' independence as far as possible. It is a combination of living environment and the physical capacity of older adults (Lawton & Nahemow, 1973) to compensate for the loss of physical functionality of older adults within the family environment. This is a time of transition from independence to interdependence to dependence gradually within a familiar environment. Aging in place is based on interpersonal perceptions that are directed towards familiar people and places (Castro & Isaacowitz, 2019) in any social context to accommodate the preference of older adults to be independent during late adulthood.

Healthy aging in place requires more nuance steps to make it happen. For example, addressing the aging population's needs requires more than just understanding the physical health components of aging. These perceptions are particularly important for rural areas as, historically, researchers and policymakers have held idealistic views that rural areas support healthy aging through close-knit community relations, a slower pace of life, and natural landscapes, which often resulted in oversights of this population in research (Keating & Phillips, 2008).

Despite the general perception that rural areas are safe and friendly (Keating & Phillips, 2008), older adults in one study reported lower subjective well-being than urban residents because of limited access to health facilities, geographic location, and isolation (Dudley, 2019).

Although some studies noted positive outlook and resilience among rural older adults because of more robust social networks (Evans, 2009), the population has declined considerably due to migration of younger generations to cities, leaving older adults with fewer supports and making them vulnerable to depression and isolation (Huxhold & Fiori, 2019). The demographic shift and migration of youth from rural to urban areas has negatively influenced caregiving resources. Unfortunately, assisted living and skilled nursing facilities are expensive and may be beyond most families' reach. Furthermore, older Americans appreciate living independently. But because of health constraints, they may need assistance to stay functionally independent in their everyday lives.

Moreover, many older adults—though not all—may have a physical or mental ailment, making them vulnerable and requiring the care of others, most probably family members. According to the latest statistics by the Alzheimer's Association (2019), nearly 6 million Americans live with Alzheimer's disease, the most common form of dementia. Furthermore, approximately 14% of all older Americans suffer from some form of dementia (Plassman et al., 2007). Mental health issues and physical health decline may be challenging for families responsible for caring for their aging family members. Multiple studies agree that older adults wish to live in their own dwellings (Vasold & Binette, 2019). Physical, social, economic, and care features play a crucial part in deciding to age in place.

### **Theoretical Perspectives**

Carstensen's socioemotional selectivity theory (SST), a lifespan theory of motivation, helps us understand why older people age in place and desire to live in their dwellings (Vasold & Binette, 2019) and within their communities. Socioemotional selectivity theory (SST) explains that as people age, they become selective of their time investment that they see limited resources

left with them. This notion of limited time and resources changes their motivation and thinking process. Older adults tend to select fewer goals, relationships that provide them with more satisfaction. Life-changing events such as retirement, lower incomes, spousal death, physical limitation, and health decline may leave them to think more selectively of their relationships for their well-being and control. Laura L. Carstensen (2006) found that social circles, such as friends, family, and neighbors, reduce as older adults age. The older adults become more aware of the time they have left and recalibrate goals as their motivations change. They opt for more reliable and satisfying relationships that might be more supportive and are more likely to enhance their self-efficacy and control (Carstensen, 1992; Charles & Carstensen, 2010). Furthermore, Wahl and Lang (2004) argue that, as persons perceive their future as limited, they feel a greater sense of belonging to the environment (Diehl & Wahl, 2010) that they have been a part of for a long time where they have developed attachments with people and places. In particular, African Americans have lived their lives with financial challenges and faced social discrimination in rural communities, yet many have been resilient to poverty and illness, which might be an outcome of their attachment to the people and places they have been a part of since their early years (Rowles, 2017). However, the quality of life can vary greatly amongst older adults aging in place.

### **Advantages of Aging in Place**

There are several reasons that people may choose to age in place as aging in place offers many benefits. The family members can help older adults with the idiosyncratic needs they pursued over the years including their choice in food and habits. In addition to more personal care, staying in the same home or community allows the older adult to remain connected with



neighbors, pets, and memories. This connection can provide them with a sense of familiarity (Ratnayake et al., 2022).

Further, staying at home during old age may provide older adults with a sense of autonomy or independence. Aging in place also may improve older adults' quality of life because of a familiar physical and geographical setting, and being close to their friends and long-lived neighbors may add to their health and happiness. However, happiness is a subjective term that may be associated with expectations and the availability of resources (Schnettler et al., 2015).

Aging in place provides a sense of familiarity in homes older adults have lived their most part of their lives. Additionally, aging in place has multiple tangible advantages that enhance the quality of life among older adults, including physical, social, and economic benefits. The benefits are interlinked, supporting one another to improve the living standard of older adults. For instance, older adults in better physical condition can socialize without reliance on others for transportation. Further, older adults' psychological well-being is impacted because they are part of the larger community where they have served and lived, creating more happiness and satisfaction. Lastly, they contribute to the community by teaching life-long life lessons and transferring culture and skills to the next generation. Physical and mental health holistically play an integral role in well-being. Therefore, physical well-being, for instance, feeling very healthy and full of energy, is considered a critical aspect of aging in place (Keyes, 2002).

Aging in place may also bring many advantages to communities, for instance, intergenerational learning and interaction as accumulated knowledge and experiences that will strengthen communities and enrich the lives of its members. Aging in place may provide older adults with a sense of community and a feeling of relationships within the community.

Another benefit noted in the literature relates to the economic advantages often associated with aging in place. While the housing landscape is rapidly changing in the current economy, home mortgage payments (Leviton, 2002), especially in the rural South, are still likely to be less costly than alternatives such as nursing homes or assisted living facilities. The cost of living in a nursing home falls to the individual, except Medicare will cover the first 100 days after a hospitalization of at least 3 days. Of note, the average cost of a semi-private room in a nursing home is \$6,844/month, a private room at an assisted living facility is \$3,628/month (Administration for Community Living, 2020b), yet the average monthly mortgage payment in Mississippi is currently \$990. For those who financially qualify, Medicaid will pay for the complete cost of nursing home care. However, for Medicaid to cover the bill, the older adult must give up all but the Personal Needs Allowance (PNA), which is a small amount determined by one's state of residence. In Mississippi, the PNA is set at \$44 per month.

### **Barriers to Aging in Place**

As people grow old, their social circles shrink because of retirement, the demise of significant others, lack of physical agility, a sedentary lifestyle, and ailments from mild to chronic. Mental and physical issues start with aging that are age related problems while aging in place become challenging. Epps et al. (2018) summarized challenges for families in urban context aging in place that improper housing, financial constraints, inadequate resources, lack of transportation and non-availability of proper information about access to services available. Lack of transportation may become a serious problem in rural areas with limited resources. Limited access to transportation may lead older adults to social isolation and elevated health costs and affordability. The lack of affordable transportation may profoundly affect older adults' mental, physical, and social health.

Intergenerational support may help aging in place for older adults, but it is less reliable than in previous generations because of smaller family size and migration of younger persons to cities for financial or social reasons. Lack of skilled family members who can assist older parents to age in place is also a barrier to aging in place. For example, family members may not feel confident in administering medications or may lack an understanding of how to manage a health issue, which could result in risk for the older adult aging in place. Aging in place has been rooted in multigenerational living for a long time for many reasons. Multigenerational is a term used to define households that include two or more generations living together (Cohen & Casper, 2002). Aging in place requires social capital, and multigenerational families build social capital through social networks and by making associations with family, friends, and neighbors.

Multigenerational families share resources including social, economic, and emotional for the entire family system. Further, multigenerational families provide support to one another to survive and live a comfortable life. As the family approach suggests achieving long-term goals, family support is essential. The state of stability and change over a lifetime within the family demands intergenerational harmony and collaboration. The dependence on multiple generations for care in late life can become a barrier to aging in place when younger generations are not available or when relationships are strained or disrupted.

There are multiple concerns about the well-being of older adults aging in place due to rural changes. For example, a study reported four problems that older adults experience: loss of sense of community, social loss and isolation, attachment to place, and commitment to stay (Strommen & Sanders, 2018). In addition, concerns about aging in place are affected by physical health, access to services, and social support.

Aging in place provides older adults with community connections. However, some remote rural areas have limited government services, poor health care, and retail food stores that are hard to access for older adults with limited resources (Hash et al., 2015). Lack of access to the services available for older adults are either far away or not fully equipped.

### **Intergenerational Relationships**

Intergenerational relationships are a source of satisfaction or distress, depending on the quality of relationships, proximity, and success of children among parents. For example, proximity and frequency of contact do not relate to parental well-being (Mancini & Blieszner, 1989; Suito & Pillemer, 1987), but the quality of parent-child relationships does (Koropecky-Cox, 2002). Close relationships can provide a source of support and positive emotion for older adults. Children's accomplishments and success in a parenting role (Ryff et al., 1994) may buffer stressors among older adults (Silverstein & Bengtson, 1991).

The socioemotional selectivity theory (Carstensen, 1992) suggests that older adults show greater interest in family relations than young adults because of perceived imminent death. For example, older grandparents were found to have healthier levels of affection for grandchildren than younger grandparents (Silverstein & Long, 1998). Intergenerational solidarity keeps families cohesive and functionally active and promotes continued reciprocity in emotional, financial, and instrumental resources (Silverstein et al., 1997) and strong intergenerational relationships (Hank, 2007). Intergenerational solidarity (Bengtson & Roberts, 1991) includes associational, affectual, consensual, functional, normative, and structural dimensions, but only associational solidarity has been examined in any depth. Associational solidarity refers to frequency and patterns of interaction of family members engaged in by the family; affectual solidarity means positive sentiment towards family members; consensual solidarity means degree

of agreement on values, attitudes, and belief among family members; functional solidarity includes degree of support and exchange of resources among family members; normative solidarity refers to the strength of commitment to perform familial roles and obligations; and structural solidarity speaks of number, type, and proximity of family members. These dimensions help understand the contextual hazards that hamper quality of life of older adults aging in place. Furthermore, they provide resources for helping older adults age in place successfully.

Baby boomers are a cohort that promoted new standards of personal and individualistic lifestyles. Fingerman et al. (2012) argue that some baby boomers favored their children more than their aging parents. Furthermore, personal values, family members' needs, and unique rewards rather than familial bonds and intergenerational obligations influenced their support patterns in some, if not all, families. Similarly, frequent divorces and remarriages have weakened familial bonds. These changes have created uncertainty about late caregiving by baby boomers in subsequent decades.

Older adults prefer to live independently from their children as long as possible (De Jong Gierveld & Van Tilburg, 1999), but some children may fail to launch due to multiple reasons, such as disabilities and delaying education. On the other hand, health problems lead children to perform as caregivers for older adults doing daily living activities (Hank, 2007). There are two kinds of activities essential for independent living: activities of daily living (ADLs) and instrumental activities of daily living (IADLs). Activities of daily living consist of basic self-care, for instance, getting into/out of bed, toileting, bathing, eating, and getting dressed, whereas instrumental activities are more complex tasks related to living independently, for example, going to grocery shop, driving, cleaning, and preparing meals. Socioeconomic conditions also

affect older adults' ability to live independently: Well-off families may not experience the situation in the same way as less fortunate families (Dunn & Phillips, 1998; Kotlikoff & Morris, 1990).

### **Caregiving Impact on Intergenerational Relationships**

Caregiving is an altruistic behavior, and over 65 million adult family caregivers provide unpaid care for their loved ones who cannot care for themselves (Gibbons et al., 2014). With 40% of all long-term care residents suffering from some form of dementia (Centers for Disease Control and Prevention, 2014), the burden placed on caregivers is substantial. Many caregivers, mostly family members, report experiencing burnout or “emotional and physical exhaustion caused by the stressful demands of their daily work” (Sarabia-Cobo, 2015, p. 76). Because of those technical aspects of caring for their older family members, caregivers feel the strain of physical, emotional, and financial issues (Cho et al., 2016). There are 5.5 million U.S. adults ages 70 and older receiving informal care, including 3.6 million experiencing dementia (Friedman et al., 2015). The demographic shift and migration of youth from rural to urban and industrial proximity, for any reason, have negatively influenced caregiving resources.

The family members may better assist older adults by providing instrumental care in the family because family members might know the preferences and lifestyles of their older relatives. Instrumental care includes laundry, cleaning and organizing the room, preparing food, and offering transportation (Maas et al., 2004). Family involvement in caring for older adults provides socioemotional assistance to older adults by talking with older adults, holding their hands for physical touch, reminiscing, and involving them in social activities (Maas et al., 2004). Assisted living facilities are expensive and may be beyond most families' reach. In addition,

older Americans appreciate living independently. To live independently, they may need assistance according to health constraints to stay functional in their everyday lives.

Bobinac et al. (2010) notes that terms caring for and caring about are slightly different in connotation. For instance, “caring for” includes more instrumental support to carry out daily functions for a smoothly functioning life, such as dressing, helping move around, and eating. On the other hand, the term “caring about” means more psychological and emotional support in which someone contacts physically or digitally to know about their well-being and provide emotional assistance. Instrumental support is more concrete in helping with chores related to everyday activities, whereas expressive support is more psychological and sympathetic. However, both may contribute to the well-being of older adults.

Despite the general perception that rural areas are safe and friendly (Keating & Phillips, 2008), older adults reported lower subjective well-being than urban residents because of limited access to health facilities, geographic location, and isolation (Dudley, 2019). Although some studies noted positive outlook and resilience among rural older adults because of more robust social networks (Evans, 2009), the population has declined considerably due to the migration of younger generations to cities, leaving older adults with fewer supports and making them vulnerable to depression and isolation (Huxhold & Fiori, 2019).

In some instances, the need for caregiving becomes inevitable for older adults in the family. Still, challenges related to family configuration and early parental attachment can lead to poorer well-being. Silverstein et al. (1997) argued that unhealthy early parent-child relationships might have adverse effects on future caregiving because of weaker intergenerational affiliations. Further, these trends are linked with marital instability, family atomization, and disruption. In

some instances, remarriage with a younger spouse may mitigate caregiving for baby boomers in their late adulthood.

Intergenerational relationships that are compromised reduce the chance of social support in late adulthood among step and divorced families. Similarly, the probable support network may decline due to the proliferation of kin relationships that result from repeated divorces and remarriages in families (Riley & Riley, 1994). Every family is different and may deal with aging in place differently.

Hence, solidarity theory reflects on many aspects of relationships but emphasizes on three dimensions of intergenerational relationships, for instance frequency of contacts, positive relationship quality, and support exchange among generations. It also happens ambivalence, mixture of positive and negative feelings at the same time, happens even in positive relationships (Birditt & Fingerman, 2012). Solidarity theory also posits that positive aspects of intergenerational ties are reciprocal in nature. In the coming decades, many baby boomers may have disabilities and need care. Although norms and perceived obligation to support family members have declined (Silverstein et al., 2006), most baby boomer parents are involved with at least one grown child weekly (Fingerman et al., 2012). This is because they need social connectivity with family members to feel emotionally attached to feel better. However, healthy attachment and reciprocity matter in support and care (Silverstein et al., 2002).

Family support for older adults in their late life is desired and expected. According to Van Den Broek et al. (2019), the recent long-term care (LTC) reforms in the Netherlands are an example of a paradigm shift of caregiving through family support contrary to state-supported services through recognition and support of families' older relatives. The families' care may have an added benefit of shared vision and historical background. Shared histories among family



members may buffer against depression and loneliness during late adulthood. However, care provision is varied among families with more siblings and only children. For example, Broek and Dykstra (2017) note that only children are more likely than children with siblings to provide support and care for aging parents. They may perceive it to be their obligation as the sole caregiver to accommodate their parents in times of need.

Older adults are healthier than their predecessors. A positive aspect of older adults is that they provide more care to their grandchildren and spouses than they receive care from family members. For example, for many older adults, almost half are caring for a spouse; others care for their friends, neighbors, or frail parents. According to the National Alliance for Caregiving (2015), 75-year-old adults provide caregiving for about 34 hours per week, which is 10 hours more caregiving per week than younger caregivers provide to older adults. According to Sarasa and Billingsley (2008), caregiving depends on the parent's health status, the need for activities of daily living (ADLs), the family income, and where adult children are involved in caregiving. Similarly, the number of children, children's social position, and the nature of governmental support may also affect the probability of providing care for older adults.

Family plays a critical role in the lives of older adults in terms of the care they provide and helps them stay in their homes comfortably irrespective of their physical frailty, cognitive disorders, and neurocognitive dysfunctionality during their old age. In addition, families often support their older adults in instrumental tasks such as handling finances or making meals for them.

### **Intergenerational Relationships and the Sandwich Generation**

The sandwich generation refers to the adults with at least one living parent aged 65 or older and who are either raising a child younger than 18 or providing financial help to a grown

child age 18 or older (see DeRigne & Ferrante, 2012 for review). The sandwich generation is squeezed between their children and parents, meaning they are caring for their parents and support their children at the same time. This gap is wider in developed countries compared to developing nations. Despite the stresses placed on the family with increasing modernization, families in developing parts of the world continue to be the caregivers' elders irrespective of community and public support systems. According to Charles and Carstensen (2010), people are generally satisfied in old age and experience relatively high levels of emotional well-being. However, the responsibilities of work and home simultaneously make caregiving challenging for adult children, the sandwich generation. The sandwich generation implies the people in their thirties or forties that are responsible simultaneously for bringing up their children and caring for the aging older adults in their family.

### **Aging Theories**

There are many theories on biological aging. Weinert and Timiras (2003) summarize four general categories of theories on aging and discuss possible interaction among the suggested mechanisms that cause aging. These include evolutionary, molecular, cellular, and system-based theories. Evolutionary theory argues that aging results from the force of natural selection, with aged individuals no longer having characteristics necessary for reproductive success and therefore providing no benefit for the continuation of the species (Haldane, 1941). Molecular theories explain that aging results from changes in the expression of genes that regulate both development and aging. The cellular theory argues that cell division among normal genes limits the number of cell divisions over time (Hayflick, 1965). Lastly, system-based approaches explain that the aging process is a decline of the organ systems affecting the adaptation to the environment, for instance, the nervous, endocrine, and immune systems. Findings based on

different theoretical approaches suggest aging can demonstrate decreased physical, physiological, and cognitive capacities.

Theory of selective optimization with compensation (SOC; Baltes & Baltes, 1993) posits as people age their capacities to be functional decline gradually through the losses that bring the aging process, but using compensation strategies, older adults maintain reasonable functionality in their lives. Theory of socioemotional selectivity SST (Carstensen, 1992) posits that younger people opt for long term and expansive goals and expand their social contacts to explore meaningful experiences in their life ahead. On the other hand, older adults prioritize their goals that are meaningful to them emotionally and comparatively short-term goals with fewer contacts but emotional satisfying.

As noted above, theories of aging explain the process from various perspectives. For instance, people with parents who have lived long lives are likely to live longer. Genes and the mutations in those genes are responsible for how long we live (Jin, 2010). On the other hand, non-genetic theories explain aging in terms of molecular and cellular changes that affect the performance of muscular work and distort everyday functionality in some cases. Wear-and-tear theory (Wiesmann, 1882, cited in Sattaur et al., 2020) assumes that animal cells are like machines, and they wear out after long-term use; however, they can recover to a certain extent with the right kind of support. The cross-linking theory (Diggs, 2008) explains that, during aging, chemical changes happen in the body; for instance, proteins, and DNA chemical bonds to each other. Cross-linking also explains the reduced elasticity of tendons, skin, and blood vessels: The binding of glucose to a protein causes various health issues. Diabetes is also viewed as a form of accelerated aging and age-related problems.

## **Life Expectancy**

The number of years a person in a particular population can expect to live under the best of circumstances is known as life expectancy. As compared to almost all other wealthy countries, American have shorter life expectancy, despite being one of the wealthiest nations across the globe (Kontis et al., 2017). Recently, a newborn can expect to live until about the age of 79; a 65-year-old can expect to live another 19.3 years, until the age of 84 years; and a 75-year-old can expect to live another 12.2 years, until the age of 87 (Arias et al., 2022). So, the older you are, the longer you are likely to live. There may be factors contributing to long life for instance, healthy habits, better sanitation, and better behaviors towards a better lifestyle.

## **What is Aging?**

During normal aging, naturally physiological processes slow down with age. Many adults reach their physical peak in their 20s, when their biological functions begin to decline gradually. Many structural and functional changes happen during aging, such as reduced walking ability, muscular strength, balance, and elasticity (Benavent-Caballer et al., 2014). As a result of aging, mental health is also affected severely because of deterioration in neurological mechanisms (Bishop et al., 2010). However, adapting to changing physical and social environments can enhance abilities and skills even in advanced age (Crews, 2022). However, an older person's memories and fluid intelligence may not be as keen as during previous life stages.

People age biologically, socially, and emotionally over time; however, at the biological level, aging prevails because of a myriad of muscular, molecular, and cellular damage in every individual's life (da Costa et al., 2016). These deteriorations may lead to decreased physical and mental capacity, increased risk of diseases, and, ultimately, death. These changes are neither linear nor age-specific and not consistent throughout the elderly population. There are many age-

related conditions including hearing loss, cataracts, refractive errors, back and neck pain, chronic obstructive pulmonary diseases, diabetes, depression, and dementia that can impact the process of aging (da Costa et al., 2016). These biological and health-related changes often result in the need for assistance with daily tasks, but access to assistance varies by individual circumstances and location.

