

How Does Research Inform Work with Multigenerational and Skipped-Generation Households in Rural Areas?

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Abstract

Many low-income families living in rural areas reside in multigenerational (children, their parents, and their grandparents) or skipped-generation (grandparents, grandchildren) households. Despite this, most family research in rural areas focuses on nuclear families. Ecological models of development suggest that grandparent involvement in low-income rural families manifests differently in low-income rural families than in those who have greater resources and/or live in urban areas. This study analyzes information on grandparent involvement in low-income rural families obtained from a body of research from the Rural Families Speak (RFS) and Rural Families Speak about Health (RFSH) studies. Three themes were identified through this review: routines and roles, educational methods/approaches, and resource awareness and use. These results are discussed in light of their value for informing research-based programming for community and Extension professionals who work with vulnerable families in rural areas.

Keywords: rural families, grandparents, grandparents raising grandchildren, multigenerational households, family support, skipped-generation households

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Until relatively recently, the traditional grandparent role in the United States was supplemental to that of parent, with grandparents providing assistance with financial costs and duties of raising grandchildren without substantial responsibility for children's day-to-day care in most cases (Neugarten & Weinstein, 1964). However, social changes over the last few decades, such as economic instability and diversification in family structure, have led to increased involvement of many grandparents in their children's lives (Bengston, 2001). Census data reports that nearly 5 million households in the United States include both grandparents and grandchildren (U.S. Census, 2018). Of this number, approximately 60% are multigenerational households where grandparents live in the same house with their children and grandchildren (Cross, 2018) and 40% are skipped-generation households where grandparents take care of grandchildren without the presence of the grandchildren's parents (U.S. Census, 2018). These estimates may not accurately represent reality because household structure is often fluid in grandparent-headed households, with children's parents entering and leaving the household due to their own challenges (e.g., incarceration, drug addiction; Hayslip et al., 2017; Yancura, 2013). Research has found that heavy grandparent involvement in childcare comes with costs and benefits. On the downside, it can become a burden on grandparents' financial and physical health (Nadorff et al., unpublished manuscript; Pinquart & Sorenson, 2003) and lead to conflict in cases where both mothers and grandparents are involved (Barnett et al., 2012). On the upside, grandparents can provide extra resources to help with childrearing and supply vulnerable grandchildren with affection and support (Barnett et al., 2010).

Grandparental support for families is most important when resources are scarce (Cherlin & Seltzer, 2014) and may be particularly critical in rural areas characterized by poverty (Bullock, 2004; Cross, 2018) and insufficient childcare resources (Malik et al., 2016). It is estimated that nearly 100,000 children are being raised by their grandparents in Appalachia alone (Smallset al., 2020). The situation is further complicated by the wide age range of grandparents. U.S. Census reports that grandparents' ages range from 30 to 80 years (Ellis & Simmons, 2014). Thus, many grandparent-headed families fall into gaps between services offered by agencies designed to help children or older adults. Lack of available services can have a substantial negative impact on physical health. For example, one study found that 28% of grandparents in a rural area had undiagnosed diabetes (Smalls et al., 2020). Despite the critical need for grandparent support in families at risk, until recently, very little research has focused on grandparent involvement in low-resource rural families. A current wave of studies has shown that many grandparents in rural areas cope with physical and financial hardships (Hansen et al., 2020) by resilience (Bailey et al., 2019) and faith (Dunfee et al., 2020; Stephens, 2020). Despite this promising trend, this work has been done in limited geographical areas (Bailey, et al., 2019; Letiecq et al., 2008) using qualitative data from small samples (Dunfee et al., 2020; Hansen, et al, 2020; Stephens, 2020).

Studies in rural areas are important because Ecological models of development (e.g., Bronfenbrenner & Morris, 2006) emphasize that time and place greatly influence transactions among individuals. Yet very little work has been done in comparatively large samples across more than one rural area.

Research on grandparent involvement can inform the work of Extension professionals and other service providers who interact with, and design programs for, families living in rural areas. However, only about 5% of Cooperative Extension programming that contributes to the quality of life for older adults focuses on intergenerational issues or custodial grandparents (NIFA, 2018). Knowledge of multidirectional systems of support between grandparents, parents, and grandchildren can help identify appropriate issues and audiences for more programs to meet the needs of this vulnerable population. The purpose of this study is to provide research-based information to inform professionals who work with multigenerational and skipped generation households from two nationwide studies, Rural Families Speak (RFS) and Rural Families Speak about Health (RFSH).

Methods

Sample and Materials

The sample for the current study consisted of all research products related to grandparents or grandparenting published from two USDA Hatch Act–funded projects, RFS and RFSH, focused on low-income rural families. Both studies required annual reports to their funder, the Cooperative State Research, Education, and Extension Service (CSREES) of the United States Department of Agriculture (USDA), which provided a record of published and unpublished manuscripts, conference presentations, and policy briefs. A total of nine research products were reviewed: three published articles; two abstracts in conference proceedings; two doctoral dissertations; two master’s theses; and one manuscript under review.

