

Journal of Mental Health and Social Behaviour

The Mental Health Needs of African American Rural Grandparents

Tamara Woods

Associate Professor, School of Social Work, Fayetteville State University, United States.

Article Details

Article Type: Research Article Received date: 05th July, 2022 Accepted date: 01st August, 2022 Published date: 03rd August, 2022

*Corresponding Author: Tamara Woods, Associate Professor, School of Social Work, Fayetteville State University, United

States

Citation: Woods, T., (2022). The Mental Health Needs of African American Rural Grandparents. J Ment Health Soc Behav

4(2):166. https://doi.org/10.33790/jmhsb1100166

Copyright: ©2022, This is an open-access article distributed under the terms of the <u>Creative Commons Attribution License</u> <u>4.0</u>, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are

credited.

Abstract

The research examined the experiences of African American grandmothers living in rural communities providing care to their grandchildren. The study explored the health, mental health, physical functioning, well-being, support, and resources of these grandmothers. The grandmothers reported challenges and needs which included their own health issues, lack of support and resources, financial concerns, transportation and childcare issues. The findings revealed that developing health education programs and other formal supports focusing on health, mental health and resources have a positive effect on the grandmother's perceptions regarding their health and support.

Keywords: Rural grandparenting, Mental health, African American grandparent caregivers, kinship care, grandparents health

Introduction

When children are unable to live with their birth parents it is typically their extended family that steps in to take care of them. This arrangement is typically called kinship care. Although this phenomenon cuts across class and ethnic group lines, it is particularly prevalent among African Americans grandmothers. The grandparent as parent role is a growing concern and tends to form the largest single group of such caregivers. Grandparents who take on primary responsibility for raising grandchildren face unique family challenges and are often referred to as the "guardians of generations" [1]. The role of the grandparents caring for their grandchildren is a social issue and occurs due to a family crisis. These crises may be changes in family life, related social trends, and child welfare policies may account for some of the increase in grandparents raising grandchildren. Social forces that appear to have contributed to the incidents of grandparents caring for grandchildren include child welfare involvement, placement in temporary foster care, teen pregnancy, divorce, poverty, unemployment, substance abuse, mental illness, HIV/AIDS, incarceration of parents, parental incapacity, and death [2].

In the US, over 8 million grandchildren live in households headed by grandparents and these numbers constantly increasing [2]. Among this group, over 2.7 million grandparents serve as primary caregivers or custodial grandparents to their grandchildren with a many of these caregivers reporting a chronic illness and living in poverty (Generations United, 2017).

Grandparents continue to play a vital supporting role in the lives of their grandchildren many times having to provide custodial care as the need arises. This role does tend to differ from culture to culture [3]. In recent years, kinship care has become a major contributor

to the delivery of out of home care services in most Western jurisdictions [4]. There is now an increasing international phenomenon of grandparents taking full responsibility for the raising of their grandchildren. Furthermore, in most countries, care in extended family is the most long-standing and culturally acceptable form of alternative family care [5]. The concept of "family continuity" and the sustaining of family links and identity for children unable to live with their biological parents is now internationally seen as good social work practice. Governments across the industrialized world now prioritize kinship care as the preferred care option for children who cannot live with their parents [4].

In Australia, statutory kinship care, which includes friends and family placements, now provides over 50 per cent of all statutory care. Similarly, in New Zealand, 51 per cent of children in out-of-home care are in a family placement. Although slower to advance in the United Kingdom, there has been an increase in the number of family and friends' placements in recent years [6]. Despite these increases, research and practice development has not kept pace with the increase of kinship care internationally [5].

The purpose of this phenomenological study was to explore the experiences of African American grandmothers residing in rural communities caring for their grandchildren, while suffering from chronic health issues. The research examined the lived experiences of the grandmothers in rural areas specifically their physical and mental health, physical functioning, well-being, social support, and resources.

This area of study is significant because rural areas typically have fewer options for obtaining health and mental health care and limited availability for transportation. Unfortunately, these aspects of living in rural areas create unique challenges for these grandmothers. Based on these challenges and health issues of grandmothers raising grandchildren (specifically rural grand parenting), it is very important to understand who these grandmothers are, these challenges, and what assistance, resources, or services they may need.