Historically, life expectancy has continued to rise as technology, medical advances, and nutrition opportunities have expanded (Crimmins, 2015). For example, life expectancy in industrialized countries has significantly increased from 45 years to 80 years since the beginning of the 20th century because of improvements in health care, food, sanitation, and living standards. Moreover, demographic projections suggest that life expectancy for men and women who maintain the healthiest lifestyle will continue to increase. However, according to the Arias, (2011), life expectancy in the United States lags that of many high-income countries. Among the top 40 countries with the highest life expectancies worldwide, the United States rests 40th, which is a decrease over the last half of a century (e.g., the United States had the 20th highest life expectancy in 1980). Lastly, everyone's aging process is unique; genetics as well as healthy habits and living conditions earlier in life can play a role as well as current experiences and access to services.

### **Physical Health**

Physical health is important for better cognitive functioning, avoiding depression, and maintaining everyday functionality, particularly during late adulthood. The sedentary behavior invites a repertoire of health-related complications including digestive disorders, arthritis, and other chronic problems. Maintaining regular light physical exercises may avoid many of these problems. However, physical health is a significant determinant of independent living for older

adults. Older adults suffer from chronic diseases such as dementia, heart-related issues, type 2 diabetes, cancer, and arthritis. These physical issues are challenges to effectively age in place. There is a myriad of chronic problems that impede older adults' everyday functionality. For example, arthritis, joint inflammation, is a common complaint among older adults that restricts their mobility. Swelling, pain, and stiffness can result in loss of function for older adults. However, arthritis is more common in women than men and in African Americans than Europeans.

Sensory limitation among older adults plays a perilous role among older adults' everyday functionality: Reflex responses, hearing loss, and vision issues come together that hamper multiple everyday functions like driving and reading. According to Heinrich et al. (2016) sensory impairment disrupts communication, may cause social isolation, depression in some acute cases, compromise independence, cognitive decline, and affect general well-being.

In addition to chronic disease, accidental injury in older adults increases, placing them at greater risk of unintentional injuries from falls. In addition, accidents are the ninth leading cause of death among older adults in the United States. However, falls can be reduced by equipping homes with safety features, for instance, railings and non-skid floors. Accidents can be further reduced by wearing proper glasses and using hearing aids, when needed, thus reducing unintentional injury for older adults.

Another common disease among older adults is type 2 diabetes worldwide due to increased life span. According to Mordarska and Godziejewska-Zawada (2017), one third of U.S. population over 65 years old are diabetic, which is a major cause of morbidity and mortality among the geriatric population. Diabetic older adults are more at risk of depression, cognitive decline, increased urinary incontinence, and frequent falls.

Age-specific conditions such as hearing loss, sleep difficulties, bone and muscle loss, diabetes, and decline in physical and mental functionality affect a person's capacity to age in place. Further, many changes happen in sensory functioning after the age of 40; for instance, the lenses of the eyes become stiffer, leading to presbyopia. Presbyopia is a refractive error that makes it difficult for older adults to see things up close. Many physical and mental implications are related to normal aging (Merchant et al., 2021). Moreover, cataracts cloud the lenses of the eyes, which reduces the vision among many older adults.

### **Mental Health**

As people age, age-related changes impact mental health, for instance, coping with chronic illness, losing loved ones, and reduced social circles. In case these circumstances persist, it may lead to depression, feeling of grief, social isolation, and anxiety. Mental health affects our functionality through how we think and feel. Newman and Zainal (2020) reported that social isolation and loneliness have a strong connection with cardiovascular, immune, neurocognitive, and mental problems.

While aging, older adults undergo various life changes that influence mental health, for example, coping with a severe issue such as losing a loved one. In certain instances, emotional distress may lead to physical illnesses such as digestive disorders, sleep disturbances, and lack of energy. Although many older adults cope with these changes and normative stressors, some do not.

Mental health is a crucial part of a healthy lifestyle where people go on with their lives using their cognitive reserves. As 77% of adults, 50 years old and older, opt to age in place (Davis, 2021) because of social and emotional benefits, for instance, the comfort of home, family and friends, social engagement in the community they lived with, cost-effectiveness, and the

ability to uphold dignity and independence. Further, a sense of empowerment and autonomy might be encouraged when they run errands and complete daily living tasks like house maintenance, food preparation, and personal care. To shed off loneliness and isolation while aging in place, older adults may continue their social networks with religious communities, favorite clubs, and related organizations that can offer resources to live a happy life with minimal physical and financial resources. Social activity during old age benefits physically and emotionally and reduces cognitive decline. For example, the results of research at Rush Alzheimer's Disease Center in Chicago found 70% less cognitive decline among socially involved older adults than those with low social activity (James et al., 2020).

Dementia, including Alzheimer's disease, is common among older adults, although dementia is not a consequence of normal aging but of disease processes that damage brain tissue. Common symptoms of dementia include slow thinking processes, memory, judgment, and reasoning. Alzheimer's disease is a progressive brain disease affecting four to five million Americans. Alzheimer's disease increases with age, and 1 in 10 Americans over the age of 65 years of age has Alzheimer's disease. Alzheimer's disease is also the fifth leading cause of death in older adults (Rabinovici et al., 2016) Chronic stress is a major health problem among many older adults that may lead to depression and anxiety. Depression affects 10% of people aged 65–80 and affects 20% of the population aged 81 and above (Solhaug et al., 2012). Depression, according to Casey (2012), can be a continuation of depression from earlier periods of life or can be developed afresh. Depression goes beyond sadness or bereavement and may relate to the loss of companions and friends. There is empirical evidence that mindfulness helps improve mental health and well-being (Gu et al., 2015).



## **Well-Being and Quality of Life**

Although there is no agreed-upon definition of quality of life, a combination of terms like quality of life, well-living, life satisfaction, needs fulfillment, and happiness may be used to explain well-being (Carreira et al., 2019). Well-being is the experience of health, happiness, and prosperity that includes having good mental health, life satisfaction, a sense of meaning or purpose, and the ability to manage stress (Pidgeon & Keye, 2014). Well-being and life satisfaction are commonly intertwined with basic human needs, such as food, shelter, income, and modern conveniences (electricity, health equipment, and communication). Higher levels of well-being are associated with decreased risk of disease, illness, and injury; better immune functioning; speedier recovery; and increased longevity (Ostir et al., 2000). Also, well-being is associated with numerous health, job, family, and economically related benefits (Centers for Disease Control and Prevention, 2014). Frey and Stutzer (2002) summarized research from multidisciplinary fields and delineated various aspects of well-being, such as physical (e.g., limited health concerns), economic (e.g., can make ends meet), social (e.g., supportive social network), emotional/psychological (e.g., feelings of worthiness and value), intellectual (e.g., ability to plan and engage in daily activities), and spiritual (e.g., the purpose of life greater than self).

Similarly, quality of life, as defined by the World Health Organization, is an individual's perception of their position in life in the context of the culture and value system where they live, and concerning their goals, expectations, standards, and concerns" (The WHOQOL Group, 1995, p. 3). Brown et al. (2004) determined that quality of life "is inherently a dynamic, multi-level and complex concept, reflecting objective, subjective, macro-societal, and micro individual, positive and negative influences which interact together" (p. 46). Spitzer (1987) identified three

dimensions of quality of life: physical function, mental status, and the ability to engage in normal social interactions).

As in everyone's life, well-being is essential for older adults who are aging in place. A comprehensive review study (Van Leeuwen et al., 2019) suggested that older adults value (1) feeling healthy and not restricted by physical issues, (2) managing their own tasks, (3) having prestige, (4) not having a feeling of burden, (5) spending time in everyday activities, (6) being involved in social tasks, (7) having close relationships that provide them a feeling of attachment, (8) feeling secure in home, and (9) not having financial restrictions. So, quality of life means many factors under an enormous umbrella of well-being and satisfaction.

The health factor in quality of life is often elevated above other elements. The World Health Organization (WHO) defined health as a “state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity” (WHO, 1947). Mental well-being is an essential part of well-being in general so, during old age, mental well-being is strongly associated with better health and a higher level of functioning (Fox et al., 2007). Further, it is bidirectional and has a connection with physical well-being and prolonged life expectancy (Stephoe et al., 2012).

Behavioral health can improve physical well-being, cognitive well-being, social well-being, and independence (Abud et al., 2022). Physical well-being means maintaining a good level of physical capability to improve successful healthy aging. Wallack et al. (2016) described physical activity as a subtype of lifestyle and choices that include exercise but also medication management and alternative therapies. Cognitive well-being means self-awareness, outlook/attitude, lifelong learning, and faith (Abud et al., 2022). Self-awareness includes self-

esteem, self-achievement, resilience, body awareness, and a sense of purpose (Wallack et al., 2016).

Social well-being includes social support, financial security, and community engagement. Social support is not only establishing relationships and rapport with family members but also with acquaintances. Community engagement includes volunteering for service work, going to churches, and feeling acquainted with the community. Being a part of a community helps develop a sense of ownership and oneness. Despite working with others, one feels independent and able to use one's cognitive ability to live without support as well as being financially independent of family or friends (Chen & Zhang, 2022). Economic well-being is interpreted as having security at present and in the time to come, wherein present security includes the ability of an individual, family, and community to meet their basic needs for things such as food, housing, utilities, health care, transportation, care, and control over their day-to-day expenses and functionality.

Well-being and life satisfaction are commonly intertwined with basic human needs, such as food, shelter, income, and modern conveniences (electricity, health equipment, and communication). Higher levels of well-being are associated with decreased risk of disease, illness, and injury; better immune functioning; speedier recovery; and increased longevity (Ostir et al., 2000). Also, well-being is associated with numerous health, job, family, and economically related benefits (Centers for Disease Control and Prevention, 2014).

Quality of life term is subjective in connotation as it varies contextually and from person to person as well. However, quality of life is influenced by many things such as having services and resources to meet basic needs. The needs include both psychological and physical within any specific geographical location. Further, people around the environment provide many resources

to add to one's quality of life such as reaching out to help at the time of need, spending time together, and making one another feel supported. Thus, aging in place can provide multiple social, psychological, and physical resources that add to quality of life of older adults. However, aging in place does not ensure quality of life because older adults may not have continuity of roles, responsibilities, and relationships especially in the case of mental issues with older adults like dementia (LeRoy et al., 2010).

## CHAPTER III

### METHODOLOGY

A mixed-method study design was selected to examine three-generational families' perceptions of concerns and needs related to aging in place in rural Mississippi, gathering quantitative data using a questionnaire and qualitative data through interviews. This study was conducted using triangulation design (Creswell et al., 2003) commonly used in mixed methods studies in social sciences. The reason for using this design was to collect data on the same topic through different methods concurrently (Morse, 1991) to grasp in-depth understanding of the research problem. This design is feasible to benefit from quantitative method, for instance large sample size and generalization, and qualitative method for example, in detail, small sample, and minute details. It is also suitable for comparing two separate data sets to arrive at conclusive findings (Morse, 1991) about the research problem.

The decision to use a mixed-method approach is to integrate quantitative and qualitative information for meaning-making and trustworthiness of the nuanced construct of aging in place, including issues, caregiving, and intergenerational relationships. Grandchildren, parents, and grandparents of more than 65 years in rural areas of Mississippi were recruited using personal acquaintances, Extension agents, church leaders, and snowball sampling. Rural areas are defined as all areas that are not considered urban areas; the threshold for classifying an area as "urban" ranges from 2,500 to 50,000 (Economic Research Service, 2019). The specific research questions this study sought to answer include:

- 1) What current issues do older adults (G1) aging in place face?
- 2) Within the same family, how do three generations (G1, G2, G3) perceive future concerns related to older adults (G1) aging in place?
- 3) Within the same family, how do three generations (G1, G2, G3) perceive needs and services required for older adults (G1) to age in place?

### **Participants**

The sample consisted of 59 participants: older adults aged 65 years and over (G1;  $n = 18$ ), adult children (G2;  $n = 22$ ), and grandchildren 18 years or older (G3;  $n = 19$ ) (see Table 3.1). To recruit participants, word-of-mouth recruitment procedures were utilized. Specifically, Extension agents and community ties (e.g., church and community leaders) were used for the initial recruitment. A snowballing strategy was used to generate additional interest in participation in which participants recommended families who were experiencing similar phases in their lives to join the study by providing researchers with names, phone numbers, and addresses of other families who had older adults aging in place and living in rural communities. The researchers contacted participants via phone and described the study and, if they were interested, the researcher worked with the family members to set up an interview time in their home or in a neutral location, such as a county Extension office or community center, where all three generations of the family could be present.

Table 1 displays the demographic characteristics of participants. Participants were between the ages 18 and 93 ( $M = 56.20$ ;  $SD = 23.40$ ) at data collection time. G1 ages were on average 85.26 years, G2 ages on average were 57.10 years, and G3 ages on average were 27.23 years. One participant from G3 was 15 years of age and participated with parental consent and child assent. Out of 59 participants, 34.48% ( $n = 20$ ) were male and 65.52% ( $n = 38$ ) identified

as female. Most of the participants (54.39 %;  $n = 31$ ) were white including 11 from G1, 11 from G2, and 9 from G3; the remaining (45.61%;  $n = 26$ ) identified as African American or Black including 6 from G1, 11 from G2, and 9 from G3. None of the participants described themselves as Hispanic or Latino.

A plurality of the participants had some type of post-high school education and/or training. Specifically, 13 participants (22.81%) earned bachelor's degrees, including three from G1, six from G2, and four from G3. Some of the participants (14.04%;  $n = 8$ ) had an associate or some technical education (i.e., one from G1, four from G2, and three from G3). Similar numbers of participants (14.04%;  $n = 8$ ) had master's degrees: none from G1, five from G2, and three from G3. Eleven participants (19.30%) had earned some college credits, including six from G1, three from G2, and two from G3. Nine participants (15.79%) had high school education (i.e., three persons from each of three generations), whereas seven (12.28%) had less than a high school education, including four from G1, none from G2, and three from G3.

Almost half of the participants (48.28%;  $n = 28$ ) were married including 8 from G1, 15 from G2, and 5 from G3. Approximately one-fourth of the participants (27.59%,  $n = 16$ ) were single and never married including 2 from G2 and 14 from G3. Some participants (15.52%,  $n = 9$ ) reported being widowed: eight from G1 and one from G2. One participant from G2 reported their marital status as separated, with four participants (6.90%) reporting they were divorced (i.e., one from G1 and three from G2).

Nearly half of the participants (46.43%,  $n = 26$ ) reported working full-time jobs, including 1 from G1, 17 from G2, and 8 from G3. Part-time employment was noted for five participants (8.93%; i.e., one each from G1 and G2, and three from G3). A small number of participants were unemployed and looking for jobs (5.36%,  $n = 3$ ); all were from G3. Some

(8.93%,  $n = 5$ ) participants, one from G2 and four from G3, were unemployed but not looking for a job. Fourteen participants from G1 (87.50%) and three participants from G2 (13.64%) reported that they were retired.

Fifty-five participants reported their annual income, including 16 from G1, 22 from G2, and 17 from G3. Many of the participants (23.64%,  $n = 13$ ) described their annual income as less than \$15,000. The remaining family incomes reported are as follows: 7.27% ( $n = 4$ ) noted their annual income between \$15,000 to \$25,000; 27.27% ( $n = 15$ ) described their annual income between \$25,000 to \$50,000; 18.18% ( $n = 10$ ) noted their income between \$50,000 to \$75,000; 3.64% ( $n = 2$ ) described their income between \$75,000 to \$100,000; and 20.00% ( $n = 11$ ) noted their annual income as \$100,000 or more.

Table 3.1 Participant Characteristics Overall and by Generation

	Total/Overall N (%)	G1 N (%)	G2 N (%)	G3 N (%)
<b>Participants</b>		18 (30.5%)	22 (37.3%)	19 (32%)
<b>Age</b>				
15-25	6 (10.90%)			6 (31.58%)
26-35	12 (21.81%)			12 (63.16%)
36-45	2 (3.64%)		1 (4.76%)	1 (5.26%)
46-55	10 (18.18%)		10 (47.6%)	
56-65	9 (16.36%)	1 (6.67%)	8 (38.10%)	
66-75	7 (12.73%)	5 (33.33%)	2 (9.52%)	
76-85	4 (7.27%)	4 (26.67%)		
86-95	5 (9.09%)	5 (33.33%)		
<b>Gender</b>				
Male	20 (34.48%)	6 (35.29%)	8 (36.36%)	6 (31.58%)
Female	38 (65.52%)	11 (64.71%)	14 (63.64%)	13 (68.42%)
<b>Race (Self-described)</b>				
African American or Black	26 (45.61%)	6 (35.29%)	11 (50.00%)	9 (50.00%)
White	31 (54.39%)	11 (64.71%)	11 (50.00%)	9 (50.00%)



Table 3.1 (continued)

	Total/Overall N (%)	G1 N (%)	G2 N (%)	G3 N (%)
<b>Ethnicity</b>				
Not Hispanic/Latino	54 (100.00%)	15 (100.00%)	20 (100.00%)	19 (100.00%)
<b>Educational Attainment</b>				
Less than High School	7 (12.28%)	4 (23.53%)	0 (0.00%)	3 (16.67%)
High School Diploma	9 (15.79%)	3 (17.65%)	3 (13.64%)	3 (16.67%)
Some College (No Degree)	11 (19.30%)	6 (35.29%)	3 (13.64%)	2 (11.11%)
Associate's or Technical Degree	8 (14.04%)	1 (5.88%)	4 (18.18%)	3 (16.67%)
Bachelor's Degree	13 (22.81%)	3 (17.65%)	6 (27.27%)	4 (22.22%)
Master's Degree	8 (14.04%)	0 (0.00%)	5 (22.73%)	3 (16.67%)
Professional Degree (medical, vet, dental, law)	1 (1.75%)	0 (0.00%)	1 (4.55%)	0 (0.00%)
<b>Marital Status</b>				
Single (Never Married)	16 (27.59%)	0 (0.00%)	2 (9.09%)	14 (73.68%)
Married	28 (48.28%)	8 (47.06%)	15 (68.18%)	5 (26.32%)
Divorced	4 (6.90%)	1 (5.88%)	3 (13.64%)	0 (0.00%)
Separated	1 (1.72%)	0 (0.00%)	1 (4.55%)	0 (0.00%)
Widowed	9 (15.52%)	8 (47.06%)	1 (4.55%)	0 (0.00%)
<b>Employment Status</b>				
Working Full-time	26 (46.43%)	1 (6.25%)	17 (77.27%)	8 (44.44%)
Working Part-time	5 (8.93%)	1 (6.25%)	1 (4.55%)	3 (16.64%)
Unemployed but looking for work	3 (5.36%)	0 (0.00%)	0 (0.00%)	3 (16.64%)
Unemployed but not looking for work	5 (8.93%)	0 (0.00%)	1 (4.55%)	4 (22.22%)
Retired	17 (30.36%)	14 (87.50%)	3 (13.64%)	0 (0.00%)
<b>Household Income</b>				
Less than \$15,000	13 (23.64%)	7 (43.75%)	2 (9.09%)	4 (23.52%)
\$15,000 to less than 25,000	4 (7.27%)	2 (12.50%)	0 (0.00%)	2 (11.76%)
\$25,000 to less than 50,000	15 (27.27%)	3 (18.75%)	7 (31.82%)	5 (29.41%)
\$50,000 to less than 75,000	10 (18.18%)	4 (25.00%)	5 (22.73%)	1 (5.88%)
\$75,000 to less than 100,000	2 (3.64%)	0 (0.00%)	1 (4.55%)	1 (5.88%)

Table 3.1 (continued)

	Total/Overall N (%)	G1 N (%)	G2 N (%)	G3 N (%)
\$100,000 or more	11 (20.00%)	0 (0.00%)	7 (31.82%)	4 (23.53%)

Note. Not all participants answered all demographic questions; some data are missing. Percentages are calculated on valid data for each demographic characteristic.

### Data Collection and Measures

Data were collected from three generations of the same family using a questionnaire and semi-structured interview protocol. The questionnaire and interviews were administered on the same day, with the questionnaire filled out prior to the interview. The questionnaire and interview were administered to each member of the family at their place of residence or a neutral location (e.g., county Extension office) with three generations including grandparents (G1), adult children (G2), and young adult grandchildren (G3). Quantitative data were obtained by questionnaire to discover what each generation perceived as their current and future needs for G1 to successfully age in place. Qualitative data were collected through interviews to understand the lived experiences of older adults aging in place in rural Mississippi. Participants were asked about during the interview, the quality of life, needs, services, caregiving resources, and the nature of the relationship of older adults with caregivers while aging in place. See Appendix B for the interview protocol and questionnaires that asked for information about family members, quality of life, current issues, services needed and demographic data about the population. To recruit more African Americans, IRB was revised for a second round of data collection, such that \$50 gift cards (\$16.67 per individual) were given when a family of three generations had completed their interviews. The oldest family member must be at least 65 years of age, and, to ensure participants from three generations, the gift cards were given after the third family member had completed the interview and questionnaire.