See Mammen and Sano (2013; 2018) for details on the RFS and RFSH projects. It is important to note that these projects were originally designed to gather much-needed information about rural families from the perspective of female heads of household, usually mothers (Mammen & Sano, 2013)—they were not designed to study grandparents. However, 22 (5%) of the 444 primary childcare providers recruited for the quantitative phase of the study (Wave One) were grandmothers. Furthermore, of the 79 primary childcare providers recruited for the qualitative phase of the study (Wave Two), 68 (86%) voluntarily mentioned that their children’s grandparents provided financial resources and social support for their families, despite the fact that the interview protocol did not solicit information on grandparent support. Researchers noted that this spontaneous mention of grandparent involvement furnished a unique opportunity to explore phenomena related to grandparent contributions to these families. Given that data came

from mothers' responses to questionnaires and interviews, it is also important to consider that much of the information is focused on interactions between grandparents and their families, and not on the grandparents themselves. The RFS and RFSH studies did not gather information on grandparent characteristics (unless grandparents responded to the survey as primary caregivers of the children).

Procedure

Materials were identified by examining project bibliographies of RFS and RFSH for published/unpublished studies, and conference presentations that specifically mentioned grandparents in the title or abstract. Published manuscripts were obtained through library search engines, while unpublished manuscripts were obtained through the primary author. Conference abstracts were accessed through published programs or through the primary author. It was not possible to access presentations associated with some abstracts. Thus, the abstracts were the sole source of information for some presentations. Once all materials were located, each member of the research team separately identified the type of grandparent involvement studied (multigenerational, primary caregiver, secondary caregiver) and findings related to the extent and nature of involvement in the sample of articles. After themes related to these areas had been separately identified, the team met via teleconference to discuss their individual results. Discussion continued until all raters agreed upon three relevant major themes (no minor themes were identified).

Results

Table 1. Summary of RFS/RFSH studies examining multigenerational and skipped-generation households in rural areas.

Author, Year Type	Purpose of the Study	Grandparent Type ¹	Results	Implications for Program Providers
Barnett, Yancura, Wilmoth, & Sano, 2016 Published Article	“The primary goal of the present analysis is to explore differences among household characteristics, maternal and	Multigenerational: one-parent/grandparent and two-parent/grandparent	No differences in economic hardship or disadvantage by household type. Children were older in one-parent households and mothers reported providing more elder care in two-parent households.	Findings emphasize the importance that service providers be aware of the different types of multigenerational households and their diverse needs. This knowledge will make services more

¹ e.g., custodial, living in multigenerational, living near

	child well-being, and family processes between one- and two-parent multigenerational families” (p. 71).		There were no significant differences in mother or child well-being, but there were differences in family processes. One-parent households reported significantly more communication with grandparents and more stable family routines.	<p>relevant and meaningful.</p> <p>Authors’ suggest there is a benefit to addressing parenting alliances and family routines in two-parent multigenerational households while considering grandparents as part of the nuclear family.</p> <p>Findings suggest that service providers might benefit from additional training in family processes.</p> <p>The study highlights the fact that these household types are complex and require a broad definition of “family member” and the importance of this in policy discussions.</p>
Conway, 2004 Doctoral Dissertation	“This study examined the stressors experienced by rural grandparent caregivers and explored factors that may be related to parental stress” (p. 10).	Custodial grandparents	<p>Data indicate that as grandparents continue in their parenting role, their confidence and perceived social support increases.</p> <p>There were significant differences between Native American and Caucasian caregivers with Native American caregivers experiencing significantly more time in role, and having lower incomes, and more depressive symptoms.</p>	<p>Grandparents raising grandchildren in rural areas need a comprehensive network of services to ensure positive child outcomes.</p> <p>There should be a concentrated effort to reduce the barriers to receiving information and utilization of available services for grandparents raising grandchildren.</p>

			The best predictors of parental stress were depression and confidence.	
Ozretich, 2004 Master's Thesis	“The purpose of this study was to identify and examine risk and protective factors associated with residential instability within a sample of rural low income mothers” (p.1).	Multigenerational households	Residential instability has a compounding effect, as children who are most at risk for future residential instability in any given year are likely to have experienced residential instability already. Furthermore, residential instability is transmitted across generations. Sharing housing with relatives also increased the risk of residential instability. Partnership separation also significantly predicted residential instability with unstable participants experiencing cyclical instability. Residential instability was theorized to be associated with persistent poverty which may indicate other destabilizing conditions.	Efforts need to increase to end the cycle of poverty in rural communities as the instability appears to be related to an accumulation of disadvantage.
Reschke, Manoogian, Richards, Walker, & Seiling, 2006 Published Article	“Examine comments of low-income mothers from rural areas to generate a greater understanding of both the positive and challenging aspects of childcare embedded	Grandmothers providing routine childcare	The adult daughter–mother relationship allowed for a beneficial childcare arrangement, but there were also some troublesome consequences of the relational nature of the arrangement. Benefits included flexibility, availability, low cost, trust, familiarity, acceptance, and strengthened relationships	Enhancing grandmother’s knowledge in childcare content areas (e.g., child development, language, social, and emotional skills, creativity and play) would benefit grandmothers and grandchildren. However, the way