Research Questions

The research questions were developed to address the gap in the literature and to explore whether the selected theoretical framework, Wellness theory, accurately predicted the findings. The research questions are as follows: 1. What is the perceived impact of chronic health issues on African American grandmothers raising their grandchildren in rural communities? 2. What is the perceived impact of mental health issues and stress on African American grandmothers raising their grandchildren inrural communities?

Theoretical Framework: Wellness theory

Theoretical Framework

Practice frameworks have the potential to integrate research evidence, ethical principles and practitioner experiential knowledge in ways that support good practice in the field of social work [5]. The theoretical framework that guided the study were Wellness theory [7]. The Wellness approach to health is applicable to diabetes as well as other health issues as chronic health issues have an impact on all areas of a person's life [8].

Wellness theory

Wellness theory is the premise that the thoughts and feelings one experiences experience directly impacts our physical functioning and wellbeing, just as our physical functioning directly affects our emotional states and thought processes [8]. The wellness perspective recognizes the extremely strong and important relationship between body, mind and environment, and health and wellness [9]. The unit of attention is the physical, mental, spiritual, and social well-being of the individual, family, and or specific population involved in the intervention process. Wellness theory recognizes that the development of the wellness state is an ongoing, lifelong process. Quality of life, rather than the length of life, is of primary concern. Wellness is defined as a state of harmony, energy positive productivity, and wellbeing in an individual mind body emotions and spirit. The state of wellness also extends to the relationships between the individual and his or her family and other interpersonal connections as well as the relationships between, the person and his or her physical environment, social, clinical, ecology, religion, health, and stress management [8].

Further, wellness supports the perspective that health is viewed in a broad sense that encompasses interrelationships among physical, mental, social, emotional, and spiritual components. This approach to health is particularly applicable to diabetes as well as other health issues as chronic health issues have an impact all areas of a person's life, work, family, social, and recreational [8].

Methodology

Design

To better understand the lived experiences of the grandmothers, the phenomenological methodology of Giorgi [10] best supported the exploration of the research questions. A researcher employing an empirical phenomenological approach operates from the perspective that the participants are the experts. Therefore, emphasis was placed on the lived experience of the participants rather than any objective interpretation of their experience. An exploratory phenomenological design was used to collect and analyze the data. Through phenomenology, the accounts of events of caregiving, experiences and challenges were understood.

This study as approved by the Institutional Review Board and sought to expand the social workers understanding of intergenerational caregiving, specifically parenting again from the grandmother caregivers' perspectives. It also allowed the grandmothers an opportunity to share their stories, which permitted a more personal view in their world.

Sample

A local grandparent's support group granted permission to recruit the participants from their program. Flyers describing the study as well as the criteria were also disseminated to local public libraries and grocery stores in an attempt to recruit participants. The requirements for the study included being an African American grandmother caring for at least one grandchild, being diagnosed with a chronic health issue and residing in rural communities. Purposeful criterion-based sampling, convenience sampling as well as snowball sampling

were used in selecting the eight participants for the study. All of the participants were from different rural communities. A sample size of eight participants provided enough information to reach a level of saturation of the data. Saturation was reached when participants began to report reoccurring information throughout the study and themes began to emerge [11].

All of the grandmothers resided in rural communities, had been diagnosed with chronic health issues and suffered from more than one chronic illness. Four of the grandmothers suffered from diabetes, four had high blood pressure, three had arthritis, one had high cholesterol, three were overweight, one had a heart condition, one was a breast cancer survivor, and one had a sinus condition. All eight women were caring for their daughter's children. They categorized themselves as Christians and reported a strong sense of spirituality.

Instrumentation/Measures

Data were collected through semi-structured in-depth interviews. These participants were asked about caregiving responsibilities for their grandchildren, their health, grandchild caregiving activities, circumstances leading to custodial grandparenting, grandmothergrandchild relationship, challenges of parenting a second time, positive and negative effects of caregiving, and resources in a rural area.

Data Analysis

In this study, the interviews were audio taped and detailed field notes were taken. Transcripts were reviewed several times and compared to the audio tapes to ensure accuracy. To give validity and credibility to the six themes of this study, member checking was conducted. During this second interview, the participants were given their transcripts for review. Participants validated that the data collected at the initial interviews were what they expressed.