## Questionnaires

There were five sections on the questionnaire including quality of life, current issues, issues to be foreseen in the following 5 years, services needed for them to facilitate aging in place in rural Mississippi, and demographics. The questionnaire was simplified after initial consultations for a better understanding of the constructs included in the study (i.e., aging in place, relationships, caregiving, and perceived needs now and in the following 5 years).

Current issues faced by G1 were derived from a needs assessment survey conducted in 2011 for the Mississippi Department of Human Services Division of Aging and Adult Services (Smith et al., 2011). The overarching question asked, “On a scale of “1” to “5,” please rate how much of a problem the following issues are for you CURRENTLY. A score of “1” will indicate that this is not a problem, while a score of “5” will indicate it is a major problem.” Eleven issues were assessed with response options on a five-point scale that ranged from 1 = not a problem to 5 = major problem, without clear descriptions within the outer points. To aid interpretation of the data, the qualitative markers on the scale were adjusted for analysis (1 = not at all, 2 = a little, 3 = some, 4 = a lot, 5 = a whole lot).

All generations were also asked to look ahead over the next 5+ years and rate how concerned they were about several issues that would affect aging in place for themselves (G1) or for their older family member (G2 and G3). The overarching question for G1 asked, “Looking ahead over the next 5+ years, on a scale of '1' to '5,' please rate how concerned you are about the following items. A score of '1' will indicate the lowest level of concern, while a score of '5' will indicate the highest level of concern.” The overarching question for G2 and G3 asked, “Looking ahead over the next 5+ years, on a scale of '1' to '5,' please rate your level of concern about how the following issues might affect your older family member (for example, your older family

member's physical health). A score of '1' will indicate the lowest level of concern, while a score of '5' will indicate the highest level of concern.” Response options were on a five-point scale that ranged from 1 = least concern to 5 = greatest concern. To aid interpretation of the data and be consistent with the data presented about G1's current concerns, the qualitative markers on the scale were adjusted for analysis (1 = not at all, 2 = a little, 3 = some, 4 = a lot, 5 = a whole lot).

All generations were also asked to look ahead over the next 5+ years and rate perceived need for services to be able to age in place. G1 answered about their own perceived needs, while G2 and G3 responded about needs for their older family member. The list of needs/services was also derived from the 2011 Mississippi Department of Human Services Division of Aging and Adult Services survey (Smith et al., 2011). The overarching question for G1 asked, “Looking ahead over the next 5+ years, please rate how much you think you might need each of the following services on a scale of '1' to '5' in order to be able to age in place. A score of '1' indicates the least amount of need while a score of '5' indicates the greatest amount of need.” The overarching question for G2 and G3 asked, “Please rate your level of need for each of the following services on a scale of '1' to '5' in order for your older family member to be able to age in place. A score of '1' indicates the least amount of need while a score of '5' indicates the greatest amount of need.” Perceived needs were also measured on a five-point scale that ranged from 1 = least need to 5 = greatest need, without clear descriptions within the outer points. To be consistent with the assessment of concerns, the qualitative markers were adjusted for analysis (1 = not at all, 2 = a little, 3 = some, 4 = a lot, 5 = a whole lot).

Each generation was asked about their own overall quality of life. Quality of life was measured with one item, “On a scale of “1” to “5,” how would you rate your overall Quality of Life? A score of “1” will indicate the lowest score possible, while a score of “5” will indicate

the highest score possible. A five-point response scale was used with 1 = lowest quality of life and 5 = highest quality of life. Demographic questions included date of birth, race, ethnicity, gender, educational attainment, marital status, employment status, household income, and zip code.

## **Interviews**

In the interviews, the G1 participants were asked how they describe their family, advantages and disadvantages of aging in place, what kinds of needs they think they might have as they get older, what resources or help might be needed to be able to age in place, who would provide care to them as they get older if they needed help to age in place, how receiving care from family members might affect family relationships, and any other thoughts about how aging in place might affect them or their family. G2 and G3 participants were asked similar questions (e.g., how they describe their family, advantages and disadvantages of aging in place, what needs might their older family member have as they age, what resources may be needed to help their older family member age in place, who would provide care if their older family member stayed in their own home, how providing care for their loved one might affect family relationships, and any other thoughts about how aging in place might affect them or their family). G3 participants were asked two additional questions: “How many people your age have left this area?” and “What are advantages of staying in this area?” Note that not all questions asked were analyzed as part of this study.

## **Procedure**

The data are from a sample of 18 families, including 18 grandparents (G1), 22 adult children (G2), and 19 grandchildren (G3). The study was approved by Mississippi State

University's Institutional Review Board (see Appendix A). The questionnaires and interviews were conducted consecutively; the questionnaire was completed first and then interviews. The interview was conducted according to the interview protocol. The reason for this sequence was if any participant had a question or needed clarification, the facilitator could address it. For example, if grandchild (G3) and adult child (G2) were completing the questionnaire, then in another room privately, the older adult (G1) was interviewed and recorded after their verbal and written consent to meet the research ethics. See Appendix B for the interview protocols and questionnaires.

The questionnaires were administered using paper copies, and interviews were digitally recorded with participants' written consent (see Appendix C). The questionnaire took 30 minutes to fill in, and the interview lasted for 25 minutes on average. The responses were audiotaped and then transcribed using MaxQDA, a qualitative software.

### **Data Analysis**

Questionnaire data were entered into and analyzed with SPSS. Frequencies and percentages were calculated for the current issues, anticipated issues, perceived needs, and demographic questions. Crosstabulations were performed to describe demographic characteristics within each of the three generations and overall.

Qualitative analysis is a categorization process within social science that is an active process in which researchers choose multiple moves to help make sense of data (Grodal et al., 2021). In this study, interview data were analyzed using Braun and Clarke's (2006) approach to thematic analysis. This approach includes six steps: 1) familiarizing yourself with data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes, and 6) eventually drawing results (Braun & Clarke, 2006). In step 1, the recorded

interviews were replayed, transcribed, and reviewed multiple times to have a feel for the data. In step 2, while performing line-by-line thematic coding of interview data, categories were organized to identify themes. MaxQDA was used to organize the coding process. In steps 3 and 4, themes were derived and checked multiple times to maintain validity. I used both inductive and deductive approaches to thematic analysis and worked within a constructivist epistemology (Lee, 2012) to understand subjective experiences and context of aging in place in Mississippi. Constructivists, according to Lee (2012), emphasize participants' observation and interviews to generate data to perceive felt experience through rich description of interview process. In steps 5 and 6, after creating and reviewing themes to corroborate with content written results for the study and this dissertation was completed.

### **Trustworthiness**

By combining and corroborating both methods, we mean to understand lived experiences, not to generalize them. This provides mutual verification of the information sought from two different angles to acquire trustworthiness. Combining both methods for confirmation and convergence of the findings is commonly known as triangulation, a methodological research procedure in which multiple methods (Denzin, 1970; Fielding & Fielding, 1986) are used to answer predetermined questions at hand so they may ensure the validity of findings (Morgan, 1998). Triangulation may take multiple forms; however, this study used Quant + Qual (quantitative and qualitative) in a concurrent approach (Morse, 1991). Notably, this approach serves the purpose of meaning-making in which both pieces of information contribute equally and supplement each other to enhance each other's impact.

Guba (1981) elaborated four processes to ensure trustworthiness of the data: credibility, transferability, dependability, and conformability. Credibility is the process of ensuring

congruence with the findings. The process of triangulation described in the previous paragraph helps to establish credibility. Transferability implies the applicability of the processes in other similar situations. To establish transferability, the study's results are described in depth, and participant quotes were used to support the quantitative data. Dependability means if the study is repeated in a similar context, with the same methods, similar results would be obtained. To address dependability, the process in the study has been elaborated in detail for helping others to perceive the situation clearly for replication purpose. Conformability relates to objectivity. Member checks helped establish conformability. A few of the themes were also validated through member checks to make sure the data accurately represented what the participants shared.



## CHAPTER IV

### RESULTS

The specific research questions this study sought to answer include:

- 1) What current issues do older adults (G1) aging in place face?
- 2) Within the same family, how do three generations (G1, G2, G3) perceive future concerns related to older adults (G1) aging in place?
- 3) Within the same family, how do three generations (G1, G2, G3) perceive needs and services required for older adults (G1) to age in place?

#### **Research Question 1: Current Issues Reported by Older Adults (G1) Aging in Place**

To understand current concerns of G1 who were aging in place, G1 participants were asked to rate how much of a problem they had in 11 different areas. The 11 areas assessed were (1) lonely or isolated, (2) depressed, (3) boredom, (4), physical health (5) suitable housing, (6) adequate health care, (7) transportation, (8) having enough food to eat, (9) affordable medications, (10) financial problems, and (11) everyday activities like bathing or preparing meals. Comments from interviews provided additional evidence of current concerns. The findings are provided below and summarized in Table 4.1.

#### **Feeling Lonely or Isolated**

Most G1 participants (88.88%;  $n = 14$ ) indicated they did not currently have a problem with feeling lonely or isolated. A small percentage (11.11%;  $n = 2$ ) indicated that feeling lonely

or isolated was currently a little problem for them. Two participants (11.11%) reported that they had some problem with loneliness, while none indicated more than some concern with their current feelings of loneliness or isolation. One male participant from G1 described scarcity of associational solidarity, the frequency of contacts between family members (Bengtson & Roberts, 1991) as, *“The only bad things about it to me is we don’t see them enough because you know, all of them work and now, the grands are getting married and the greats are little, they go on to school so you don’t get to see them too much. It is just this world to me is a dog eat dog because to really live, both of them got to work.”* A female participant from G2 described, *“I think they are facing more of a loneliness; they need people to come check on them...”*

### **Depression**

When asked about their current concerns of depression, 68.75% ( $n = 11$ ) of G1 participants did not report a problem. Of those who did indicate a concern (31.25%;  $n = 5$ ), three participants reported a little problem, and two reported depression was somewhat of a problem for them currently. However, two participants did not answer this item on the questionnaire.

### **Boredom**

One-third of G1 participants who indicated boredom as a concern noted it to be only a little problem for them (35.29%;  $n = 6$ ). One person reported boredom to be somewhat of a problem for them, and one indicated boredom was a lot of a problem. However, boredom was not reported as a problem by most of the respondents (52.94%;  $n = 9$ ), and one person abstained from responding to this item on the questionnaire.

## **Physical Health**

In response to the current concern about physical health, many (64.70%;  $n = 11$ ) considered physical health to be a current concern, with six of them reporting it to be a little problem in their life, five suggesting it was somewhat of a problem, and two reporting physical health to be a major concern currently. One male participant from generation one described, "*I have my knee operations.*" A small number of G1 participants (23.52%;  $n = 4$ ) reported physical health not to be an issue. One person did not respond to this item. One participant from G1 described that he has not been able to do what he used to, "*Not really. I can do all, but I cannot get to do what I used to.*"

## **Suitable Housing**

The majority of G1 in this sample (88.88%;  $n = 16$ ) answered that they have no problem with housing suitability. Only a couple of participants (11.11%;  $n = 2$ ) described that suitable housing is currently a concern. One of those respondents reported the condition of their home to be a concern, whereas the other reported it to be a whole lot concern. However, one male participant from G1 stated in response to an interview question either he would opt for aging in place or moving to a nursing home, his preference was to remain at home: "*No, there is no problem living at home.*"

## **Adequate Health Care**

Many of G1 aging in place (77.77%;  $n = 14$ ) responded that they have no concern regarding adequate health care. One participant described the adequacy of health care as a little bit of a current problem. A few participants (16.66%;  $n = 3$ ) described adequacy of health care as a whole lot of an issue.

## **Transportation**

Most G1 participants reported transportation to not be a current problem (88.88%;  $n = 16$ ). Only two participants (11.11%) indicated transportation as a problem. That is, one participant (5.60%) reported some concern about transportation, and another reported it as a whole lot of concern (5.60%). A female participant from G1 described inability to drive to get the doctor, *“Well, somebody to go to Jackson. My daughter would not let me drive. She hates it.”*

## **Having Enough Food to Eat**

Many G1 participants (77.77%;  $n = 14$ ) reported no current concerns with having enough food to eat. One participant indicated that having enough to eat was a little problem. A few participants (16.66%;  $n = 3$ ) described the availability of enough food to eat as a lot or a whole lot of concern for them currently. One female participant from G2 described, *“Meals on wheels to help them prepare so they won’t have to cook as much, and then that would’ve had more money, because sometimes older people, you are colder, and they have to spend more money on heat and lighting.”*

## **Affordable Medications**

A good majority of G1 (61.11%;  $n = 11$ ) indicated affordability of medication was not a problem for them. However, some older adults (22.22%;  $n = 4$ ) described that the affordability of medicines is a little problem. A few participants (16.66%;  $n = 3$ ) described the affordability of medications as a lot of a problem ( $n = 2$ ) or a major concern ( $n = 1$ ) for them.

## **Financial Problems**

All G1 participants responded to how much of a current concern that financial problems were for them. Most (77.78%;  $n = 14$ ) indicated that financial problems were not a concern, but

four did. That is, one G1 participant marked finances as a little problem (5.56%;  $n = 1$ ), one as somewhat of a problem (5.56%;  $n = 1$ ), and two reported major concern (11.11%;  $n = 2$ ).

### Everyday Activities Like Bathing or Preparing Meals

Many G1 participants (72.22%;  $n = 13$ ) responded that everyday activities like bathing and preparing meals were not a problem. However, five participants indicated varying levels of concern with everyday activities. Specifically, two G1 participants indicated a little problem completing everyday activities. One additional G1 participant stated that everyday activities were somewhat of a problem. A couple of G1 participants (11.11%;  $n = 2$ ) described a lot of concern with everyday activities like bathing and preparing meals. One female participant from G2 responded, *“I am sure I will come to that help with the housekeeping and then yard work. I cannot think of anything else.”* A female participant from G1 described her inability to cook for herself and received help from her daughter, *“Well, I can do a little cooking.”* Then she responded to the question who cooked for her, *“Um-hmm. My daughter cooks.”*

Table 4.1 Current Concerns Reported by G1 ( $N = 18$ )

Concerns	Frequency	Percentage
Feeling lonely or isolated	4/18	22.22%
Depression	5/16	31.25%
Boredom	8/17	47.06%
Physical health	13/17	76.47%
Suitable housing	2/18	11.11%
Adequate health care	4/18	22.22%
Transportation	2/18	11.11%
Having enough food to eat	4/18	22.22%
Affordable medications	7/18	38.89%
Financial problems	4/18	22.22%
Everyday activities like bathing or preparing meals	5/18	27.78%

Note. Responses on a five-point scale of 1 = not at all, 2 = a little, 3 = some, 4 = a lot, 5 = a whole lot. The data in the table only shows a little to a whole lot of responses.

## **Research Question 2: Future Concerns Related to Older Adults (G1) Aging in Place**

### **Future Concerns (5+ Years) Reported by Older Adults (G1) Aging in Place**

In addition to understanding the concerns of G1 participants aging in place currently, data were gathered to delineate the types of concerns anticipated within the next 5 years. G1 participants were asked to rate on a 5-point scale how much of an anticipated concern they have in 11 areas. The 11 areas are as follows: (1) physical health, (2) mental health, (3) finding employment, (4) driving on your own, (5) lack of transportation, (6) affording basic needs (like food or rent), (7) affording medications, (8) affording health care, (9) living independently, (10) ability to care for others, (11) and not having someone to care for you. The findings are presented below and summarized in Table 4.2.

#### ***Physical Health***

G1 participants who are currently aging in place had varying responses to the question regarding their anticipated concerns about physical health in the next 5 years. Some G1 participants (27.77%;  $n = 5$ ) described that physical health is no concern for them, but a lot of G1 (44.44%;  $n = 8$ ) termed physical health as little or some concern. However, some (27.77%;  $n = 5$ ) described physical health as a whole lot of concern in the following 5 years. There was a quote from a male participant from G1 about anticipating health concerns: *“It’s hard to say because I’m in good health now, and I’m 70 and a half. I really can’t answer that question truthfully, because I don’t know, I’ve never been in that position, so I don’t know.”*

#### ***Mental Health***

Approximately one-fourth of G1 participants (27.77%;  $n = 5$ ) currently aging in place indicated that their mental health in the next 5 years was not a concern. Many G1 participants

(50.00%;  $n = 9$ ) aging in place described mental health as a little or some concern for them. However, some (27.77%;  $n = 5$ ) described mental health as a major concern for them in the following 5 years.

### ***Finding Employment***

An overwhelming majority of G1 (93.75%;  $n = 15$ ) described finding employment in the next 5 years as no concern. However, one G1 participant (6.25%;  $n = 1$ ) described finding employment as the greatest concern in the following 5 years to come. Two participants did not respond to this question.

### ***Driving on Your Own***

G1 participants were asked to describe their concern regarding driving on their own; many (61.11%;  $n = 11$ ) described driving on their own as no concern. Some G1 (16.66%;  $n = 3$ ) noted that driving on their own was a little concern. Only two (11.11%) described that driving on their own was some concern. Finally, two (11.11%) described a lot of concern about driving on their own.

### ***Lack of Transportation***

G1 participants were asked about their concerns related to lack of transportation. Most (83.75%;  $n = 15$ ) said that lack of transportation was no concern for them. However, some older adults (16.66%;  $n = 3$ ) noted that lack of transportation was a little concern for them. The question was responded to by all participants ( $N = 18$ ).

### ***Affording Basic Needs (Like Food or Rent)***

When G1 participants were asked about affording basic needs (like food or rent), most of them (88.88%;  $n = 16$ ) noted that it was no concern. One (5.60%) noted that affording basic

needs (like food or rent) was some concern for them, and one (5.60%) described this as a major concern.

### ***Affording Medications***

G1 participants aging in place indicated their concerns regarding affording their medications. The majority of G1 participants (88.88%;  $n = 16$ ) noted that affording medication was a concern of least interest for them. However, two of the participants (11.11%) noted that affording medication was a major concern.

### ***Affording Health Care***

While responding to the question regarding affording health care, most of the G1 participants (88.88%;  $n = 16$ ) noted that it was a matter of least concern. One G1 participant (5.60%) noted that affording health care was a lot of concern for them. Similarly, one (5.60%) described affording health care as a whole lot of concern for them.

### ***Living Independently***

G1 participants aging in place were asked about their concerns related to living independently. Many (61.11%;  $n = 11$ ) noted that living independently was not a matter of concern for them at all. Four G1 participants (22.23%) noted that living independently was a matter of little concern. Two (11.11%) noted that living independently was a lot of concern, while one (5.60%) described it as a major concern for them.

### ***Ability to Care for Others***

G1 participants were also asked if they were able to provide care for others, and most of them (44.44%;  $n = 8$ ) noted that it was not a concern for them. Many (27.8%;  $n = 5$ ) described that their ability to care for others was a little concern for them. Some (16.70%;  $n = 3$ ) noted that



their ability to care for others was a concern for them. However, two (11.11%;  $n = 2$ ) noted either a lot or a whole lot of concern about their ability to care for others.

### ***Not Having Someone to Care for You***

G1 participants were asked to respond to the question regarding the availability of any caregiver for them too. The majority of G1 participants (77.80%;  $n = 14$ ) described that not having someone to care for them was a matter of least concern for them. For example, one G1 participant said, *“They get along pretty good now, so I’m quite sure they would probably take turns in taking care of me.”* Many G1 (16.66%;  $n = 3$ ) noted that not having someone to care for them was a matter of little concern. However, one (5.60%) noted that not having someone to care for them was a matter of concern for them. One G1 participant said, *“It is going to be hard with the children. Like I said my son drives trucks and he is going out of town and my other daughter live in Memphis.”*

### **Future Concerns (5+ Years) for G1 Reported by G2**

G1’s adult children (G2) also responded to questions about 10 potential areas of concern related to G1’s ability to age in place. The areas of concern included (1) physical health, (2) mental health, (3) finding employment, (4) driving on your own, (5) lack of transportation, (6) affording basic needs (like food or rent), (7) affording medications, (8) affording health care, (9) living independently, and (10) not having someone to care for them. The findings are presented below and summarized in Table 4.2.

#### ***Physical Health***

As noted by G2, most (63.61%;  $n = 14$ ) indicated that G1’s physical health was a whole lot of concern, with two additional (9.11%) having a lot of concern. One female participant from

G2 described, *“He had a heart attack one day at home. He was by himself, so he called an ambulance, and he was on the porch when they got there.”* Four (18.20%) had little or no concern regarding G1’s physical health, while two (9.11%) reported that they had some concerns about G1’s physical health. One female participant from G2 noted, *“I stayed with my parents between the ages which my mom is 68, my dad is 67 and its just me, her, and my nephew. But at the age that they are, my mom, to me she’s getting forgetful, and I’ve been trying to tell the doctor this, she really needs to get some medicine before you know. I work in the pharmacy, I kind of know a lot about stuff like that and just try to combat it before it gets to a stage where it’s not nice because then you’d have to deal with a lot of memory loss and stuff like that so you got to combat that before it happens and stuff like that because if she repeats stuff.”*

### ***Mental Health***

Regarding mental health concerns for G1, some G2 participants (22.71%;  $n = 5$ ) noted mental health as little or no concern for older adults. A few G2 participants (13.61%;  $n = 3$ ) described a little concern about G1’s mental health, while two (9.11%) expressed some concern. Comparatively, over half of G2 participants described a lot (9.11%,  $n = 2$ ) or a whole lot (40.90%;  $n = 9$ ) of concern about G1’s future mental health. One female participant from G2 noted, *“So she would not eat and then you know she would not remember if she took her medicine. She could come to my house for the day and then she will get home and she would call my sister-in-law and say I should not enjoy being at your house today and she would think what you are talking about, just a bit I come to your house. So, it just got to the point with her that we just could not leave her alone.”*

### ***Finding Employment***

In terms of concern related to G1 finding employment, most of G2 (86.42%;  $n = 19$ ) described that they had little or no concern about G1 finding a job. Only one G2 participant (4.51%) described some concern about G1 finding employment. However, two G2 participants (9.11%) expressed major concern regarding G1 finding employment.