The individual textual descriptions consisted of participants' verbatim statements regarding their lived experiences. The emerging textural themes are provided in the sample quotations below and are in the grandmother's own words. They include the circumstances leading to care which focused on the parent's substance abuse issues, the grandmother's health and their ability to provide care, their struggles as a result of a lack of resources, money/transportation, the parental responsibility and lack of support from the parents, suddenly becoming a parent again, and the strong sense of spirituality of all of the participants.

The composite textural themes that emerged included the circumstances leading to care, the grandmother's health and their ability to provide care, the lack of resources/money and transportation, the parental responsibility, becoming a parent again, as well as their own spirituality. The participants talked extensively about their health, resources, transportation social support, parenting again, spirituality and situations that necessitated removal of the grandchildren from the parents' custody.

Most of the participants reported being on a fixed income with atleast one chronic health issue, lack of resources and social support, becoming a parent again unexpectantly, their own spirituality and the circumstances leading to care involved drug use.

The grandmothers had taken on the parenting role unexpectedly and had views of what grand parenting should be. Most of the participants felt that it was the parent's responsibility to provide care and admitted to getting minimal informal or formal support. However, they also wanted the children to remain with family and prevent placement in foster care. All participants admit that caring for their grandchildren had been challenging yet a blessing. This was illustrated again and again with very similar responses by the participants.

Theme	Invariant constituents	Sample quotations
Circumstances surrounding care	Most of the grandmothers took on the parenting role due to the substance abuse of the mother. They explained that they assumed the care of their grandchildren to prevent placement in the foster care system.	"The kids' mama was using crack and leaving the kids home; she came back when she came back" "My oldest was on drugs and on the street all the time."
Ability to provide care/ health	Each grandmother was providing care to the best of their ability. They all admitted to suffering from more than one health issue.	"I'm tired from my heart problems and my high blood pressure. I just don't move as fast as I used to but I'm doing alright." "I have all these issues (diabetes and arthritis) and I feel stressed out sometimes but I do what I can with them grandkids."
Financial hardship/ Resources	Most of the participants reported being on a fixed income. They all stated that they were receiving some financial assistance from their local social service agency.	"I am on a fixed income. I just don't have the money. If I could I would pay to put Jawan in Prime Time." "Things are expensive. It costs a lot to raise children. I'm not proud of it but we get help from social services. We need it."
Parenting again	The grandmothers had taken on the parenting role unexpectedly. They all had views of what grand parenting should be.	"Grandkids are supposed to come visit, not live with us." "I'm 64 years old. I'm supposed to be retired. Taking care of these kids is a lot of sacrifice."
Parental responsibility/ social support	Most of the participants felt that it was the parent's responsibility to provide care. Most admitted to getting minimal informal or formal support.	"Help, if they helped me I could do more but I will continue to do what I need to do. My sister helps out when she can. The mama could get herself together if she wanted to. She states that she does not have a lot of support outside the church and does need anything she can get." She says, "My daughter hurt everybody. She is just selfish and, I mean, she wasn't raised like that."
Spirituality	All participants admit that caring for their grandchildren had been challenging yet a blessing. They all shared a strong sense of spirituality.	"When things get rough, I go to my favorite scripture: We learned this when I was a little girl. Trust in the LORD with all your heart and lean not on your own understanding; "It's hard sometimes. I don't always see it this way but the Pastor says God gave me a second chance. I thank God every day."

Table 1. Textural Themes and Universal constituents

The structural descriptions consisted of descriptions participants provided in regard to the setting or context in which their experiences took place [3]. These universal structures resulted in the following and are listed below: the unwavering sense of family obligation, determination to provide care even though they were not in the

best of health, frustration with the lack of services, resentment with the parents as they provided the least amount of support, a sense of their own loss in their new role, and their amazing ability to cope and find strength in spirituality.

Theme	Invariant constituents	Sample quotation
Family obligation	All of the participants expressed that they loved their grandchildren and it was their obligation to take care of their grandchildren.	"The CPS (child protective services) they called me after they were put in jail. They wanted to give me temporary custody. I asked myself if I could live with myself if I didn't help take those children and the answer was no." "I never made a decision to take the children. I never thought about it. I had to do it."
Determination	Each participant was determined to care for their grandchildren even though they were not in the best of health.	She explained that taking care of these kids is added stress on her but she states "I will take care of these kids, I am their grandmother." While clenching her hands together she states with assurance, "it tires me out sometimes but I will takes good care of them kids; yes mam.
Frustration	Most of the participants verbalized a frustration with services in a rural community.	"Everything is so far. We walk to the store. I depend on my sister for rides. I don't always have money to pay her. The three year old has a lot of Dr.'s appt. in town. Transportation will take us but they are always too early. They don't take me to my doctor's appointments so I have a hard time matching my sister's schedule to go to the doctor. I get stressed out trying to get to places so sometimes I don't make my appointments. Things are expensive. It costs a lot to raise children. I'm not proud of it but we get help from social services. We need it. We have a car but everything is so far away. We have to go to town to the doctor or for any appointments. Sometimes I just don't feel like the long ride."
Resentment	Each participant reported that they received minimal support from family. Each specifically resented the mothers for the lack of support they provided.	"The mama doesn't really help. She'll have to deal with that when it's time for her to meet her maker." She says her daughter hurt everybody. "She is just selfish and wasn't. I mean, she wasn't raised like that." She felt compelled to add that she will do what she has to do with or without her daughter.
Sense of loss	All of the participants were caring for their grandchildren unexpectedly. They all expressed the losses associated with their new role.	I'm 64 years old. I'm supposed to be retired. Taking care of these kids is a lot of sacrifice. I don't have money to go to lunch on Saturdays with my club members. I can't even pay the dues. I used to make excuses all the time; now they just, just don't even ask anymore." "We don't have private time. My marriage is not like it was. It's been hard for us. At this age it was supposed to be just us two. Now it's us and the children. They, they just take so muc of my time. I don't know when was the last time I bought something for myself or gone out to eat with my
Coping and strength	All of the participants reported that God is their one constant source of strength and use the power of prayer as a coping mechanism.	"I have relied on my trust and faith in God." "My granddaughter is why I'm here. My daughter went to heaven but I have a part of her. My granddaughter was placed with me for God's purpose." al Themes and Invariant Constituents

The lived experiences of these grandmothers were challenging yet they somehow found strength. This was present for each of the custodial grandmothers providing care. Their stories were very straight forward. These grandmothers described their experiences in detail and why they were significant. Their stories painted vivid pictures of difficult, periods of adjustment in their lives. The grandmothers remembered the difficulties as well as the important family obligation. They admitted that their lives and their circumstances had most likely changed forever; which contributed to the mixed emotions of stress, anxiety, frustration and added blessing. These findings are consistent with other studies as well and revealed consistency among the participants regarding the themes and patterns.

Results

The results of the study support the body of scholarly findings cited in the literature relevant to the experiences of African American grandmothers with chronic health and mental health concerns raising their grandchildren in rural communities [5,12,13,14,15]. All of the participants in this study had assumed the additional responsibility of care for at least one grandchild. The findings were consistent with studies that African American relative caregivers assume the role of caregiving for their relative children due to substance abuse, death of the parent, homelessness, parental incarceration, mental illness, HIV/AIDS, and poverty [16]. For this study substance abuse was the main factor in the grandmothers taking on the parenting role. They were providing care due to their adult children's substance abuse and involvement with the child welfare system. These grandmothers felt a strong family obligation to prevent long term placement in the foster care system. A lack of social support and spirituality were also recurring themes. Most of the findings are consistent with other studies that report many challenges for grandmothers including chronic health issues, a lack of resources in their rural communities, and limited social support.

Even though the grandmothers in this study indicate connections between their level of social support, fiscal resources health and mental health, they did not report any impacts on the quality of care they provided to their grandchildren. These findings are unexpected and contribute to the existing research about the phenomenon of African American grandmothers with health and mental health issues raising grandchildren in rural communities.

Discussion

This research examined the issues related to caregiver health and mental health, social support, and resources in rural communities. The results from this study indicate there is a connection between caregivers' social support and health and mental health, as well as caregivers' resources and health and mental health.