### ***Driving on Your Own***

G2 participants were asked about G1's ability to drive on their own. More than one-third (36.41%;  $n = 8$ ) described that they had no concern about G1 driving on their own. Only one G2 participant had a little concern about G1 driving on their own. Some G2 (13.61%;  $n = 3$ ) noted some concerns about G1 driving on their own. Ten G2 participants had a lot (9.11%;  $n = 2$ ) or a whole lot (36.41%;  $n = 8$ ) of concern about G1 driving on their own. One female participant from G2 described, "*She insisted on watching T.V., we walk together, we sit up and talk, we—if she says, well, I just want to go to the store sometimes, I said, come on lets go to the store you know but I'm very particular about her driving because as they get older and driving, they won't see like they used to see versus younger than older.*" In another quote, a female participant from G2 described, "*His transportation. Because I think as he gets older, he is not going to be able to drive. He is doing good at it now, but he does not like it. When we had to go to a doctor appointment, I think Jackson two hours like that either she or I take him.*"

### ***Lack of Transportation***

Half of the G2 participants (50.01%;  $n = 11$ ) noted no concern about G1 having a lack of transportation. However, two (9.11%) described a little concern about lack of transportation. Three G2 participants (13.61%) described some concerns about lack of transportation. Finally,

one G2 participant described a lot of concern, while five noted a whole lot of concern (22.71%) about lack of transportation for G1. A female participant from G2 described, *“He shot himself and he was dealing with macular degeneration and hearing, and I knew he was fixed not to give up his keys so that, you know that is.”*

### ***Affording Basic Needs (Like Food or Rent)***

Most of the G2 participants (50.01%;  $n = 11$ ) described that G1 affording basic needs (like food or rent) was no concern for them. G2 participants (9.11%) noted that affording basic needs (like food or rent) was a little concern, while three (13.61%) reported it as some concern. One G2 participant (4.50%) noted that affording basic needs (like food or rent) was a lot of concern, while five (22.71%) reported a lot of concern about G1 affording basic needs (like food or rent). One female participant from G2 described, *“Well, they might need like some assistance coming in so, I recommend clean up or wash for them, fold clothes for them, whatever they in their home. If they cannot do it, I think they really need somebody in there to help them.”*

### ***Affording Medications***

Nearly half of G2 participants indicated that G1 affording medication was no concern (31.81%;  $n = 7$ ) or a little concern G2 (13.61%;  $n = 3$ ). Some G2 participants (22.71%;  $n = 5$ ) noted some concerns regarding affording medications. One G2 participant noted G1 affording medication was a lot of concern, while six (27.3%) noted that it was a whole lot of concern.

### ***Affording Health Care***

Many G2 participants (27.31%;  $n = 6$ ) noted that G1 affording health care was a little concern (18.21%;  $n = 4$ ). Two G2 participants (9.11%) noted some concern regarding G1

affording health care. One G2 participant described a lot of concern, and nine (40.91%) noted a whole lot of concern about G1 affording health care.

### ***Living Independently***

Regarding G1 living independently, three G2 participants (13.61%) described no concern and four (18.21%) noted a little concern. Some concern was described by only two (9.11%) G2 participants. The majority of G2 participants reported a lot of concern (13.61%;  $n = 3$ ) or a whole lot of concern (45.51%;  $n = 10$ ) about G1 living independently.

### ***Not Having Someone to Care for Them***

Most G2 participants (54.52%;  $n = 12$ ) described that not having someone to care for G1 was no concern, while only four G2 (18.20%) indicated a little concern. One female participant from G2 while responding to the interview questions explained the scarcity of family members to help in caring for older adult aging in place. However, some G2 participants (27.27%;  $n = 6$ ) reported not having someone to care for G1 as a major concern. One female participant from G2 described, *“Oh a lot of that I feel sad, but I know my sister would be here in the daytime. I would have to take the night shift. I do not know if there is somebody that we could trust to help out, you know.”* Another female participant from G2 described hardships of helping older adults: *“She’s in bad shape, she’s real big and she got diabetes and her feet bust open, sometimes they bleed, and she can’t get around, she’s got two boys and a girl, closest one is in Aberdeen.”*

### **Future Concerns (5+ Years) for G1 Reported by G3**

To understand and foresee concerns of grandchildren (G3) related to G1 aging in place in Mississippi, G3 were asked about multiple areas of older adults’ life span development. They pointed out 10 areas of concern related to older adults aging in place in Mississippi. The areas of

concern include (1) physical health, (2) mental health, (3) finding employment, (4) driving on your own, (5) lack of transportation, (6) affording basic needs (like food or rent), (7) affording medications, (8) affording health care, (9) living independently, and (10) not having someone to care for them. The findings are presented below and summarized in Table 4.2.

### ***Physical Health***

G3 participants noted various concerns about physical health in the next five years for G1 who are currently aging in place in Mississippi. Some G3 participants noted (21.11%;  $n = 4$ ) that physical health is the least concern for them, but more G3 (31.61%;  $n = 6$ ) described G1's physical health as some concern. Five G3 participants (26.31%) noted physical health was a lot of concern in the following five years. Also, a few G3 (15.80%;  $n = 3$ ) noted physical health of G1 was a lot of concern for them.

### ***Mental Health***

G3 participants foresaw concerns about the mental health of G1 aging in place in the next 5 years. G3 noted (27.81%;  $n = 5$ ) that mental health is no concern for older adults. A few G3 (15.80%;  $n = 3$ ) described the mental health of G1 as either a little concern or some concern. However, some G3 participants (21.12%;  $n = 4$ ) described G1's mental health as a lot of concern in the next 5 years. Similarly, a few G3 (15.81%;  $n = 3$ ) realized the mental health of older adults was a whole lot of concern.

### ***Finding Employment***

Most G3 participants (57.91%;  $n = 11$ ) described that G1 finding employment was no concern for them. Accordingly, a few G3 (15.80%;  $n = 3$ ) noted either a little or some concern

about G1 finding employment. Only one G3 participant (5.31%) either described a lot of concern for G1 finding employment.

### ***Driving on Your Own***

G3 were asked to describe their concerns related to the driving capacities of G1 aging in place. Some G3 (26.32%;  $n = 5$ ) noted some concern for G1 driving on their own. A similar number of G3 participants (21.11%;  $n = 4$ ) described either no concern or a little concern. However, one grandchild noted that G1's driving on their own was a lot of concern, whereas some (21.10%;  $n = 4$ ) G3 noted a whole lot of concern.

### ***Lack of Transportation***

G1 were also asked to respond to the concerns regarding transportation unavailability for G1. The majority (52.62%;  $n = 10$ ) of G3 noted for their G1 that lack of transportation was no concern for them. Two of G3 (10.51%) noted a little concern about lack of transportation for G1. A few of the G3 participants (15.81%;  $n = 3$ ) described some concerns about lack of transportation for G1. Some G3 (15.81%;  $n = 3$ ) noted lack of transportation the greatest concerns whereas one G3 participant described lack of transportation as a lot of concern for G1 aging in place.

### ***Affording Basic Needs (Like Food or Rent)***

Most G3 participants (52.61%;  $n = 10$ ) noted no concern regarding affording basic needs (like food or rent) for G1. A little need for affording basic needs (like food or rent) was described by two G3 participants (10.50%). Some of G3 (26.32%;  $n = 5$ ) noted some concerns regarding affording basic needs (like food or rent). However, only one G3 participant (5.31%) noted a lot

of concern, and the other participant described a whole lot of concern pertaining to affording basic needs (like food or rent).

### *Affording Medications*

G3 participants were also asked about affordability of medications for G1. A plurality of G3 (47.41%;  $n = 9$ ) described affordability of medications as no concern, but some (26.31%;  $n = 5$ ) noted affordability of medications as a lot of concern. Also, two (10.50%) described affordability of medications as a whole lot of concern for G1 aging in place. One G3 participant noted affordability of medications was a little concern. Two G3 participants (10.50%) noted affordability of medications as some concern for G1 aging in place.

### *Affording Health Care*

G3 participants reported on affording health care for G1 aging in place in Mississippi. Most of G3 (52.63%;  $n = 10$ ) noted no concern regarding G1 affording health care. One G3 participant described a little concern about affording health care for G1. A few of G3 (15.80%;  $n = 3$ ) noted either some or a lot of concern for G1 affording health care. However, two G3 participants (10.52%) described affording health care as a whole lot of concern for G1 aging in place.

### *Living Independently*

G3 participants were asked to note the capacity of G1 to live independently. Many G3 participants (31.60%;  $n = 6$ ) described no concern for G1 to live on their own independently. Several G3 (21.10%;  $n = 4$ ) noted some concern for G1 to live independently, while a few (15.80%;  $n = 3$ ) described a lot of concern. However, many G3 participants (26.32%;  $n = 5$ ) described living independently as a whole lot of concern for G1 aging in place. One female



participant from generation three described, “Well, they might need like some assistance coming in so I recommend clean up or wash for them, fold clothes for them, whatever they need in their home, if they can’t do it, I think they really need somebody in there to help them.”

***Not Having Someone to Care for Them***

G3 participants noted concern regarding G1 not having someone to care for them when aging in place. The majority of G3 (63.16%;  $n = 12$ ) described that not having someone to care for G1 was no concern for them. Some of the grandchildren (15.79%;  $n = 3$ ) noted not having someone to care for G1 was a little concern. Similarly, a few G3 (15.79%;  $n = 3$ ) noted not having someone to care for G1 was a whole lot of concern. Only one G3 participant described not having someone to care for G1 was a concern to some extent.

Table 4.2 Anticipated Concerns for G1 Aging in Place in the Next 5+ Years

Concerns	G1		G2		G3	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percent age
Physical health	13/18	72.22%	18/22	81.81%	15/19	78.95%
Mental health	13/18	72.22%	17/22	77.27%	13/18	72.22%
Finding employment	1/16	6.25%	3/22	13.63%	8/19	42.10%
Driving on your own	7/18	38.89%	14/22	63.63%	14/19	73.68%
Lack of transportation	3/18	16.67%	11/22	50.00%	9/19	47.37%
Affording basic needs	2/18	11.11%	11/22	50.00%	9/19	47.37%
Affording medications	2/18	11.11%	15/22	68.18%	10/19	52.63%
Affording health care	2/18	11.11%	16/22	72.72%	9/19	47.37%
Living independently	7/18	38.89%	19/22	86.36%	12/19	63.16%
Ability to care for others	10/18	55.56%	-	-	-	-
Not having someone to care for you	4/18	22.23%	10/22	45.46%	7/19	36.84%

Note.  $N = 49$ . Responses on a five-point scale of 1 = not at all, 2 = a little, 3 = some, 4 = a lot, 5 = a whole lot. Data in the table only shows a little to a whole lot of responses.

### **Research Question 3: Perceived Needs and Services Required for Older Adults (G1) to Age in Place**

#### **Anticipated Needs for Next 5+ Years by Older Adults (G1) Aging in Place**

To foresee the needs of older adults aging in place in Mississippi, G1 participants were asked to rate on a five-point scale to describe how concerned they were with 18 anticipated needs in the following 5 years. The needs include (1) home-delivered meals, (2) food stamp programs, (3) tax preparation, (4) financial planning, (5) home health care, (6) homemaker service (help with chores), (7) repair services, (8) senior discount programs, (9) information and referral services, (10) telephone reassurance, (11) transportation services, (12) adult day care, (13) health screening, (14) physical fitness/exercise programs, (15) support groups, (16) nutrition counseling, (17) respite care (relief for caregivers), and (18) senior Medicare patrol. The scale used to describe was 1 = none, 2= a little, 3 = some, 4 = a lot, 5 = a whole lot. Results are presented below and summarized in Table 4.3.

#### ***Home-Delivered Meals***

Most G1 participants (83.33%;  $n = 15$ ) rated their need for home-delivered meals as a little for aging in place. But two participants (11.11%;  $n = 2$ ) noted that home-delivered meals were needed to some extent. However, one participant described that home-delivered meals are a whole lot of concern.

#### ***Food Stamp Programs***

G1 participants were asked about their anticipated need for food stamp programs when aging in place. Most G1 participants (83.33%;  $n = 15$ ) felt that food stamp programs would not be needed, and one noted a little need. However, two (11.11%) described a whole lot of need for food stamp programs.

### ***Tax Preparation***

Regarding G1's anticipated need for tax preparation, most G1 participants (76.47%;  $n = 13$ ) noted that tax preparation would not be needed. Only a few (17.63%;  $n = 3$ ) described that tax preparation would be of a little need to age in place. One G1 participant noted a whole lot of need for tax preparation. One participant did not respond to this question at all.

### ***Financial Planning***

Many G1 participants (76.47%;  $n = 13$ ) responded that financial planning help would not be needed to age in place. Two G1 participants (11.80%) stated that they would need a little help in financial planning, while one described some need for help. However, one G1 participant identified a whole lot of need for help in financial planning. One participant did not respond to this question.

### ***Home Health Care***

G1 participants were asked about their anticipated need related to home health care to age in place. Half of (50.00%;  $n = 8$ ) G1 participants described no need for any kind of home health care. Four (25.00%) stated that they would need a little help with home health care, while one (6.30%) anticipated some need. One G1 participant noted a lot of need for home health care, and two (12.50%) described a whole lot of need for home health care while aging in place. Two participants did not respond to this question.

### ***Homemaker Service (Help with Chores)***

Many G1 participants (58.80%;  $n = 10$ ) described no anticipated need for homemaker services (help with chores) when aging in place. Two G1 participants (11.80%) stated a little need for homemaker services. Four G1 participants (23.50%) described that they anticipated

needing some help in homemaker services. Only one participant indicated a whole lot of need for homemaker services. One participant did not answer this question.

### ***Repair Services***

The majority of G1 participants (77.80%;  $n = 14$ ) described no anticipated need for repair services to age in place. One participant stated that they would need a little help with repair services, and one anticipated some need for repair services. However, some (23.53%;  $n = 4$ ) described a lot of need for repair services.

### ***Senior Discount Programs***

G1 participants were asked about their anticipated need for senior discount programs to age in place. Many (61.11%;  $n = 11$ ) described no need for any senior discount programs. A good number of G1 participants (27.81%;  $n = 5$ ) described a little need for senior discount programs. However, two (11.11%) desired a whole lot of need for senior discount programs.

### ***Information and Referral Services***

The majority of G1 participants (64.71%;  $n = 11$ ) described no anticipated need for any referral services to age in place. Some (29.40%;  $n = 5$ ) anticipated a little need for information and referral services. However, one participant described a whole lot of need for information and referral services. One participant did not answer this question.

### ***Telephone Reassurance***

Most G1 participants (75.00%;  $n = 12$ ), given two responses missing, described no anticipated need for telephone reassurance when aging in place. Telephone reassurance refers to phone calls from a volunteer to an older adult as a way to reduce loneliness, anxiety, depression, and other consequences that may accompany living alone or being homebound. Only two

(12.50%) said they would have little need for telephone reassurance. One G1 participant reported some need for telephone reassurance. However, one G1 participant said there would be a whole lot of need for telephone reassurance.

### ***Transportation Services***

The majority of G1 participants (67.71%;  $n = 12$ ) described no need for any transportation services to age in place. Only a few participants (16.71%;  $n = 3$ ) reported a little need for transportation services. However, a similar number of older adults (16.71%;  $n = 3$ ) described a whole lot need for transportation services.

### ***Adult Day Care***

The anticipated need for adult day care was also explored among G1 participants aging in place. Many G1 participants (61.11%;  $n = 11$ ) described that adult day care would not be needed to age in place. Some G1 (22.22%;  $n = 4$ ) described a little need for adult daycare services. However, a few G1 participants (16.71%;  $n = 3$ ) described a whole lot of need for adult day care.

### ***Health Screening***

The majority of G1 participants (64.71%;  $n = 11$ ) described no anticipated need for health screening when aging in place. Two participants (11.82%) noted a little need for health screening. Similarly, two (11.82%) described some anticipated need for health screening. One G1 participant described a lot of need for health screening, whereas one noted a whole lot of need for health screening. One participant did not respond to this question.

### ***Physical Fitness/Exercise Programs***

The majority of G1 participants (58.8%;  $n = 10$ ) described no need for physical fitness/exercise programs to age in place. Many of them (35.31%;  $n = 6$ ) noted a little need for

any physical fitness/exercise programs. One G1 participant noted a whole lot of need for physical fitness/exercise programs. Only one G1 participant did not respond to the question.

### ***Support Groups***

Many of the G1 participants (66.71%;  $n = 12$ ) noted no need for support groups to age in place. Two participants (11.11%) described a little need for support groups. A similar number of G1 participants (11.11%;  $n = 2$ ) noted some need for support groups. Two G1 participants (11.11%) also noted a whole lot of need for support groups.

### ***Nutrition Counseling***

A large number of G1 participants (66.71%;  $n = 12$ ) noted no need for nutrition counseling services to age in place. Some (16.71%;  $n = 3$ ) described a little need for nutrition counseling services, while two (11.11%) noted some need for nutrition counseling services. However, one G1 participant described a whole lot of need for nutrition counseling services.

### ***Respite Care (Relief for Caregivers)***

Nearly half of G1 participants aging in place (47.06%;  $n = 8$ ) noted no need for respite care (relief for caregivers). Some G1 participants (29.4%;  $n = 5$ ) anticipated a little need for respite care. Two (11.11%) noted some need for respite care, while one G1 participant noted a whole lot of need for respite care to age in place.

### ***Senior Medicare Patrol***

Many G1 participants (64.31%;  $n = 9$ ) noted no need for senior Medicare patrol for them to age in place. Some (21.41%;  $n = 3$ ) described a little need for senior Medicare patrol. One of the G1 participants noted some need for senior Medicare patrol, whereas one described a whole lot of need.

## **Anticipated Needs for Next 5+ Years for G1 Reported by G2**

To identify the needs of G1 in aging in place in Mississippi, G2 were also asked about 17 services that may be needed for older adults to age in place in Mississippi. The needed services include (1) home-delivered meals, (2) food stamp programs, (3) tax preparation, (4) financial planning, (5) home health care, (6) homemaker services (help with chores), (7) repair services, (8) senior discount programs, (9) information and referral services, (10) telephone reassurance, (11) transportation services, (12) adult day care, (13) health screening, (14) physical fitness/exercise programs, (15) support groups, (16) nutrition counseling, and (17) respite care (relief for caregivers). Results are presented below and summarized in Table 4.3.

### ***Home-Delivered Meals***

Regarding the provision of home-delivered meals to help G1 age in place, many G2 participants (38.10%;  $n = 8$ ) anticipated no need for home-delivered meals for G1. Some G2 participants (19.04%;  $n = 4$ ) described a little need for meals delivered at home to G1. Only three participants (14.28%) described some need for home-delivered meals. Some G2 participants (14.28%;  $n = 3$ ) anticipated a lot of need for home-delivered meals. However, a similar number of G2 (14.28%;  $n = 3$ ) described a whole lot of need for home-delivered meals. One participant did not answer this question.

### ***Food Stamp Programs***

Many G2 participants (63.63%;  $n = 14$ ) described no need for food stamp programs for G1 aging in place. Only one (4.54%) noted some need for a food stamp program. However, many G2 participants (38.82%;  $n = 7$ ) described a whole lot of need for a food stamp program for G1 to age in place. As one G2 participant said, "I think with that, just say, I think she might

*need some food stamps because food is getting higher, it is getting high, and they said, well, you make too much to get food now."*

### ***Tax Preparation***

Regarding services for tax preparation to G1 aging in place, many G2 participants (59.10%;  $n = 13$ ) described no need for tax preparation services. A few G2 (13.63%;  $n = 3$ ) noted a little need for tax preparation services. One G2 participant (4.54%) described some need for tax preparation services, but another participant (4.54%;  $n = 1$ ) noted a lot of need for it. However, some G2 participants (18.18%;  $n = 4$ ) described a whole lot of need for tax preparation services.

### ***Financial Planning***

Many G2 participants (36.36%;  $n = 8$ ) noted that there was no need for financial services for G1 aging in place. Four G2 participants (18.18%) described a little need for financial planning, and a similar number of G2 (18.18%;  $n = 4$ ) anticipated G1 having some need for financial planning services. One participant noted a lot of need for financial services, whereas more G2 participants (22.72%;  $n = 5$ ) anticipated a whole lot of need for financial services for G1 to age in place. One G2 participant discussed finances as an advantage of aging in place: *"Advantages, I would say maybe it wouldn't be a financial burden, because a lot of times, when we have to go through different stuff like that, you have to pay for that. So, it wouldn't be like a financial burden on the family."*

### ***Home Health Care***

Many G2 participants (22.72%;  $n = 5$ ) described no need for home health care service for older adults aging in place. Some G2 (18.18%;  $n = 4$ ) noted that there is little need for home



health care for older adults. A similar number of G2 participants (18.18%;  $n = 4$ ) expressed some need for home health care for older adults. Two G2 participants (9.10%) noted a lot of need for home health care services for older adults. However, many G2 participants (31.81%;  $n = 7$ ) anticipated there would be a whole lot of need for home health care for G1 to age in place.

### ***Homemaker Services (Help with Chores)***

Some G2 participants (18.18%;  $n = 4$ ) described no need for homemaker services (help with chores) for G1 aging in place. Several G2 participants (27.27%;  $n = 6$ ) noted a little need for homemaker services, while two (9.09%) anticipated G1 having some need for homemaker services. Some (18.18%;  $n = 4$ ) noted a lot of need for homemaker services. Many G2 participants (27.27%;  $n = 6$ ) described a whole lot of need for homemaker services (help with chores) for G1 to age in place. One G2 participant said, *“They need people to come check on them, and basically house care, cleaning up, and cooking for them, and just taking them places sometimes.”* Another G2 participant recommended, *“meals on wheels to help them prepare so they won’t have to cook as much, and then that would’ve had more money, because sometimes older people, you’re colder, and they have to spend more money on heat and lighting, so that will help them out in different things.”*

### ***Repair Services***

Many G2 participants (36.36%;  $n = 8$ ) described no need for repair services for G1 aging in place. Two G2 participants (9.09%) noted a little need for repair services for older adults aging in place. Many G2 participants (22.72%;  $n = 5$ ) expressed some need for repair services. Three of the G2 participants (13.63%) noted a lot of need for repair services for G1 aging in place, while four (18.18%) noted a whole lot of need for repair services.

### ***Senior Discount Programs***

G2 participants noted the need for senior discount programs to allow G1 to successfully age in place. Approximately one-fourth of G2 participants (27.27%;  $n = 6$ ) described no need for senior discount programs for older adults aging in place. Several G2 (22.72%;  $n = 5$ ) noted a little need for senior discount programs for G1. Two G2 participants (9.09%) described some need or a lot of need for senior discount programs. However, nearly half of the G2 participants (40.90%;  $n = 9$ ) noted a whole lot of need for senior discount programs for G1 aging in place in Mississippi.

### ***Information and Referral Services***

Approximately one-fourth of G2 participants (27.27%;  $n = 6$ ) noted no need for information and referral services for older adults aging in place. Some (22.72%;  $n = 5$ ) described a little need for information and referral services. A small percentage of G2 participants (18.18%;  $n = 4$ ) noted some need for information and referral services. A few of G2 (13.63%;  $n = 3$ ) anticipated a lot of a need for information and referral services for G1 aging in place. However, four G2 participants (18.18%) noted a whole lot of need for information and referral services for older adults.

### ***Telephone Reassurance***

A few G2 participants (57.14%;  $n = 8$ ) reported that telephone reassurance is not needed for older adults to age in place. Some G2 participants (14.32%;  $n = 2$ ) described that telephone reassurance is of little need to them. One G2 participant (7.11%) described it as some need to age in place. Some G2 (21.42;  $n = 3$ ) noted that telephone reassurance is of a lot of need G1 to age in place. Eight older adults did not respond to this question.

### ***Transportation Services***

G2 noted the need for transportation for their G1 parents differently. A large number of G2 participants (45.52%;  $n = 10$ ) noted transportation services as no need for their older adults to age in place. Only one G2 participant (4.51%) described transportation services as a little need. A few G2 participants (13.62%;  $n = 3$ ) described transportation services as a need to some extent. One G2 participant (4.51%) noted a lot of need, while several (28.61%;  $n = 6$ ) noted transportation services for G1 as a whole lot of need for G1 to age in place.

### ***Adult Day Care***

G2 also reported on the adult day care services needed for G1 to age in place. Most of the G2 (40.91%;  $n = 9$ ) reported adult care services of least need for older adults. Many adult children (22.72%;  $n = 5$ ) anticipated that adult day care is of some need for G1 to age in place. Some G2 (13.61%;  $n = 3$ ) described a lot of need for adult day care for G1. However, many G2 participants (22.72%;  $n = 5$ ) deemed adult daycare as a whole lot of need for G1 to age in place.

### ***Health Screening***

The need for health screening for G1 to age in place was noted by G2. While some G2 participants (27.31%;  $n = 6$ ) described health screening as not needed for G1 to age in place, other G2 participants (22.71%;  $n = 5$ ) noted a little need for health screening. Two G2 participants (9.11%) anticipated some need for health screening for G1. One G2 participant noted a lot of need for health screening for older adults. However, many G2 participants (36.41%;  $n = 8$ ) described a whole lot of need for health screening for G1 aging in place.

### ***Physical Fitness/Exercise Programs***

Five G2 participants (22.71%) described physical fitness/exercise programs as services of a whole lot of need for older adults to age in place. Four G2 participants (18.21%) noted differently about physical fitness/exercise programs services some need and a lot of need. Some G2 (22.71%;  $n = 5$ ) described a little need for physical fitness/exercise programs for G1. However, some G2 (18.21%;  $n = 4$ ) anticipated a whole lot of need for physical fitness/exercise programs for G1 aging in place. One female participant from G2 described, *“I feel that they would need more of definite centers for them to come to, like this here, like recreation for them to do. I guess sometimes, sitting at home, get lazy, you know, and you don’t wanna do anything but recreation.”*

### ***Support Groups***

More than one-third of the G2 participants (36.41%;  $n = 8$ ) noted support groups were of no need for older adults to age in place. Similar numbers of G2 (13.62%;  $n = 3$ ) described a little need or some need for support groups for G1 to age in place. Four G2 participants (18.20%;  $n = 4$ ) noted a lot of need and four (18.20%) reported a whole lot of need for support groups for older adults to age in place successfully.

### ***Nutrition Counseling***

Several G2 participants (38.11%;  $n = 8$ ) noted no need for nutrition counseling services for G1 to age in place. However, some G2 participants (19.05%;  $n = 4$ ) described either a little need or some need for nutrition counseling services for older adults to age in place. A plurality of G2 (42.85%;  $n = 9$ ) anticipated a lot or a whole lot of need for nutrition counseling services for their older adults to age in place in rural Mississippi.

### ***Respite Care (Relief for Caregivers)***

Nearly one-third of G2 participants (31.82%;  $n = 7$ ) described no need for respite care (relief for caregivers) to help G1 stay in their homes to age in place. Similarly, nearly one-third of the G2 participants (31.82%;  $n = 7$ ) noted respite care as a little need or some need for older adults to age in place. However, slightly more than one-third of G2 participants (36.36%;  $n = 8$ ) anticipated respite care as a lot or a whole lot of need or the greatest need for G1 to age in place.

### **Anticipated Needs for Next 5+ Years for G1 Reported by G3**

To identify the needs for services by older adults (G1) in aging in place in Mississippi, grandchildren (G3) were also asked questions about 17 services that could be needed: (1) home-delivered meals, (2) food stamp programs, (3) tax preparation, (4) financial planning, (5) home health care, (6) homemaker services (help with chores), (7) repair services, (8) senior discount programs, (9) information and referral services, (10) telephone reassurance, (11) transportation services, (12) adult day care, (13) health screening, (14) physical fitness/exercise programs, (15) support groups, (16) nutrition counseling, and (17) respite care (relief for caregivers).

Results are presented below and summarized in Table 4.3.

### ***Home-Delivered Meals***

Many of the G3 participants (42.11%;  $n = 8$ ) noted there was no need for home-delivered meals for G1 in their families aging in place. Some of G3 (21.11%;  $n = 4$ ) described a little need for home-delivered meals for G1, while a few (15.80%;  $n = 3$ ) noted some need for home-delivered meals. One G3 participant described a lot of need for home-delivered meals for G1, while some (15.79%;  $n = 3$ ) noted a whole lot of need for home-delivered meals for G1 aging in place in Mississippi.

### ***Food Stamp Programs***

G3 participants reported on food stamp programs for G1 aging in place. Most of G3 (52.63%;  $n = 10$ ) noted food stamp programs were no need for G1. Similar numbers of G3 (10.52%;  $n = 2$ ) noted either a little or a lot need for food stamp programs for G1. One G3 participant noted some need for food stamp programs for G1 aging in place. However, several G3 (21.05%;  $n = 4$ ) described food stamp programs as a whole lot of need for G1 to age in place.

### ***Tax Preparation***

Many of the G3 participants (42.11%;  $n = 8$ ) described no need for tax preparation services for G1 aging in place. Some of G3 (21.11%;  $n = 4$ ) noted tax preparation services as a little need for G1 aging in place. One G3 participant noted some need for tax preparation services, while two (10.52%) described a lot of need for tax preparation services for G1. Similarly, some G3 participants (15.79%;  $n = 4$ ) noted tax preparation services as a whole lot of need for G1 aging in place in Mississippi.

### ***Financial Planning***

Many G3 participants (42.11%;  $n = 8$ ) noted no need for financial planning for G1 aging in place. Several G3 (15.81%;  $n = 3$ ) described a little need or some need (21.05%;  $n = 4$ ) for financial planning for G1. Only two (10.53%) G3 participants noted the need for financial planning as a whole lot of need for G1 aging in place in Mississippi.

### ***Home Health Care***

G3 reported on the need for home health care services for G1, and nearly one-third (31.58%;  $n = 6$ ) of G3 participants noted no need for home health care services. Some G3 participants (26.32%;  $n = 5$ ) noted a little or some need for home health care. Several G3

(26.32%;  $n = 5$ ) described home health care as a lot of need for G1 aging in place. There were some G3 participants (15.79%;  $n = 3$ ) who reported a whole lot of need for home health care for G1 aging in place.

### ***Homemaker Services (Help with Chores)***

Many G3 participants (36.84%;  $n = 7$ ) described no need for homemaker services (help with chores) for G1 aging in place. Some G3 participants (26.32%;  $n = 5$ ) noted homemaker services as either a little need or some need. Two G3 participants (10.53%) described a lot of need for homemaker services for G1, while one-fourth (26.32%;  $n = 5$ ) noted a whole lot of need for homemaker services (help with chores) for G1 aging in place in Mississippi. One G3 female described, *“Well I can see he got a grandkids ... he has across the street. They are there to help. If we can get down and he cannot do it what they do is to bathe him, feed him, keep the house clean, feed his pets.”*

### ***Repair Services***

Approximately one-third of G3 participants (36.84%;  $n = 7$ ) reported no need for repair services for G1 aging in place. Some G3 participants (21.10%;  $n = 4$ ) noted repair services for older adults as either a little or some need. One G3 participant noted a lot of need for repair services for G1. However, a few G3 (15.79%;  $n = 3$ ) noted a whole lot of need for repair services for G1 to age in place.

### ***Senior Discount Programs***

Several G3 participants (26.32%;  $n = 5$ ) noted no need for senior discount programs for G1 aging in place. More G3 participants (42.11%;  $n = 8$ ) described either a little or some need

for senior discount programs. However, nearly one-third of G3 participants (31.58%;  $n = 6$ ) described a lot or a whole lot of need for senior discount programs for G1 aging in place.

### ***Information and Referral Services***

Many of G3 participants (36.91%;  $n = 7$ ) noted no need for information and referral services for G1 aging in place in Mississippi. Fewer (22.21%;  $n = 4$ ) described either a little or some need for information and referral services. One G3 participant noted a lot of need for information and referral services, while two (11.11%) described a whole lot of need for information and referral services for G1 aging in place in Mississippi.

### ***Telephone Reassurance***

Nearly half of G3 (46.15%;  $n = 6$ ) noted no need for telephone reassurance for G1 aging in place. A few G3 participants (23.11%;  $n = 3$ ) described a little need for telephone reassurance for G1. The remaining G3 participants (30.77%;  $n = 4$ ) described a lot or a whole lot of need for telephone reassurance for G1 aging in place.

### ***Transportation Services***

Several G3 participants (42.11%;  $n = 8$ ) reported no need for transportation services for G1 aging in place in Mississippi. Some G3 participants (26.32%;  $n = 5$ ) described a little or some need for transportation services for G1. However, many G3 participants (31.58%;  $n = 6$ ) noted the greatest need for transportation services for G1 aging in place.

### ***Adult Day Care***

Most of G3 (57.89%;  $n = 11$ ) described no need for adult day care for G1 aging in place. Some G3 participants (15.79%;  $n = 3$ ) described a little need for adult day care for G1. Two G3 participants (10.51%) noted some need for adult day care for G1. One G3 participant described a



lot of need for adult day care, whereas two (10.52%) noted a whole lot of need for adult day care for G1 aging in place.

### ***Health Screening***

A few G3 participants (16.67%;  $n = 3$ ) described no need for health screening for G1 aging in place. One-third of G3 participants (33.33%;  $n = 6$ ) noted a little need for health screening for G1 aging in place. Many described a lot (27.78%;  $n = 5$ ) or a whole lot (22.22%;  $n = 4$ ) of need for health screening services for G1 aging in place in Mississippi.

### ***Physical Fitness/Exercise Programs***

G3 participants were asked about the need for physical fitness/exercise programs for G1 aging in place. A few of them (16.67%;  $n = 3$ ) described no need for physical fitness/exercise programs for G1 aging in place. Several G3 (38.89%;  $n = 7$ ) described a little need for physical fitness/exercise programs for G1. Two G3 participants (11.12%) noted some need for physical fitness/exercise programs for older adults. The same number of G3 participants (11.12%;  $n = 2$ ) described a lot of need for physical fitness/exercise programs for older adults. However, less than one-fourth of G3 participants (22.22%;  $n = 4$ ) noted a whole lot of need for physical fitness/exercise programs for G1 aging in place in Mississippi.

### ***Support Groups***

A plurality of G3 (47.41%;  $n = 9$ ) noted that there would be no need for support groups for G1 aging in place. A few G3 participants (15.81%;  $n = 3$ ) described a little need for support groups to age in place. Two (10.51%) noted some need for support groups for G1 to age in place in Mississippi. One G3 participant noted a lot of need for support groups for G1 aging in place.

Some of the G3 participants (21.11%;  $n = 4$ ) described a whole lot of need for support services for G1 to age in place in Mississippi.

### *Nutrition Counseling*

Many G3 participants (38.90%;  $n = 7$ ) noted no need for nutrition counseling for G1 to age in place. A few G3 (16.71%;  $n = 3$ ) described a little need for nutrition counseling for G1. Two G3 participants (11.12%) noted some need for nutrition counseling for G1. One G3 participant noted a lot of need, while several (27.81%;  $n = 5$ ) described a whole lot of need for nutrition counseling for G1 to age in place in Mississippi.

### *Respite Care (Relief for Caregivers)*

Many G3 participants (42.11%;  $n = 8$ ) noted no need for respite care for G1 to age in place. A few G3 participants (15.81%;  $n = 3$ ) noted a little need for respite care to age in place. The same number (15.81%;  $n = 3$ ) described a lot of need for respite care. Approximately one-fourth (26.32%;  $n = 5$ ) noted a whole lot of need for respite care for G1 to age in place in Mississippi.

Table 4.3 Anticipated Services Needed for G1 to Age in Place in the Next 5+ Years.

Services	G1		G2		G3	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Home-delivered meals	3/15	20.00%	13/21	61.90%	11/19	57.89%
Food stamp programs	3/15	20.00%	8/22	36.36%	9/19	47.37%
Tax Preparation	4/17	23.53%	9/22	40.91%	10/19	52.63%
Financial planning	4/17	23.53%	14/22	63.64%	11/19	57.89%
Home health care	8/16	50.00%	17/22	77.27%	13/19	68.42%
Homemaker services (help with chores)	7/17	41.18%	16/22	72.73%	12/19	63.16%
Repair services	4/18	22.22%	14/22	63.64%	12/19	63.16%
Senior discount programs	7/18	38.89%	16/22	72.73%	14/19	73.68%
Information & referral services	6/17	35.29%	16/22	72.73%	11/18	61.11%
Telephone reassurance	4/16	25.00%	6/14	42.86%	7/13	53.84%
Transportation services	6/18	33.33%	11/21	52.38%	11/19	57.89%
Adult daycare	7/18	38.89%	14/22	63.64%	11/19	42.11%

Table 4.3 (continued)

Services	G1		G2		G3	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Health screening	6/17	35.29%	16/22	72.73%	15/19	78.95%
Exercise programs/ physical fitness	7/17	41.18%	18/22	81.82%	15/18	83.33%
Support groups	6/18	33.33%	14/22	63.64%	10/19	52.63%
Nutrition counseling	6/18	33.33%	13/21	61.90%	11/18	61.11%
Respite care	9/17	52.94%	15/22	68.18%	11/19	57.89%
Senior Medicare Patrol	5/14	35.71%	-	-	-	-

Note.  $N = 49$ , Responses on a five-point scale of 1 = not at all, 2 = a little, 3 = some, 4 = a lot, 5 = a whole lot. Data in the table only shows a little to a whole lot of responses.

## CHAPTER V

### CONCLUSION

This study aimed to understand what the current and anticipated needs and services during late adulthood are for rural families aging in place in Mississippi. This study is novel in that it assessed the current and anticipated needs and services from three generations' perspectives via quantitative and qualitative approaches. Obtaining perspectives from multiple generations involved in the caregiving of older adults is critical to understanding how best to support the growing aging population in America.

Overall, results suggest physical and mental health concerns were common concerns for all three generations. Most older adults in this study endorsed physical health as a current concern. This finding is consistent with the literature and aging theories (Weinert & Timiras, 2003), which postulate a decline in health due to evolutionary, molecular, cellular, and system-based mechanisms. Physical health concerns were also anticipated to become more pressing concerns for the generations in the next 5 years. In addition to reduced physical health, many G1 participants were currently concerned with being able to afford medications, which was also noted by more than 50% of G2 and G3 when asked about concerns in the next 5+ years. While older adults are eligible for Medicare, it does not cover all medical costs and not everyone is eligible for premium free Part A. According to the AARP, 1 in 5 adults of Medicare age paid more than \$2,000 out of pocket to cover their health care costs in 2021. Additionally, Medicare does not cover all prescription drugs, another noted concern across the generations. Taken

together, these data suggest that the declining physical health of older adults and the associated costs of care and medications are concerns that families need to plan for, and the government needs to consider more fully as costs of healthcare continues to rise (Coulter et al., 2019).

Out of the 11 different areas of current concerns, boredom was the second most endorsed concern of older adults, although it was only a major concern for one participant. Boredom is associated with reduced cognitive functioning in older age, as well as depression (Conroy et al., 2010), the latter of which was endorsed by almost half of the G1 participants as a current concern. While boredom was not an area assessed in the survey that the younger two generations completed, boredom and loneliness were noted during the interviews. For instance, family members suggested that communities needed additional places for older adults to go during the day to be entertained, physically active, and engage in social interactions. Finding ways to engage older adults in activities, both social and physical, is an area for communities to focus resources to reduce faster declines in mental health, the latter of which was a concern noted by all generations.

Almost all of G2 participants and more than half of G3 participants reported concerns about older adults living independently. G1 participants may not recognize the dangers of living independently, which can lead to family conflict. Families should try to discuss the signs that living independently may not be the safest route. For example, falling is one of the major risk factors to older adults living alone. When older adults have lost flexibility, have weakened muscles, experience balance problems, are slower to react, and experience brittle bones, conversations about the next step need to be considered. While that is the case, it is important for families to remember that barriers to independent living are unique to individual situations

(DiGennaro Reed et al., 2014), highlighting the need for early planning and good family communication as families prepare to care for the older generations.

Financial concerns were rarely reported by G1 individuals, but these concerns received a lot of attention from the two younger generations. Affording basics like food was noted as a concern for about half of the participants in G2 and G3. However, financial concerns related to healthcare and medication were endorsed by 47%-73% of family members. These findings highlight the issue of rising healthcare costs (Coulter et al., 2019) and suggest that families may struggle to meet the medical needs of older adults. Additionally, these concerns also point to policy gaps in caring for older adults.

Responses of G2 and G3 participants aligned more often than either generation did with G1. For example, telephone reassurance for older adults was reported as a need by only one-fourth of G1 participants (25.00%), almost half of G2 participants (42.86%), and more than 60% of G3. There was a gradual increase in the percentage perceiving a need for telephone reassurance across the generations. The percentage may be higher among G2 and G3 because of higher rates of smartphone ownership; 95% of 18–49-year-olds own a smartphone compared to 61% of those age 65 and older (Laricchia, 2023). Other generational differences in concerns were noted in regard to driving. Specifically, older adults driving was noted by 14 participants in both G2 and G3 as a concern, whereas only 7 of G1 participants reported this as a concern. Similarly, not having transportation was noted by almost 50% of G2 and G3 participants, but only 17% of G1 participants. While consistency between G2 and G3 were noted often, some differences also existed. For example, living independently was noted as a concern by almost 40% of G1, 86% of G2 and 63% of G3. Additionally, G2 noted more concerns than any other generation, with the highest percentage of all generations in 8 of the 10 concerns. These

variations in responses suggest that obtaining concerns from multiple generations are important if we want to support families while they support their aging in place family member(s).