Studies have found that the responsibilities of caregiving impact many aspects of a caregiver's life and they suffer from role overload and role confusion. Overload is caused by the increased or added parenting duties. Grandmothers also have the added burden of clarifying their role as parent to a grandchild while balancing their other roles in the same family unit. Not surprising, caregivers also experience other life changes including limited time for self and friends [17,18,19,20]. All participants in this study had assumed the additional responsibility of care for at least one grandchild.

When seeking social support, researchers have found that caregivers often turn to family, friends, and even religious organizations for this support. These findings are consistent with existing research with family and friends being the primary providers of social support for caregivers. Ironically, many of the caregivers identified the parents of the children as providing the least consistent support.

A study conducted by Robitaille [21] noted that rural grandparents experience high levels of stress and anxiety. However, coping and social support have been found to mediate grandparent stress. A

mixed methods approach was used to examine the physical and mental health, stress, coping, and social support of 21 custodial grandparents residing in rural Western Kentucky. The findings of this study contribute a deeper understanding of custodial grandparent health

Another study by Peterson [2] explored the thoughts on future care planning among older grandparents raising adolescent grandchildren. In-depth, qualitative interviews were conducted with a diverse sample of 15 participants recruited from three states. Major themes were a preference for adult sons and daughters as future caregivers, limited future care conversations with adolescent grandchildren, sharing information due to personal health crises and special needs of grandchildren, mixed willingness or commitment responses from potential caregivers, and limited formal legal caregiving arrangements. Findings suggest that older grandparent caregivers can benefit from social workers assisting with complex thoughts and issues linked to caregiving of the adolescents.

A study by Bruder [22] explored the challenges faced by grandparents including their health issues, mental health and ability to cope with the challenges of raising grandchildren. The researchers analyzed cross-sectional data from the National Survey of Children's Health, comparing caretaker responses from 2400 grandparent-headed households and 78,000 parent-headed households with children aged 3 to 17 years. Results indicated that grandparents reported no greater problems with caregiver coping compared with parents.

Traditionally, grandmothers expect to spend short time segments with their grandchildren. When grandchildren visit grandparents during vacations or special occasions, they stay for a short while. In this study, the grandmothers had hopes that the parents would get help and again take on the parenting role, but in reality, the grandmothers sensed that their obligation would be long term.

African American grandmothers tend to place their own lives and happiness behind in place of their grandchildren. These grandparents put their lives on the back burner to provide for their grandchildren. These roles are described as reciprocal obligations [23]. The health and mental health issues of caregivers in this study paralleled very similar issues reported in other studies. The research shows caregivers experience high levels of stress and increased stress levels with increasing caregiving responsibilities.

A review of the literature revealed that the majority of grandmothers had significant physical and mental health issues. These caregivers suffered from many chronic diseases, including diabetes, heart disease, arthritis, high cholesterol, obesity, and high blood pressure, as well as depression, and anxiety. Consistent with the literature, all the caregivers interviewed in this study reported anxiety and chronic health problems but revealed that it did not negatively impact the parenting of their grandchildren.

Conclusion

Reviewing the research on the perceived impact of physical and mental health issues on African American grandmothers raising their grandchildren in rural areas was important in addressing the gap in research. Additional research is needed to further understand the impact of their health and mental health as well as these unique challenges. Continued research in the area of kinship caregiving specifically rural custodial grand parenting and their health and mental health is vital to ensure that research, teaching, and practice are all informed by the best evidence-based information.

Further research

It is important that health care providers, human services, mental health care professionals, educators, and policy makers gain a better understanding of grandparent kinship care providers, specifically with minority populations [24,25,26,27]. Based on the literature to date, it is clear that further research is needed related to rural

grandmothers, particularly focusing on their mental health. Promoting the health and mental health of rural grandmothers will serve to strengthen this significant family resource [28]. Continued research in the areas of rural kinship care, health, mental health, and child welfare polices is crucial. The study's findings indicated several areas for future research which would provide family life programs focusing on health, mental health, and resources and social support in rural communities.

Limitations

The current study has some limitations and should be acknowledged. First, the sample is small. The study was limited to those individuals who were currently caring for their grandchild, had been diagnosed with a chronic illness, and lived in rural communities. Although this study examined the experiences of grandmothers raising grandchildren, two rural counties and a limited number of participants were involved. As a result, the design did not produce results that were generalizable.