According to intergenerational solidarity theory (Bengtson & Roberts, 1991), family members help older adults because of familial commitment to family roles and responsibilities. Middle-aged family members, often called the sandwich generation, may feel the most commitment to care for their aging parents, while balancing the demands of a younger generation and work. Consistent with the literature on the sandwich generation (DeRigne & Ferrante, 2012), results from this study indicate that G2 participants reported more concerns than the other two generations, most likely due to their involvement in the day-to-day caregiving of the older adult while still feeling the strain of managing their children, home, and work. Given that adult children are often tasked with most of the caregiving and work responsibilities in the family, particularly women (Parker & Patten, 2013), research finds that this generation is at risk for mental health problems, including stress, depression, and anxiety (DeRigne & Ferrante, 2012). Caregiver depression is noted as a “silent health crisis,” with estimates indicating that 20% of family caregivers suffer from depression (Family Caregiver Alliance, 2002). To support healthy aging in place, communities and governments may need to consider ways to relieve stress for this generation.

One of the services noted by the two younger generations, particularly that of G2, was respite care. Respite care services are not usually covered by insurance plans but are covered by Medicare for up to 5 days if the care occurs in a hospital or skilled nursing facility. However, availability of those services may be scant in rural areas such as Mississippi, limiting opportunities for the caregiving generations to have relief from the stress often associated with day-to-day caregiving. Communities in rural areas may need to find ways to attract these

services to the area and to ensure that citizens can afford the associated costs of the services. Also, making families aware of resources available to them such as the MS Access to Care Network or the Mississippi Family Caregiver Coalition, may help provide options in more populated areas of the state.

Regarding services that families felt would be needed, the majority of each generation endorsed the need for home health care services to assist G1 with successfully aging in place. Considering the rural nature of the sample in this study (Hash et al., 2015) and the associated reduced access to medical services in Mississippi, this finding is not a surprise. Additionally, as older adults age, their health deteriorates, requiring more skilled caregiving that family members may not feel competent to administer alone. This might also explain in part the finding that adult day cares were a needed service, particularly from the perspective of G2 participants. Family members may be concerned about leaving old adults alone during the day while they are at work. Having a place where older adults can “hang out” with others and get out of the house while also being cared for may be appealing to family, especially if the day care is affordable.

The need for services that address everyday chores such as cooking, laundry, cleaning, and yard work was noted by most G2 and G3 participants but less than half of G1 participants. Similarly, repair services were also mentioned by more than half of G2 and G3 family members. The higher number of family members in the latter two generations endorsing these items could be due to the younger generations feeling added pressure of performing these daily tasks, which may be a source of stress for them if they are also balancing school/work, children, and/or care of their home. Older adults may be less likely than the other two generations to endorse this needed service due to perceptions that they can still maintain at least some of these tasks on their own (e.g., making a sandwich) or because they are satisfied with the current arrangement. Given



that stress of caregivers is common (Dwyer et al., 1994) communities can use this information to help find ways to assist families with an older adult aging in place. For example, communities could address the need for services by encouraging and incentivizing businesses in housekeeping, laundering services, repair/maintenance, and landscaping.

Another service particularly important to G2 participants revolves around information and referral services. Being familiar with amenities and resources in the community is key to successful aging in place. One way that communities, especially in rural areas (RHHub, 2023), can ensure families have access to the information is to create wraparound programs and/or the integration of physical and behavioral health services that help coordinate services for older adults. Models such as the Program of All-Inclusive Care for the Elderly (PACE) are available to residents of many communities in Mississippi. PACE is an innovative model that provides a range of integrated preventative, acute care, and long-term care services to manage the often complex medical, functional, and social needs of the frail elderly. It was created to provide clients, family, caregivers, and professional healthcare providers the flexibility to meet a person's health care needs while continuing to live safely in the community.

### **Limitations**

Although this research adds to the body of empirical knowledge, there are some notable limitations too. The data collected from three generations could not be compared at a specific familial level. The small number of participants made inferential analyses impossible; thus, limited options for statistics were available. Lastly, the response scales on the questionnaire only had clear descriptions for the two outer endpoints which included terms of “greatest” and “least.” Those terms imply ranking, but participants were not asked to rank concerns or needs across the full list of items; instead, they were asked to indicate greatest or least concerns or

needs within an item. This made analysis challenging; thus, the qualitative markers were adjusted for analysis and reporting purposes.

### **Recommendations for Future Research**

Future research on intergenerational relationships may enhance understanding of social scientists on how ambivalence impacts intergenerational relationships among three generations in the same families affected by aging in place. Further, any research conducted on more than three generations in multigenerational context may help social scientists understand dynamics of intergenerational relationships among families of older adults aging in place with limited resources and amenities. Research on both rural and urban samples may provide insights into how multigenerational families traverse through needs and services to hamper/enhance intergenerational relationships that change in the face of rural and urban context. Extending the sample using predetermined classification rather than depending on snowballing and convenient sampling could provide a wider variety of experiences. Lastly, the research should be repeated using a more diverse population, including all ethnic groups and cultures.

### **Summary and Implications**

While aging is an inescapable phenomenon, aging in place may buffer against age-related decline. These findings build on the limited knowledge regarding aging in place in rural, impoverished communities. Data from this study indicates that for families aging in place, top concerns revolve around physical and mental health issues and supports, whether that be access to or costs of medical care. The findings have implications for families, community leaders, non-profit organizations, and for-profit businesses, as well as local, state, and federal governmental agencies. Families can familiarize themselves with information and resources available to them

in the local community or within the state. Communities can find ways to incentivize businesses that fill some of the gaps in care such as lawn or home health services. Policies need to be re-evaluated regarding affordability of healthcare and governments can work to make citizens aware of models such as PACE that can provide integrative and wraparound services. While some concerns are consistently noted across three generations of family members, G2 and G3 responses regarding their concerns were more aligned than either of the two younger generations and G1, highlighting the need to evaluate multiple family members' perspectives on what they need to successfully age in place.

## REFERENCES

- Abud, T., Kounidas, G., Martin, K. R., Werth, M., Cooper, K., & Myint, P. K. (2022). Determinants of healthy ageing: A systematic review of contemporary literature. *Ageing Clinical and Experimental Research*, 34(6), 1215–1223.
- Administration for Community Living. (2020a). *2019 profile of older Americans*. U.S. Department of Health and Human Services. <https://acl.gov/sites/default/files/Aging%20and%20Disability%20in%20America/2019ProfileOlderAmericans508.pdf>
- Administration for Community Living. (2020b). *Costs of care*. LongTermCare.gov. <https://acl.gov/ltc/costs-and-who-pays/costs-of-care>
- Alzheimer's Association. (2019). 2019 Alzheimer's disease facts and figures. *Alzheimer's & Dementia*, 15(3), 321–387.
- Arias, E. (2011). United States life tables. *National Vital Statistics Report* (Vol 59). Centers for Disease Control and Prevention. [http://www.cdc.gov/nchs/data/nvsr/nvsr59/nvsr59\\_09.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr59/nvsr59_09.pdf)
- Arias, E., Tejada-Vera, B., Kochanek, K. D., & Ahmad, F. B. (2022, August). Provisional life expectancy estimates for 2021. *Vital Statistics Rapid Release* (No. 23). National Center for Health Statistics. <https://dx.doi.org/10.15620/cdc:118999>
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469–480. <https://doi.org/10.1037//0003-066X.55.5.469>
- Atkinson, R. (2015). Losing one's place: Narratives of neighbourhood change, market injustice and symbolic displacement. *Housing, Theory & Society*, 32(4), 373–388.
- Baltes, P. B., & Baltes, M. M. (1993). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1–34). Cambridge University Press.
- Benavent-Caballer, V., Rosado-Calatayud, P., Segura-Ortí, E., Amer-Cuenca, J. J., & Lisón, J. F. (2014). Effects of three different low-intensity exercise interventions on physical performance, muscle CSA and activities of daily living: A randomized controlled trial. *Experimental Gerontology*, 58, 159–165.

- Bengtson, V. L., & Roberts, R. E. L. (1991). Intergenerational solidarity in aging families: An example of formal theory construction. *Journal of Marriage and the Family*, *53*, 856–870.
- Birditt, K. S., & Fingerman K. L. (2012). Parent/child and intergenerational relationships across adulthood. In M. A. Fine & F. D. Fincham (Eds.), *Family theories: A content-based approach* (p. 71–86). Routledge.
- Bishop, N. A., Lu, T., & Yankner, B. A. (2010). Neural mechanisms of aging and cognitive decline. *Nature*, *464*, 529–535.
- Bobinac, A., van Exel, N. J. A., Rutten, F. F. H., Brouwer, W. B. F. (2010). Caring for and caring about: Disentangling the caregiver effect and the family effect. *Journal of Health Economics*, *29*, 549–556.
- Bowen, M. (1978). *Family therapy in clinical practice*. Jason Aronson.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.
- Broderick, C. B. (1993). *Understanding family process: Basics of family systems theory*. Sage Publications.
- Broek, T., & Dykstra, P. A. (2017). The impact of siblings on the geographic distance between adult children and their ageing parents. Does parental need matter? *Population Space & Place*, *23*(6). <https://doi.org/10.1002/psp.2048>
- Brown, J., Bowling, A., & Flynn, T. (2004). *Models of quality of life: A taxonomy, overview and systematic review of literature*. Report commissioned by European Forum on Population Ageing Research/Quality of Life [Internet]. University of Sheffield. <http://eprints.kingston.ac.uk/id/eprint/17177>
- Carreira, H., Williams, R., Strongman, H., & Bhaskaran, K. (2019). Identification of mental health and quality of life outcomes in primary care databases in the UK: A systematic review. *BMJ Open*, *9*(7), e029227.
- Carstensen, L. L. (1992). Social and emotional patterns in adulthood: Support for socioemotional selectivity theory. *Psychology of Aging*, *7*(3), 331–338.
- Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science*, *312*(5782), 1913–1915. <https://doi.org/10.1126/science.1127488>
- Casey, D. A. (2012). Depression in the elderly. *Asia-Pacific Psychiatry*, *4*, 160–167. <https://doi.org/10.1111/j.1758-5872.2012.00191.x>

- Castro, V. L., & Isaacowitz, D. M. (2019). Aging and the social ecology of everyday interpersonal perception: What is perceived, in whom, and where? *Journals of Gerontology Series B: Psychological Sciences & Social Sciences*, 74(6), 988–998. <https://doi.org/10.1093/geronb/gbx159>
- Centers for Disease Control and Prevention. (2009). *Healthy places terminology*. [http://www.cdc.gov/healthy\\_places/terminolgy.htm](http://www.cdc.gov/healthy_places/terminolgy.htm)
- Centers for Disease Control and Prevention. (2014). *Long-term care providers and services users in the United States: Data from the national study of long-term care providers, 2013–2014*. [http://www.cdc.gov/nchs/data/series/sr\\_03/sr03\\_038.pdf](http://www.cdc.gov/nchs/data/series/sr_03/sr03_038.pdf).
- Charles, S. T., & Carstensen, L. L. (2010). Social and emotional aging. *Annual Review of Psychology*, 61, 383-409.
- Chen, L., & Zhang, Z. (2022). Community participation and subjective well-being of older adults: The roles of sense of community and neuroticism. *International Journal of Environmental Research and Public Health*, 19(6), 3261. <https://doi.org/10.3390/ijerph19063261>
- Cho, J., Ory, M. G., & Stevens, A. B. (2016). Socioecological factors and positive aspects of caregiving: Findings from the REACH II intervention. *Aging & Mental Health*, 11, 1190.
- Cohen, P. N., & Casper, L. M. (2002). In whose home? Multigenerational families in the United States, 1998–2000. *Sociological Perspectives*, 45(1), 1–20. <https://doi.org/10.1525/sop.2002.45.1.1>
- Colby, S., & Ortman, J. M. (2014). *The baby boom cohort in the United States: 2012 to 2060* (P25-1141). U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.
- Conroy, R. M., Golden, J., Jeffares, I., O’Neil, D., & McGee, H. (2010). Boredom-proneness, loneliness, social engagement and depression and their association with cognitive function in older people: A population study. *Psychology, Health & Medicine*, 15, 463-473. <https://doi.org/10.1080/13548506.2010.487103>
- Coulter, I.D., Herman, P. M., Ryan, G. W., Hilton, L. J., Hays, R. D., & CERC team (2019). The challenge of determining appropriate care in the era of patient-centered care and rising health care costs. *Journal of Health Services Research & Policy*, 24, 201-206. <https://doi.org/10.1177/1355819618815521>
- Creswell, J. W., Plano Clark, V. L., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209–240). Sage Publications.
- Crews, D. E. (2022). Aging, frailty, and design of built environments. *Journal of Physiological Anthropology*, 41, 2. <https://doi.org/10.1186/s40101-021-00274-w>

- Crimmins, E. M. (2015). Lifespan and healthspan: Past, present, and promise. *The Gerontologist*, 55(6), 901–911.
- da Costa, J. P., Vitorino, R., Silva, G. M., Vogel, C., Duarte, A. C., & Rocha-Santos, T. (2016). A synopsis on aging—Theories, mechanisms and future prospects. *Ageing Research Reviews*, 29, 90–112.
- Davidson, M. (2009). Displacement, space and dwelling: Placing gentrification debate. *Ethics, Place and Environment*, 12(2), 219–234.
- Davis, M. R. (2021). *Despite the pandemic, the percentage of older adults who want to age in place stays steady*. AARP. <https://www.aarp.org/home-family/your-home/info-2021/home-and-community-preferences-survey.html>
- De Jong Gierveld, J., & Van Tilburg, T. (1999). Living arrangements of older adults in the Netherlands and Italy: Coresidence values and behaviour and their consequences for loneliness. *Journal of Cross-Cultural Gerontology*, 14, 1–24.
- Denzin, N. K. (1970). *The research act in sociology: A theoretical introduction to sociological methods*. Butterworths.
- DeRigne, L & Ferrante, S. (2012). The sandwich generation: A review of the literature. *Florida Public Health Review*, 9(12), 95-104.
- Diehl, M. K., & Wahl, H.-W. (2010). Awareness of age-related change: Examination of a (mostly) unexplored concept. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 65(3), 340–350.
- DiGennaro Reed, F. D., Strouse, M. C., Jenkins, S. R., Price, J., Henley, A. J., & Hirst, J. M. (2014). Barriers to independent living for individuals with disabilities and seniors. *Behavior Analysis in Practice*, 7, 70–77. <https://doi.org/10.1007/s40617-014-0011-6>
- Diggs, J. (2008). The cross-linkage theory of aging. In S. J. Loue & M. Sajatovic (Eds.), *Encyclopedia of aging and public health*. Springer.
- Donorfio, L. M., & Sheehan, N. W. (2001). Relationship dynamics between aging mothers and caregiving daughters: Filial expectations and responsibilities. *Journal of Adult Development*, 8(1), 39–49.
- Dudley, D. (2019). Why we should care about rural aging. *Generations*, 43(2), 294–298.
- Dunn, T. A., & Phillips, J. W. (1998). *Intergenerational co-residence and children's incomes* (Mimeo). Maxwell Center for Demography and Economics of Aging.
- Dwyer, J. W., Lee, G. R., & Jankowski, T. B. (1994). Reciprocity, elder satisfaction, and caregiver stress and burden: The exchange of aid in the family caregiving relationship. *Journal of Marriage and Family*, 56, 35–43.

- Economic Research Service. (2019). *What is rural?* U.S. Department of Agriculture. <https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/what-is-rural/>
- Epps, F., Weeks, G., Graham, E., & Luster, D. (2018). Challenges to aging in place for African American older adults living with dementia and their families. *Geriatric Nursing, 39*(6), 646–652.
- Evans, R. J. (2009). A comparison of rural and urban older adults in Iowa on specific markers of successful aging. *Journal of Gerontological Social Work, 52*(4), 423–438. <https://doi.org/10.1080/01634370802609197>
- Family Caregiver Alliance. (2002). Caregiver depression: A silent health crisis. <https://www.caregiver.org/resource/caregiver-depression-silent-health-crisis/>
- Federal Commission on Long-Term Care. (2013, September 18). *Federal commission on long-term care: Report to Congress*. U.S. Congress.
- Fielding, N. G., & Fielding, J. L. (1986). *Linking data*. Sage Publications.
- Fingerman, K. L. (2001). *Aging mothers and their adult daughters: A study in mixed emotions*. Springer.
- Fingerman, K. L., Cheng, Y. P., Birditt, K., & Zarit, S. (2012). Only as happy as the least happy child: Multiple grown children's problems and successes and middle-aged parents' well-being. *Journals of Gerontology: Social Sciences, 67*(2), 184–193.
- Fingerman, K. L., Pillemer, K. A., Silverstein, M., & Suiitor, J. J. (2012). The baby boomers' intergenerational relationships. *Gerontologist, 52*(2), 199–209.
- Fox, K. R., Stathi, A., McKenna, J., & Davis, M. G. (2007). Physical activity and mental well-being in older people participating in the Better Ageing Project. *European Journal of Applied Physiology, 100*(5), 591–602. <https://doi.org/10.1007/s00421-007-0392-0>
- Frey, B., & Stutzer, A. (2002). The economics of happiness. *World Economics-Henley on Thames, 3*(1), 25–42.
- Friedman, E. M., Shih, R. A., Langa, K. M., & Hurd, M. D. (2015). US prevalence and predictors of informal caregiving for dementia. *Health Affairs, 34*(10), 1637–1641. <http://doi.org/10.1377/hlthaff.2015.0510>
- Fullilove, M. T. (2004). *Root shock: How tearing up city neighborhoods hurts America, and what we can do about it*. One World/Ballantine Books.
- Gibbons, S. W., Ross, A., & Bevans, M. (2014). Liminality as a conceptual frame for understanding the family caregiving rite of passage: An integrative review. *Research in Nursing and Health, 37*(5), 423–436.



- Grodal, S., Anteby, M., & Holm, A. (2021). Achieving rigor in qualitative analysis: The role of active categorization in theory building, *Academy of Management Review*, 46(3), 591–612.
- Gu, J., Strauss, C., Bond, R., & Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A systematic review and meta analysis of mediation studies. *Clinical Psychology Review*, 37, 1–12. <https://doi.org/10.1016/j.cpr.2015.01.006>
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology*, 29, 75–91. <https://doi.org/10.1007/BF02766777>
- Haldane, J. B. S. (1941). *New paths in genetics*. George Allen & Unwin.
- Hank, K. (2007). Proximity and contacts between older parents and their children: A European comparison. *Journal of Marriage and Family*, 69, 157–173.
- Hash, K. M., Jurkowski, E. T., & Krout, J. A. (2015). Conclusions and future directions. In K. M. Hash, E. T. Jurkowski, & J. A. Krout (Eds.), *Aging in rural places: Policies, programs, and professional practice* (p. 283–296). Springer.
- Hayflick, L. (1965). The limited in vitro lifetime of human diploid cell strains. *Experimental Cell Research*, 37(3), 614–636.
- Heinrich, A., Gagne, J. P., Viljanen, A., Levy, D. A., Ben-David, B. M., & Schneider, B. A. (2016). Effective communication as a fundamental aspect of active aging and well-being: paying attention to the challenges older adults face in noisy environments. *Social Inquiry into Well-Being*, 2(1).
- Hooyman, N., & Kiyak, H. A. (2010). Aging in other countries and across cultures in the United States. *Social Gerontology*, 9, 43–64.
- Huxhold, O., & Fiori, K. L. (2019). Do demographic changes jeopardize social integration among aging adults living in rural regions? *Journals of Gerontology: Psychological Sciences*, 74(6), 954–963. <https://doi.org/10.1093/geronb/gby008>
- James, B. D., Power, M. C., Gianattasio, K. Z., Lamar, M., Oveisgharan, S., Shah, R. C., Marquez, D. X., Barnes, L. L., & Bennett, D. A. (2020). Characterizing clinical misdiagnosis of dementia using Medicare claims records linked to Rush Alzheimer's Disease Center (RADDC) cohort study data. *Alzheimer's & Dementia*, 16, e044880. <https://doi.org/10.1002/alz.044880>
- Jin, K. (2010). Modern biological theories of aging. *Aging and Disease*, 1(2), 72.
- Keating, N. C., & Phillips, J. (2008). A critical human ecology perspective on rural ageing. In N. C. Keating (Ed.), *Rural ageing: A good place to grow old?* Policy Press.

- Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 243(6), 207–222.
- Kontis, V., Bennett, J. E., Mathers, C. D., Li, G., Foreman, K., & Ezzati, M. (2017). Future life expectancy in 35 industrialised countries: projections with a Bayesian model ensemble. *The Lancet*, 389(10076), 1323–1335.
- Koropecj-Cox, T. (2002). Beyond parental status: Psychological well-being in middle and old age. *Journal of Marriage and Family*, 64, 957–971.
- Kotlikoff, L., & Morris, J. (1990). Why don't the elderly live with their children? A new look. In D. Wise (Ed.), *Issues in the economics of aging* (pp. 149–169). University of Chicago Press.
- Laricchia, F. (2023, March 24). Share of adults in the United States who owned a smartphone from 2015 to 2021, by age group. Statista. <https://www.statista.com/statistics/489255/percentage-of-us-smartphone-owners-by-age-group/>
- Lawton, M. P., & Nahemow, L. (1973). Ecology and the aging process. In C. Eisdorfer & M. P. Lawton (Eds.), *The psychology of adult development and aging* (pp. 619–674). American Psychological Association.
- Lee, C. J. G. (2012). Reconsidering constructivism in qualitative research. *Educational Philosophy & Theory*, 44(4), 403–412. <https://doi.org/10.1111/j.1469-5812.2010.00720>
- LeRoy, L., Treanor, K., & Art, E. (2010). Foundation work in long-term care. *Health Affairs*, 29(1), 207–211. <https://doi.org/10.1377/hlthaff.2009.0783>
- Leviton, R. (2002). Reverse mortgage decision-making. *Journal of Aging & Social Policy*, 13(4), 1–16.
- Link, G. (2015). The Administration for Community Living: Programs and initiatives providing family caregiver support *Generations*, 39(4), 57–63.
- Maas, M. L., Reed, D., Park, M., Specht, J. P., Schutte D., & Kelley, L. S., Swanson, E. A., Trip-Reimer, T., & Buckwalte, K. C. (2004). Outcomes of family involvement in care intervention for caregivers of individuals with dementia. *Nursing Research*, 53(2), 76–86.
- Mancini, J. A., & Blieszner, R. (1989). Aging parents and adult children: Research themes in intergenerational relations. *Journal of Marriage and Family*, 51, 275–290.
- Merchant, R. A., Morley, J. E., & Izquierdo, M. (2021). Exercise, aging, and frailty: Guidelines for increasing function. *Journal of Nutrition, Health, and Aging*, 25, 405–409.
- Mordarska, K., & Godziejewska-Zawada, M. (2017). Diabetes in the elderly. *Menopause Review/Przegląd Menopauzalny*, 16(2), 38–43.

- Morgan, D. L. (1998). Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research*, 8, 362–376.
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research*, 40(2), 120–123.
- National Alliance for Caregiving. (2015). *Caregiving in the U.S.: 2015*. <https://www.caregiving.org/caregiving2015>
- National Institute on Aging. (2017). *Aging in place: Growing older at home*. National Institutes of Health. <https://www.nia.nih.gov/health/aging-place-growing-older-home>
- Newman, M. G., & Zainal, N. H. (2020). The value of maintaining social connections for mental health in older people. *The Lancet Public Health*, 5(1), e12–e13.
- Ostir, G. V., Markides, K. S., Black, S. A. & Goodwin, J. S. (2000). Emotional well-being predicts subsequent functional independence and survival. *Journal of the American Geriatrics Society*, 48(5), 473–478. <https://doi.org/10.1111/j.1532-5415.2000.tb04991.x>
- Parker, K. & Patten, E. (2013). The sandwich generation: Rising financial burdens of middle-aged Americans. <https://www.pewresearch.org/socail-trends/2013/01/30/the-sandwich-generation/>
- Pidgeon, A. M., & Keye, M. (2014). Relationship between resilience, mindfulness, and psychological well-being in university students. *International Journal of Liberal Arts and Social Science*, 2(5), 27–32.
- Plassman, B. L., Langa, K. M., Fisher, G. G., Heeringa, S. G., Weir, D. R., Ofstedal, M. B., Burke, J. R., Hurd, M. D., Potter, G. G., Rodgers, W. L., Steffens, D. C., Willis, R. J., & Wallace, R. B. (2007). Prevalence of dementia in the United States: The aging, demographics, and memory study. *Neuroepidemiology*, 29(1-2), 125–132. <https://doi.org/10.1159/000109998>
- Rabinovici, G. D., Karlawish, J., Knopman, D., Snyder, H. M., Sperling, R., & Carrillo, M. C. (2016). Testing and disclosures related to amyloid imaging and Alzheimer's disease: Common questions and fact sheet summary. *Alzheimer's & Dementia*, 12(4), 510–515.
- Ratnayake, M., Lukas, S., Brathwaite, S., Neave, J., & Henry, H. (2022). Aging in place: Are we prepared? *Delaware Journal of Public Health*, 8(3), 28–31. <https://doi.org/10.32481/djph.2022.08.007>
- RHIhub. (2023). *Rural health information hub*. <https://www.ruralhealthinfo.org/>
- Riley, M. W., & Riley, J. W., Jr. (1994). Age integration and the lives of older people. *The Gerontologist*, 34(1), 110–115.

- Rowles, G. D. (2017). Being in place: Identity and place attachment in late life. In *Geographical Gerontology* (pp. 203–215). Routledge.
- Ryff, C. D., Lee, Y. H., Essex, M. J., & Schmutte, P. S. (1994). My children and me: Midlife evaluations of grown children and of self. *Psychology and Aging, 9*, 195–205.
- Sarabia-Cobo, C. (2015). Heart coherence: A new tool in the management of stress on professionals and family caregivers of patients with dementia. *Applied Psychophysiology & Biofeedback, 40*(2), 75–83.
- Sarasa, S., & Billingsley, S. (2008). Personal and household care giving for adult children to parents and social stratification. *Families, Ageing and Social Policy: Intergenerational Solidarity in European Welfare States, 123*.
- Sattaur, Z., Lashley, L., & Golden, C. J. (2020). Wear and tear theory of aging. In R. Summers, C. Golden, L. Lashley, & E. Ailes (Eds.), *Essays in developmental psychology*. <https://www.assessmentpsychologyboard.org/edp/>
- Saxon, S. V., Etten, M. J., & Perkins, E. A. (2021). *Physical change and aging: A guide for helping professions*. Springer.
- SCAN Foundation. (2012). *Growing demand for long-term care in the U.S.*
- Schnettler, B., Denegri, M., Miranda, H., Sepúlveda, J., Orellana, L., Paiva, G., & Grunert, K. (2015). Family support and subjective well-being: An exploratory study of university students in southern Chile. *Social Indicators Research, 122*(3), 833–864. <https://doi.org/10.1007/s11205-014-0718-3>
- Silverstein, M., & Bengtson, V. L. (1991). Do close parent-child relationships reduce the mortality risk of older parents? *Journal of Health and Social Behavior, 32*, 382–395.
- Silverstein, M., Bengtson, V. L., & Lawton, L. (1997). Intergenerational solidarity and the structure of adult child-parent relationships in American families. *American Journal of Sociology, 103*, 429–460. <https://doi.org/10.1086/231213>
- Silverstein, M., Conroy, S., Wang, H., Giarrusso, R., & Bengtson, V. L. (2002). Reciprocity in parent-child relations over the adult life course. *Journal of Gerontology: Social Sciences, 57*, S3–S13. <https://doi.org/10.1093/geronb/57.1.S3>
- Silverstein, M., Gans, D., & Yang, F. M. (2006). Intergenerational support to aging parents: The role of norms and needs. *Journal of Family Issues, 27*(8), 1068–1084. <https://doi.org/10.1177/0192513X06288120>
- Silverstein, M., & Long, J. D. (1998). Trajectories of grandparents' perceived solidarity with adult grandchildren: A growth curve analysis over 23 years. *Journal of Marriage and the Family, 60*, 912–923.

- Smith, R. C., Turner, J. J., Grice, S. M., & Parisi, D. M. (2011). *2011 older adult needs assessment*. Mississippi Department of Human Services Division of Aging and Adult Services.
- Solhaug, H. I., Romuld, E. B., Romild, U., & Stordal, E. (2012). Increased prevalence of depression in cohorts of the elderly: An 11-year follow-up in the general population—the HUNT study. *International Psychogeriatrics*, *24*(1), 151–158.
- Spitzer, W. O. (1987). State of science 1986: Quality of life and functional status as target variables for research. *Journal of Chronic Diseases*, *40*(6), 465–471.
- Step toe, A., Demakakos, P., & de Oliveira, C. (2012). The psychological well-being, health, and functioning of older people in England. In J. Banks, J. Nazroo, & A. Steptoe (Eds.), *The dynamics of aging: Evidence from the English Longitudinal Study of Ageing (Wave 5)* (pp. 98–182). Institute for Fiscal Studies.
- Strommen, J., & Sanders, G. F. (2018). Perceptions of changing communities among rural elders: Impact on well-being. *Activities, Adaptation & Aging*, *42*(3), 210–224.
- Suitor, J. J., & Pillemer, K. (1987). The presence of adult children: A source of stress for elderly couples' marriages? *Journal of Marriage and Family*, *49*, 717–725.
- Sullivan, A., & Sheffrin, M. S. (2003). *Economics: Principles in action*. Pearson Prentice Hall.
- Umberson, D. (1992). Relationships between adult children and for both generations. *Journal of Marriage and the Family*, *54*, 664–674.
- United Nations. (2020). *World population ageing 2019*.
- U.S. Census Bureau. (2020). *Explore census data*. <https://data.census.gov>
- Van Den Broek, T., Dykstra, P. A., & Van Der Veen, R. J. (2019). Adult children stepping in? Long-term care reforms and trends in children's provision of household support to impaired parents in the Netherlands. *Ageing & Society*, *39*(1), 112–137. <https://doi.org/10.1017/S0144686X17000836>
- Van Leeuwen, K. M., van Loon, M. S., van Nes, F. A., Bosmans, J. E., de Vet, H. C. W., Ket, J. C. F., Widdershoven, G. A. M., & Ostelo, R. W. J. G. (2019). What does quality of life mean to older adults? A thematic synthesis. *PLoS ONE*, *14*(3), 1–39. <https://doi.org/10.1371/journal.pone.0213263>
- Vasold, K., & Binette, J. (2019). *2018 home and community preferences: A national survey of adults ages 18-plus*. AARP. <https://www.aarp.org/pri/topics/livable-communities/2018-home-community-preference.html>
- Veron, M. J. (2020). The politics of frailty. *Age & Ageing*, *49*(4), 544–548. <https://doi.org/10.1093/ageing/afaa023>

- Wahl, H. W., & Lang, F. (2004). Aging in context across the adult life course: Integrating physical and social environmental research perspectives. *Annual Review of Gerontology and Geriatrics*, 23(1).
- Wallack, E. M., Wiseman, H. D., & Ploughman, M. (2016). *Healthy aging from the perspectives of 683 older people with multiple sclerosis*. Multiple Sclerosis International.
- Weinert, B. T., & Timiras, P. S. (2003). Invited review: Theories of aging. *Journal of Applied Physiology*, 95(4), 1706–1716.
- WHOQOL Group. (1995). The World Health Organization quality of life assessment (WHOQOL): Position paper from the World Health Organization. *Social Science & Medicine*, 41(10), 1403–1409.
- World Health Organization. (1947). *The constitution of the World Health Organization*.

APPENDIX A  
IRB APPROVAL

**Tuesday, February 16, 2016 at 11:32:31 AM Central Standard Time**

---

**Subject:** Study 15-274: Intergenerational Resilience Among Rural Older Adults and Their Families

**Date:** Tuesday, February 16, 2016 at 11:10:06 AM Central Standard Time

**From:** amassey@orc.msstate.edu

**To:** Wilmoth, Joe

**CC:** Massey, Ashley, Massey, Ashley

Protocol Title: Intergenerational Resilience Among Rural Older Adults and Their Families

Protocol Number: 15-274

Principal Investigator: Dr. Joe Wilmoth

Date of Determination: 2/16/2016

Qualifying Exempt Category: 45 CFR 46.101(b)(2)

Dear Dr. Wilmoth:

The Human Research Protection Program has determined the above referenced project exempt from IRB review.

Please note the following:

- Retain a copy of this correspondence for your records.
- An approval stamp is required on all informed consents. You must use the stamped consent form for obtaining consent from participants.
- Only the MSU staff and students named on the application are approved as MSU investigators and/or key personnel for this study.
- The approved study will expire on 8/31/2020, which was the completion date indicated on your application. If additional time is needed, submit a continuation request. (SOP 01-07 Continuing Review of Approved Applications)
- Any modifications to the project must be reviewed and approved by the HRPP prior to implementation. Any failure to adhere to the approved protocol could result in suspension or termination of your project.
- Per university requirement, all research-related records (e.g. application materials, letters of support, signed consent forms, etc.) must be retained and available for audit for a period of at least 3 years after the research has ended.
- It is the responsibility of the investigator to promptly report events that may represent unanticipated problems involving risks to subjects or others.

This determination is issued under the Mississippi State University's OHRP Federalwide Assurance #FWA00000203. All forms and procedures can be found on the HRPP website: [www.orc.msstate.edu](http://www.orc.msstate.edu).

Thank you for your cooperation and good luck to you in conducting this research project. If you have questions or concerns, please contact me at [amassey@orc.msstate.edu](mailto:amassey@orc.msstate.edu) or call 662-325-3294.

Page 1 of 2



Finally, we would greatly appreciate your feedback on the HRPP approval process. Please take a few minutes to complete our survey at <https://www.surveymonkey.com/s/PPM2FBP>.

Sincerely,

Ashley Massey  
Assistant Compliance Administrator

**From:** [nrs54@msstate.edu](mailto:nrs54@msstate.edu)  
**To:** [jw734@msstate.edu](mailto:jw734@msstate.edu); [hdo36@msstate.edu](mailto:hdo36@msstate.edu); [baw236@msstate.edu](mailto:baw236@msstate.edu); [cb559@msstate.edu](mailto:cb559@msstate.edu); [mr2062@msstate.edu](mailto:mr2062@msstate.edu)  
**Subject:** Approval Notice for Study # IRB-18-440, Intergenerational Resilience Among Rural Older Adults and Their Families  
**Date:** Thursday, March 21, 2019 11:10:53 AM

---

Protocol ID: IRB-18-440  
Principal Investigator: Joe Wilmoth  
Protocol Title: Intergenerational Resilience Among Rural Older Adults and Their Families  
Review Type: EXPEDITED  
Approval Date: March 21, 2019  
Expiration Date: February 20, 2024

The above referenced study has been approved. To access your approval documents, log into myProtocol and click on the protocol number to open the approved study. Your official approval letter can be found under the Event History section. For non-Exempt approved studies, all stamped documents (e.g., consent, recruitment) can be found in the Attachment section and are labeled accordingly.

If you have any questions that the HRPP can assist you in answering, please do not hesitate to contact us at [irb@research.msstate.edu](mailto:irb@research.msstate.edu) or 662.325.3994.

APPENDIX B  
QUESTIONNAIRES AND INTERVIEW PROTOCOLS

### Families and Aging in Place—G1

Most people prefer to “age in place”—that is, to live in their own homes as they grow older. We are trying to learn what might make it harder to age in place and how growing older might affect their families. Your answers will be confidential. Your name will not be connected to any of your responses.

Please answer each question as accurately as possible. If you are not sure what any question means, please ask the researcher to make it clear to you.

#### QUALITY OF LIFE

- 1) On a scale of “1” to “5,” how would you rate your overall Quality of Life? A score of “1” will indicate the lowest score possible, while a score of “5” will indicate the highest score possible. Circle the best answer.

Lowest Quality of Life					Highest Quality of Life
1	2	3	4	5	

- 2) On a scale of “1” to “5,” please rate how much of a problem the following issues are for you **CURRENTLY**. A score of “1” will indicate that this is not a problem, while a score of “5” will indicate it is a major problem. Circle the best answer.

	Not a Problem				Major Problem
a) Feeling lonely or isolated	1	2	3	4	5
b) Depression	1	2	3	4	5
c) Boredom	1	2	3	4	5
d) Your physical health	1	2	3	4	5
e) Suitable housing	1	2	3	4	5
f) Adequate health care	1	2	3	4	5
g) Transportation	1	2	3	4	5
h) Having enough food to eat	1	2	3	4	5
i) Affordable medications	1	2	3	4	5
j) Financial problems	1	2	3	4	5
k) Everyday activities like bathing or preparing meals	1	2	3	4	5

- 3) **Looking ahead over the next 5+ years, on a scale of “1” to “5,” please rate how concerned you are about the following items. A score of “1” will indicate the lowest level of concern, while a score of “5” will indicate the highest level of concern. Circle the best answer.**

	Least Concern			Greatest Concern	
a) Physical health	1	2	3	4	5
b) Mental health	1	2	3	4	5
c) Finding employment	1	2	3	4	5
d) Driving on your own	1	2	3	4	5
e) Lack of transportation	1	2	3	4	5
f) Affording basic needs (like food or rent)	1	2	3	4	5
g) Affording medications	1	2	3	4	5
h) Affording health care	1	2	3	4	5
i) Living independently	1	2	3	4	5
j) Ability to care for others	1	2	3	4	5
k) Not having someone to care for you	1	2	3	4	5

- 4) **Looking ahead over the next 5+ years, please rate how much you think you might need each of the following services on a scale of “1” to “5” in order to be able to age in place. A score of “1” indicates the least amount of need while a score of “5” indicates the greatest amount of need. Circle the best answer.**

	Least Need			Greatest Need	
a) Home-Delivered Meals	1	2	3	4	5
b) Food Stamp Programs	1	2	3	4	5
c) Tax Preparation	1	2	3	4	5
d) Financial Planning	1	2	3	4	5
e) Home Health Care	1	2	3	4	5
f) Homemaker Services (help with chores)	1	2	3	4	5
g) Repair Services	1	2	3	4	5
h) Senior Discount Programs	1	2	3	4	5
i) Information and Referral Services	1	2	3	4	5
j) Transportation Services	1	2	3	4	5
k) Adult Day Care	1	2	3	4	5
l) Health Screening	1	2	3	4	5
m) Physical Fitness/Exercise Programs	1	2	3	4	5
n) Support Groups	1	2	3	4	5
o) Nutrition Counseling	1	2	3	4	5
p) Respite care (Relief for care givers)	1	2	3	4	5

**RELIGION/SPIRITUALITY**

1) How often do you attend church or other religious meetings? Check  your best answer.

- |  |  |
|--|--|
| <input type="checkbox"/> Never               | <input type="checkbox"/> A few times a month   |
| <input type="checkbox"/> Once a year or less | <input type="checkbox"/> Once a month          |
| <input type="checkbox"/> A few times a year  | <input type="checkbox"/> More than once a week |

2) How often do you spend time in private religious activities, such as prayer, meditation or Bible study? Check  your best answer.

- |  |   |
|--|---|
| <input type="checkbox"/> Rarely or never     | <input type="checkbox"/> Two or more times a week |
| <input type="checkbox"/> A few times a month | <input type="checkbox"/> Daily                    |
| <input type="checkbox"/> Once a week         | <input type="checkbox"/> More than once a day     |

Please mark the extent to which each statement is true or not true for you. Answers range from “definitely not true” to “definitely true of me.”

3) In my life, I experience the presence of the Divine (i.e., God). Check  your best answer.

- |   |  |
|---|--|
| <input type="checkbox"/> Definitely not true  | <input type="checkbox"/> Tends to be true      |
| <input type="checkbox"/> Tends not to be true | <input type="checkbox"/> Definitely true of me |
| <input type="checkbox"/> Unsure               |  |

4) My religious beliefs are what really lie behind my whole approach to life. Check  your best answer.

- |   |  |
|---|--|
| <input type="checkbox"/> Definitely not true  | <input type="checkbox"/> Tends to be true      |
| <input type="checkbox"/> Tends not to be true | <input type="checkbox"/> Definitely true of me |
| <input type="checkbox"/> Unsure               |  |

5) I try hard to carry my religion over into all other dealings in life. Check  your best answer.

- |   |  |
|---|--|
| <input type="checkbox"/> Definitely not true  | <input type="checkbox"/> Tends to be true      |
| <input type="checkbox"/> Tends not to be true | <input type="checkbox"/> Definitely true of me |
| <input type="checkbox"/> Unsure               |  |

## HEALTH

Instructions: Here are some questions about your health. Please read each question carefully and check (☑) your best answer. You should answer the questions in your own way. There are no right or wrong answers.

**Today** would you have any physical trouble or difficulty:

- |   | <i>None</i>              | <i>Some</i>              | <i>A Lot</i>             |
|---|--------------------------|--------------------------|--------------------------|
| 1) Walking up a flight of stairs          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2) Running the length of a football field | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## CAREGIVING

The following questions relate to the subject of providing care for a friend or family member that is over the age of 50 and has a chronic condition that makes self-care difficult.

1) Do you have a chronic condition that makes self-care difficult? Check ☑ your best answer.

- Yes
- No

If you checked "Yes," answer the following questions based on your experience receiving care from a family member or friend.

If you checked "No," think about what you think it would be like for a friend or family member to provide care for you. Answer the questions as though you were receiving care from a family member or friend.

2) Do you live in a home or apartment, an independent living retirement community, an assisted living facility, a nursing home, or someplace else? Check ☑ your best answer.

- Home or apartment
- Independent living retirement community
- Assisted living facility
- Nursing home
- Other \_\_\_\_\_

**Caregiver Relationships**

If you answered “Yes” above, check  each person that currently provides care for you.

If you answered “No” above, check  each person that you expect would care for you if you had a chronic condition that made it difficult to take care of yourself.

Thinking about the person that provides care to you (or would provide care to you if you needed it), what is his or her relationship to you? If more than one person provides care (or would provide it if you need it), please check (☑) below who provides (or would provide) care and whether they provide (or would provide) MOST of the care or SOME of the care. Also, please check  each person that would provide NO care.

1) *Each person that provides (or would provide) care for you:*

	<i>Provide Most of the Care</i>	<i>Provide Some Care</i>	<i>Provide NO Care</i>
<input type="checkbox"/> Self	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Aunt or great aunt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sister	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Brother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sister-in-law	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Brother-in-law	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Son	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Daughter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Grandchild	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Son-in-law	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Daughter-in-law	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Father	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Uncle or great uncle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Father-in-law	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Wife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Friend/neighbor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Husband	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Mother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Mother-in-law	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other (specify relationship) _____			



2) Who lives in the same home that you live in? Check  all that live with you.

- |   |   |
|---|---|
| <input type="checkbox"/> Aunt or great aunt | <input type="checkbox"/> Father                       |
| <input type="checkbox"/> Sister             | <input type="checkbox"/> Uncle or great uncle         |
| <input type="checkbox"/> Brother            | <input type="checkbox"/> Father-in-law                |
| <input type="checkbox"/> Sister-in-law      | <input type="checkbox"/> Wife                         |
| <input type="checkbox"/> Brother-in-law     | <input type="checkbox"/> Friend                       |
| <input type="checkbox"/> Son                | <input type="checkbox"/> Neighbor                     |
| <input type="checkbox"/> Daughter           | <input type="checkbox"/> Husband                      |
| <input type="checkbox"/> Son-in-law         | <input type="checkbox"/> Mother                       |
| <input type="checkbox"/> Daughter-in-law    | <input type="checkbox"/> Mother-in-law                |
| <input type="checkbox"/> Partner            | <input type="checkbox"/> Other (specify relationship) |

Following are reasons some people have given for why they provide care for family members. For each statement, please circle the number from "1" to "4" that shows how much you agree with each reason for providing care: "1" indicates that you strongly agree, and "4" indicates you strongly disagree. Circle the best answer.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
A person should give care to a family member because:				
4) It is a duty to provide care to elderly dependent family members.	1	2	3	4
5) It is important to set an example for the children in the family.	1	2	3	4
6) I was taught by my parents to take care of elderly dependent family members.	1	2	3	4
7) Of my religious and spiritual beliefs.	1	2	3	4
8) By giving care to elderly dependent family members, I am giving back what has been given to me.	1	2	3	4
9) It strengthens the bonds between me and them.	1	2	3	4
10) I was raised to believe care should be provided in the family.	1	2	3	4
11) It is what my people have always done.	1	2	3	4
12) It is a way to be useful and make a family contribution.	1	2	3	4
13) My family expects me to provide care.	1	2	3	4

Check  the best answer. If you are receiving care from a friend or family member...

14) Would you say that receiving care ...

- Has had no effect on your friendships?
- Has strengthened your friendships?
- Has weakened your friendships?

15) Would you say that receiving care ...

- Has had no effect on your family relationships?
- Has strengthened your family relationships?
- Has weakened your family relationships?

### DEMOGRAPHICS

1) What is your date of birth?

\_\_\_\_ / \_\_\_\_ / \_\_\_\_\_  
Month    Day    Year

2) What is your racial or ethnic background? Check (✓) your best answer.

- African-American or Black
- American Indian or Alaska Native
- Asian-American
- White
- Native Hawaiian or Other Pacific Islander
- Part of another group (Identify group) \_\_\_\_\_

3) Are you of Hispanic or Latino ethnicity? Check (☑) your answer.

- Yes
- No

4) What is your gender? Check (✓) your answer.

- Male
- Female

5) What is your highest level of educational attainment? Check (☑) your answer.

- Less than High School
- High School Diploma
- Some College (No Degree)
- Associate's or Technical Degree
- Bachelor's Degree
- Master's Degree
- Doctoral Degree
- Professional Degree (medical, vet, dental, law)

6) What is your marital status? Check (☑) your answer.

- |   |                                     |
|---|-------------------------------------|
| <input type="checkbox"/> Single (Never Married) | <input type="checkbox"/> Separated  |
| <input type="checkbox"/> Married                | <input type="checkbox"/> Widowed    |
| <input type="checkbox"/> Divorced               | <input type="checkbox"/> Cohabiting |

7) Which of the following best describes your current employment status? Check (☑) your answer.

- |   |                                  |
|---|----------------------------------|
| <input type="checkbox"/> Working full-time                | <input type="checkbox"/> Retired |
| <input type="checkbox"/> Working part-time                | <input type="checkbox"/> Other   |
| <input type="checkbox"/> Unemployed, but looking for work | _____                            |
| <input type="checkbox"/> Unemployed, not looking for work | _____                            |

8) What is your total annual household income? Check (☑) your answer.

- |   |  |
|---|--|
| <input type="checkbox"/> Less than \$15,000             | <input type="checkbox"/> \$50,000 to less than \$75,000  |
| <input type="checkbox"/> \$15,000 to less than \$25,000 | <input type="checkbox"/> \$75,000 to less than \$100,000 |
| <input type="checkbox"/> \$25,000 to less than \$50,000 | <input type="checkbox"/> \$100,000 or more               |

9) What is the zip code for the place where you live?

\_\_\_\_\_

### Families and Aging in Place—G 2 & 3

Most people prefer to “age in place”—that is, to live in their own homes as they grow older. We are trying to learn what might make it harder to age in place and how growing older might affect families. Your answers will be confidential. Your name will not be connected to any of your responses.

Please answer each question as accurately as possible. We also are interviewing an older member of your family (parent or grandparent). Some questions will relate to you. Some will relate to your older family member. If you are not sure what any question means, please ask the researcher to make it clear to you.

Note:

- The first group of questions relate to your observations about your older family member.
- The second group of questions relate to you personally.

#### QUESTIONS ABOUT YOUR OLDER FAMILY MEMBER

- 1) Please rate your level of need for each of the following services on a scale of “1” to “5” in order **for your older family member** to be able to age in place. A score of “1” indicates the least amount of need while a score of “5” indicates the greatest amount of need. Circle the best answer.

	Least Need					Greatest Need
a) Home-Delivered Meals	1	2	3	4	5	
b) Food Stamp Programs	1	2	3	4	5	
c) Tax Preparation	1	2	3	4	5	
d) Financial Planning	1	2	3	4	5	
e) Home Health Care	1	2	3	4	5	
f) Homemaker Services (help with chores)	1	2	3	4	5	
g) Repair Services	1	2	3	4	5	
h) Senior Discount Programs	1	2	3	4	5	
i) Information and Referral Services	1	2	3	4	5	
j) Transportation Services	1	2	3	4	5	
k) Adult Day Care	1	2	3	4	5	
l) Health Screening	1	2	3	4	5	
m) Physical Fitness/Exercise Programs	1	2	3	4	5	
n) Support Groups	1	2	3	4	5	
o) Nutrition Counseling	1	2	3	4	5	
p) Respite care (Relief for care givers)	1	2	3	4	5	

- 2) **Looking ahead over the next 5+ years, on a scale of “1” to “5,” please rate your level of concern about how the following issues might affect your older family member (for example, your older family member’s physical health). A score of “1” will indicate the lowest level of concern, while a score of “5” will indicate the highest level of concern. Circle the best answer.**

	Least Concern		Greatest Concern		
a) Physical health	1	2	3	4	5
b) Mental health	1	2	3	4	5
c) Finding employment	1	2	3	4	5
d) Driving on their own	1	2	3	4	5
e) Lack of transportation	1	2	3	4	5
f) Affording basic needs (like food or rent)	1	2	3	4	5
g) Affording medications	1	2	3	4	5
h) Affording health care	1	2	3	4	5
i) Living independently	1	2	3	4	5
j) Not having someone to care for them	1	2	3	4	5

### CAREGIVING

The following questions relate to the subject of providing care for an older family member that has a chronic condition that makes self-care difficult.

- 1) Does your older family member have a chronic condition that makes self-care difficult? Check  your best answer.
- Yes
- No
- 2) If you checked “Yes,” do you provide care for that family member?
- Yes
- No

3) Does your older family member live in a home or apartment, an independent living retirement community, an assisted living facility, a nursing home, or someplace else? Check  your best answer.

- Home or apartment
- Independent living retirement community
- Assisted living facility
- Nursing home
- Other \_\_\_\_\_

Following are reasons some people have given for why they provide care for family members. For each statement, please circle the number from "1" to "4" that shows how much you agree with each reason for providing care: "1" indicates that you strongly agree, and "4" indicates you strongly disagree. Circle the best answer.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
A person should give care to a family member because:				
4) It is a duty to provide care to elderly dependent family members.	1	2	3	4
5) It is important to set an example for the children in the family.	1	2	3	4
6) I was taught by my parents to take care of elderly dependent family members.	1	2	3	4
7) Of my religious and spiritual beliefs.	1	2	3	4
8) By giving care to elderly dependent family members, I am giving back what has been given to me.	1	2	3	4
9) It strengthens the bonds between me and them.	1	2	3	4
10) I was raised to believe care should be provided in the family.	1	2	3	4
11) It is what my people have always done.	1	2	3	4
12) It is a way to be useful and make a family contribution.	1	2	3	4
13) My family expects me to provide care.	1	2	3	4

If **you are providing** care to your older family member...

- 14) Would you say that providing care ...
- Has had no effect on your friendships?
  - Has strengthened your friendships?
  - Has weakened your friendships?
  - I do not provide care.
- 15) Would you say that providing care ...
- Has had no effect on your family relationships?
  - Has strengthened your family relationships?
  - Has weakened your family relationships?
  - I do not provide care.

**QUESTIONS ABOUT YOU PERSONALLY**

**QUALITY OF LIFE**

Instructions: Here are some questions about **your** health and feelings. Please read each question carefully and choose your best answer. You should answer the questions in your own way. There are no right or wrong answers.

- 1) On a scale of “1” to “5,” how would you rate **your** overall Quality of Life? A score of “1” will indicate the lowest score possible, while a score of “5” will indicate the highest score possible. Circle the best answer.

Lowest Quality of Life					Highest Quality of Life
1	2	3	4	5	

Check  your best answer.

**During the past week: How often did you:**

	None	Some	A Lot
2) Socialize with other people (talk or visit with friends or relatives)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Take part in social, religious, or recreation activities (meetings, church, movies, sports, parties)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Stay in your home, a nursing home, or hospital because of sickness, injury, or other health problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**RELIGION/SPIRITUALITY**

1) How often do you attend church or other religious meetings? Check  your best answer.

- |  |  |
|--|--|
| <input type="checkbox"/> Never               | <input type="checkbox"/> A few times a month   |
| <input type="checkbox"/> Once a year or less | <input type="checkbox"/> Once a month          |
| <input type="checkbox"/> A few times a year  | <input type="checkbox"/> More than once a week |

2) How often do you spend time in private religious activities, such as prayer, meditation or Bible study? Check  your best answer.

- |  |   |
|--|---|
| <input type="checkbox"/> Rarely or never     | <input type="checkbox"/> Two or more times a week |
| <input type="checkbox"/> A few times a month | <input type="checkbox"/> Daily                    |
| <input type="checkbox"/> Once a week         | <input type="checkbox"/> More than once a day     |

Please mark the extent to which each statement is true or not true for you. Answers range from “definitely not true” to “definitely true of me.” Check  your best answer.

3) In my life, I experience the presence of the Divine (i.e., God). Check  your best answer.

- |   |  |
|---|--|
| <input type="checkbox"/> Definitely not true  | <input type="checkbox"/> Tends to be true      |
| <input type="checkbox"/> Tends not to be true | <input type="checkbox"/> Definitely true of me |
| <input type="checkbox"/> Unsure               |  |

4) My religious beliefs are what really lie behind my whole approach to life. Check  your best answer.

- |   |  |
|---|--|
| <input type="checkbox"/> Definitely not true  | <input type="checkbox"/> Tends to be true      |
| <input type="checkbox"/> Tends not to be true | <input type="checkbox"/> Definitely true of me |
| <input type="checkbox"/> Unsure               |  |

5) I try hard to carry my religion over into all other dealings in life. Check  your best answer.

- |   |  |
|---|--|
| <input type="checkbox"/> Definitely not true  | <input type="checkbox"/> Tends to be true      |
| <input type="checkbox"/> Tends not to be true | <input type="checkbox"/> Definitely true of me |
| <input type="checkbox"/> Unsure               |  |



**DEMOGRAPHICS**

1) What is your date of birth?

\_\_\_\_ / \_\_\_\_ / \_\_\_\_\_  
Month Day Year

2) What is your racial or ethnic background? Check (☑) your best answer.

African-American or Black

American Indian or Alaska Native

Asian-American

White

Native Hawaiian or Other Pacific Islander

Part of another group (Identify group) \_\_\_\_\_

3) Are you of Hispanic or Latino ethnicity? Check (☑) your answer.

Yes

No

4) What is your gender? Check (☑) your answer.

Male

Female

5) What is your highest level of educational attainment? Check (☑) your answer.

Less than High School

High School Diploma

Some College (No Degree)

Associate's or Technical Degree

Bachelor's Degree

Master's Degree

Doctoral Degree

Professional Degree (medical, vet, dental, law)

6) What is your marital status? Check (☑) your answer.

Single (Never Married)

Married

Divorced

Separated

Widowed

Cohabiting

7) Which of the following best describes your current employment status? Check (☑) your answer.

Working full-time

Working part-time

Unemployed, but looking for work

Unemployed, not looking for work

Retired

8) What is your total annual household income? Check (☑) your answer.

Less than \$15,000

\$15,000 to less than \$25,000

\$25,000 to less than \$50,000

\$50,000 to less than \$75,000

\$75,000 to less than \$100,000

\$100,000 or more

9) What is the zip code for the place where you live?

\_\_\_\_\_



- What do you think are advantages and disadvantages of aging in place?
  - How important is it for you to be able to stay in your own home as you get older?
  
- What kinds of needs do you think you might have as you get older?
  
- What resources, or what kind of help, do you think do you might need to be able to stay in your own home as you age?
  - Food security, housing, transportation, and health services are some of the challenges people often face as they grow older and try to continue living in their own homes. What concerns might you have about any of these or other issues?

2.

- Who in your family would provide care to you as you get older if you need help to stay in your own home?
  
  
  
  
  
  
  
  
  
  
- How do you expect that receiving care from family members might affect the way you relate to one another?
  - Is there the possibility that nobody in the family could provide care? How would that affect family relationships?
  
  
  
  
  
  
  
  
  
  
- Do you have any other thoughts about how aging in place might affect you or your family?

### Interview Questions—G 2&3

- We are interested in learning about how aging in place affects families. By aging in place, we mean that someone stays in their own home as they get older rather than to live someplace else, such as in a nursing home or with a family member.
  
- How would you describe your family?
  - How big is your family?
  - Who are the members of your family?
  - How are family members related?
  
- What do you think are advantages and disadvantages of aging in place?
  - How important is it that your family member be able to stay in their own home as they age?

- What kinds of needs do you think your older family member might have as they get older?

- What resources do you think do your older family member will need to be able to stay in their own home as they age?
  - Food security, housing, transportation, and health services are some of the challenges people often face as they grow older and try to continue living in their own homes. What concerns might you have about any of these or other issues?

- Who in your family would provide care if your older family member stayed in their own home?
  
  
  
- How do you expect that providing care for your loved one affect the way family members relate to one another?
  - Is there the possibility that nobody in the family could provide care? How would that affect family relationships?
  - If you are in the situation where your parent or grandparent needs care, how what are your thoughts about that situation?
  
  
  
- Do you have any other thoughts about how aging in place might affect you or your family?

**For third generation:**

- How many people your age have left this area?
  
  
- What are advantages of staying in this area?



APPENDIX C  
INFORMED CONSENT FORMS

**Mississippi State University**  
**Informed Consent Form for Participation in Research**

---

**Title of Research Study:** Intergenerational Resilience Among Rural Older Adults and Their Families

**Study Site:** County Extension Offices

**Researchers:** Dr. Joe Wilmoth, Dr. Brittney Oliver, Dr. Brandan Wheeler, Jennifer Smith

**Purpose**

The purpose of this research is to identify family and community assets and challenges related to the process of people trying to continue living in their own homes as they grow older.

**Procedures**

If you participate in this study, you will be asked to complete a survey and answer interview questions about aging in place that is expected to take 45 – 60 minutes. You also may be asked to participate in a focus group about community resources related to aging place.

**Questions**

If you have any questions about this research project, please feel free to contact Dr. Joe D. Wilmoth at 662-325-1799.

For questions regarding your rights as a research participant, or to discuss problems, express concerns or complaints, request information, or offer input, please feel free to contact the MSU Research Compliance Office by phone at 662-325-3994, by e-mail at [irb@research.msstate.edu](mailto:irb@research.msstate.edu), or on the web at <http://orc.msstate.edu/humansubjects/participant/>.

**Voluntary Participation**

Please understand that your **participation is voluntary**. Your **refusal to participate will involve no penalty or loss** of benefits to which you are otherwise entitled. You **may discontinue your participation** at any time without penalty or loss of benefits.

**Please take all the time you need to read through this document and decide whether you would like to participate in this research study.**

If you agree to participate in this research study, please sign below. You will be given a copy of this form for your records.

\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Investigator Signature

\_\_\_\_\_  
Date



Approved:	Expires:
2/16/16	8/31/2020
IRB # 15-274	

Page 1 of 1  
Version: MM/DD/YYYY

**Mississippi State University  
Parental or Legally Authorized Representative Permission Form  
for Participation in Research**

---

**You are being asked to allow your child to participate in a research project. This form provides you with information about the project. Please read the information below and ask any questions you might have before deciding whether or not to allow your child to participate.**

**Title of research project:** Intergenerational Resilience Among Rural Older Adults and Their Families

**Site of research project:** County Extension Offices

**Name of researcher(s) & University affiliation:** Dr. Joe Wilmoth, Dr. Brittney Oliver, Dr. Brandan Wheeler, Jennifer Smith, Mississippi State University

**The purpose of this research project:**

- The purpose of this research is to identify family and community assets and challenges related to the process of people trying to continue living in their own homes as they grow older.

**If you agree to allow your child to participate in this research project, we will ask your child to do the following things:**

- Complete a survey about caregiving

**The total estimated time to participate in this research project:** 1 hour

**The risks of participation:**

- No risks are anticipated associated with participation in this study.

**The benefits of participation:**

- As a result of this research, we hope to have more information that will help families as older relatives age in place.

**Compensation:**

- None

**Confidentiality and privacy protections:**

- No names are attached to any documents, and no names will be used in any reports based on this research.
- It is important to understand that these records will be held by a state entity and therefore are subject to disclosure if required by law.

**Contacts and questions:**

- If you have any questions, please ask now. If you should have any questions later or want additional information, please contact Dr. Joe D. Wilmoth at 662-325-1799. For information regarding your rights as a

research subject, please contact the MSU Research Compliance Office at 662-325-3994.

**If you do not want your child to participate:**

Please understand that your child's participation is **voluntary**. Your refusal to allow your child to participate will involve **no penalty** or loss of benefits to which you or your child is otherwise entitled. You may discontinue your child's participation **at any time** without penalty or loss of benefits. Your child may skip any items that he or she chooses not to answer. Your refusal will not impact current or future relationships with Mississippi State University. To do so, simply tell the researcher that you wish to stop.

If after reading the information above, you agree to allow your child to participate, please sign below. If you decide later that you wish to withdraw your permission, simply tell the researcher. You may discontinue your child's participation at any time. You will be given a copy of this form for your records.

---

Child's name (please print)

---

Parent or \*Legally Authorized Representative's Signature                      Date

---

Investigator's Signature    Date

If a Legally Authorized Representative (rather than a parent), must have documentation to show LAR status.

**Assent Form for Minors Participating in This Study**

Project Title: ***Intergenerational Resilience Among Rural Older Adults and Their Families***

Investigators: Dr. Joe Wilmoth, Dr. Brittney Oliver, Dr. Brandan Wheeler, Jennifer Smith

Your parent knows that we are going to ask you to participate in this study. We want to know about how different generations of families are affected when an older member of the family tries to continue living in their own home as they grow older. It will take about an hour to complete the survey and the interview. Your name will not be written anywhere on the survey. No one will know these answers came from you.

If you don't want to participate, you can stop at any time. There will be no bad feelings if you don't want to do this. You can ask questions if you do not understand any part of the questions we ask. When we are finished with this study we will write a report about what we learned. This report will not include your name or that you were in the study.

Do you understand? Is this OK?

Participant's Name (Please Print): \_\_\_\_\_

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Investigator's Signature Date