Implications for practice

Reviewing the literature on the perceived impact of mental and physical health issues on African American grandmothers raising their grandchildren in rural communities was important in addressing the gap in research. Although most of the findings are consistent with other studies that report many challenges for grandmothers including chronic health issues, mental health concerns, a lack of resources in their rural communities, and limited social support, this study found that their health did not impact their caregiving roles. Wellness theory states that the thoughts and feelings that a person experiences directly affects their physical functioning and well-being, just as our physical functioning directly affects our emotional states and thought processes [9]. This theory of health is particularly applicable to health and mental health issues since they tend to have an impact on all areas of a person's life, including work, family, social, and recreational [8]. The state of wellness also extends to the relationships between the individual and his or her family or other interpersonal connections. This also can include the relationship between the person and his or her physical, social, clinical, and ecological environments [8]. According to this theory, the stressors of parenting again can have an impact on their physical health, wellbeing and functioning. However, these grandmothers have managed this additional stress through using social support and spirituality as coping mechanisms. Moreover, these grandmothers viewed their spirituality and the social support provided by their religion and their religious communities as essential coping components to their survival as caregivers.

Conflict of interest: The authors declare no conflict of interest. **References**

- 1. Bertera, E. M., and Crewe, S. E. 2013. "Parenthood in the Twenty first Century: African American Grandparents as Surrogate Parents." *Journal of Human Behavior in the Social Environment* 23(2): 178-92.
- 2. Peterson, T. L. (2018). Grandparents Raising Grandchildren in the African American Community. *Generations*, 42(3), 30–36. Retrieved from http://search.ebscohost.com.ezproxy. uncfsu.edu/login.aspx?direct=true&db=sih&AN=13 2584747&site=ehost-live&scope=site
- Martin, S. D. (2016). Grandparents raising grandchildren: The lived experience of extended family reconciliation (Order No. 10241234). Available from ProQuest Central; ProQuest Dissertations & Theses Global. (1841229214). Retrieved from https://www.proquest.com/dissertations-theses/grandparentsraising-grandchildren-lived/docview/1841229214/se-2?accountid=10813
- Worrall, J. (2006). Challenges of Grandparent Custody of Children at Risk in New Zealand. Families in Society: Journal of Contemporary Social Services, 87(4), 546–554. https://doiorg.uncfsu.idm.oclc.org/10.1606/1044-3894.3570

- Connolly, M., Kiraly, M., McCrae, L., and Mitchell, G. (2017).
 A Kinship Care Practice Framework: Using a Life Course Approach. *British Journal of Social Work, 47*(1), 87–105. https://doi.org.uncfsu.idm.oclc.org/10.1093/bjsw/bcw041
- Farmer, E. (2009). How do placements in kinship care compare with those in non-kin foster care: placement patterns, progress and outcomes? *Child & Family Social Work, 14*(3), 331–342. https://doi-org.uncfsu.idm.oclc.org/10.1111/j.1365-2206.2008.00600.x
- Witmer, J.M., Sweeney, T.J.,(1992). A Holistic Model for Wellness and Prevention Over the Life Span. *Journal Counseling & Development*. https://doi.org/10.1002/j.1556-6676.1992. tb02189.x
- 8. Hattie, A., Myers, J.E., and Sweeney, T.J. (2004). A factor structure of wellness: Theory, assessment, analysis, and practice. *Journal of Counseling & Development*, 82(3), 354-364.
- Schriver, J. M. (2020). Human behavior and the social environment: Shifting paradigms in essential knowledge for social work practice th ed.). Boston: Pearson & Allyn & Bacon.
- Giorgi, A. (2009). The descriptive phenomenological method in psychology: A modified Husserlian approach. Pittsburgh, PA: Duquesne University.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B. and Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, 52(4), 1893–1907. https://doiorg.uncfsu.idm.oclc.org/10.1007/s11130574-8
- 12. Carter, B., and M. McGoldrick, (2009). The expanded family life cycle: Individual, Family, and social perspectives [with access code] (Allyn and Bacon Classics in Education).
- 13. Denby, R. W., Testa, M. F., Alford, K. A., Cross, C. L., and Brinson, J. A. (2017). Protective Factors as Mediators and Moderators of Risk Effects on Perceptions of Child Well-Being in Kinship Care. *Child Welfare*, *95*(4), 111–136. Retrieved from http://search.ebscohost.com.ezproxy.uncfsu.edu/login.aspx?direct=true&db=sih&AN=126420814&site=ehost-live&scope=site
- Doley, R., Bell, R., Watt, B., and Simpson, H. (2015).
 Grandparents raising grandchildren: investigating factors associated with distress among custodial grandparent. *Journal of Family Studies*, 21(2), 101 https://doiorg.uncfsu.idm.oclc.org/10.1080/13229400.2015.1015215
- 15. Harnett, P. H., Dawe, S., and Russell, M. (2014). An investigation of the needs of grandparents who are raising grandchildren. *Child & Family Social Work, 19*(4), 411–420. https://doiorg.uncfsu.idm.oclc.org/10.1111/cfs.12036
- Wichinsky, L., Thomas, J., DeJohn, T., and Turney, H. (2013). Identifying Unmet Needs: Recommendations for Creating a Model Kinship Subsidy Program. *Journal of Family Social Work*, 16(5), 431–446. https://doiorg.uncfsu.idm.oclc.org/10.10 80/10522158.2013.834022
- 17. Gibson, L.E. and Green, M.W. (2002) Nutritional influences on cognitive function: mechanisms of susceptibility. *Nutrition Research Reviews*, *15*, 169-206. doi:10.1079/NRR200131
- 18. Hayslip, B. Jr. & Kaminski, P.L. (2005). Grandparents raising their grandchildren: a review of the literature and suggestions for practice. *Gerontologist*. *45*(2):262-9. doi: 10.1093/geront/45.2.262.
- 19. Jendrek, M. P. (1994). Grandparents Who Parent Their Grandchildren: Circumstances and Decisions. *The Gerontologist*, *34*, 206-216. http://dx.doi.org/10.1093/geront/34.2.206

- 20. Johnson-Garner, M.Y. & Meyers, S.A. (2003). What Factors Contribute to the Resilience of African-American Children Within Kinship Care?. *Child and Youth Care Forum*. DOI:10.1023/A:1025883726991.
- 21. Robitaille, K. Y. (2012). The Health of Rural Grandparents Raising Grandchildren [Ph.D., University of Tennessee Health Science Center]. In Health of Rural Grandparents Raising Grandchildren (p. 87 p).
- Bruder Stapleton, F. (2020). What are the stresses of grandparents raising grandchildren? NEJM Journal Watch. Pediatrics & Adolescent Medicine, Retrieved from https://www.proquest.com/scholarly-journals/what-are-stresses-grandparentsraising/docview/2432382612/se-2?accountid=10813
- 23. Ruiz A, et al. (2008) Direct regulation of genes involved in glucose utilization by the calcium/calcineurin pathway. *J Biol Chem*, 283(20):13923-33
- 24. Hebblethwaite, S., & Norris, J.,(2011). Expressions of Generativity Through Family Leisure: Experiences of Grandparents and Adult Grandchildren. 60(1), https://doi.org/10.1111/j.1741-3729.2010.00637.x

- 24. Hurme, H., Westerback, S., & Quadrello, T. (2010). Traditional and New Forms of Contact Between Grandparents and Grandchildren. *Journal of Intergenerational Relationships*, 8(3), 264–280. doi:10.1080/15350770.2010.498739
- Kelley, et al., (2010).Radar, lidar, and optical observations in the polar summer mesosphere shortly after a space shuttle launch. *Journal of Geophysical Research 115*: doi: 10.1029/2009JA014938. issn: 0148-0227.
- Postigo, J.M.L. & Honrubia, R., (2010). The Co-residence of Elderly People with Their Children and Grandchildren. *Educational Gerontology*, DOI:10.1080/03601270903212351.
- Bigbee, J. L., Boegh, B. V., Prengaman, M., and Shaklee, H. (2011). Promoting the health of frontier caregiving grandparents: A demonstration project evaluation. *Journal for Specialists in Pediatric Nursing*, 16(2), 156-161. doi:10.1111/j.1744-6155.2011.00284.x