	<p>within the adult daughter–older mother relationship, particularly in economic hardship” (p. 161).</p>		<p>and generational ties.</p> <p>Difficulties included blurred role boundaries, negative experiences with parenting from childhood, and grandmother’s health.</p>	<p>this training and education is currently offered is not appropriate for grandmothers who provide routine care.</p> <p>Programs could (1) appeal to emotional ties as motivation, (2) include adult daughters and grandmothers and focus on topics relevant to shared care of children, (3) acknowledge the nature of the situation and relationship, (4) connect families to other resources, and (5) suggest activities that consider the home environment, limited resources, and developmental needs of the grandmother.</p>
<p>Reschke & Walker, 2005 Master’s Thesis</p>	<p>“We draw attention to grandmothers who provide child care and the parents and children they serve” (p. 33).</p>	<p>Grandmothers providing routine childcare</p>	<p>There are practical and relational benefits to utilizing grandmother for child care, but there are also challenges such as confusion with role boundaries.</p>	<p>Programs that offer support to families using grandmother child care need to reflect an understanding of this arrangement by building on strengths and addressing challenges.</p> <p>Opportunities for low-income families utilizing grandmother child care to be connected to rural community resources are important.</p>

Seo, Stafford, & Seiling, 2005 Conference Proceedings	To explore childcare issues in rural America as barriers to maternal employment in low-income families.	Grandparent childcare	Mother's time as a proportion of total childcare time was used to measure maternal childcare share. Grandparent care influenced maternal childcare negatively.	Future welfare programs should continue or increase subsidies for childcare because they reduce low-income mothers' responsibilities and may increase childcare supply in rural areas.
Sero-Lynn, 2010 Doctoral Dissertation	"This research examined informal and formal support usage by low-income rural mothers in three states" (p. xi).	Non-residential grandparents as support	Mothers created a patchwork of support to meet their needs. The most well-adjusted mothers were those who found a mix of supports. If mothers excluded formal supports, they reported issues within the informal support network they were using and lower levels of well-being. Diminished availability of formal support systems in rural locations impacted support choice, especially with transportation and child care needs.	Implications were not discussed in this study.
Woodford & Mammen, 2010 Published Article	"The purpose of this study was to identify the factors that affect rural low-income mothers' opportunity for post-secondary education" (p. 86).	Focused on intergenerational transmission of educational choices between grandmothers, mothers, and grandchildren	Parents with post-secondary education, school tuition and fees, whether or not the participant was living with a partner, the presence of a preschool aged child, and whether or not the participant lived in a state that had strict TANF work requirements significantly predicted the opportunity for rural low-income mothers to pursue post-secondary education or training.	Rural low-income mothers with more information about the benefits and costs of education may be able to make better decisions. Providing peer groups and support networks, mothers may get more accurate advice about the opportunities available to them and can share stories amongst their peers.

<p>Yancura, Sano, & Ontai, 2013</p> <p>Conference Proceedings</p>	<p>“This study compared food, nutrition, and physical activity between families with and without and older adult in the household” (abstract).</p>	<p>Multigenerational households</p>	<p>Mothers from multigenerational households reported less favorable scores on the food, nutrition, and physical activity scale.</p> <p>According to mothers’ reports of obesity, children who lived in multigenerational households were significantly more obese than those who lived in traditional, two-generation households.</p>	<p>Service providers to rural families’ households should consider the impact that the presence of a grandparent in the household has on grandchild characteristics.</p>
<p>Yancura, Barnett, Sano, & Mammen, 2020</p>	<p>“The purpose of this study is to identify the supports provided by nonresident grandparents to their children and, thus grandchildren, and to examine the instances in which these contributions occur” (p. 3).</p>	<p>Non-resident grandparents</p>	<p>Mothers received a variety of types of support from their children’s grandparents.</p> <p>Sometimes, the supports increased stress levels and raised conflicts between mothers and grandparents on parenting practices.</p> <p>Resources were often limited for all three generations. However, grandparent support appeared to play a key role in the financial and emotional functioning of rural mothers and their children.</p> <p>The results highlight the complexity of intergenerational relationships.</p>	<p>Grandparent support may be overlooked in current practice with low-resource rural families.</p> <p>Practitioners working with rural families can use this information to inform programs, especially given the likelihood of poor health and financial well-being among older rural Americans who compromise these unseen safety nets.</p> <p>An intergenerational approach to support should be considered.</p>

Three themes were identified from our review of studies: routines and roles, unique educational methods/approaches, and resource awareness and use. These themes should not be considered as

sole findings from the studies reviewed. Instead, they are an overview of studies' results from a collective and integrated perspective.

Authors of more than half of the included articles noted the impactful nature of household-level routines and roles on family functioning and/or individual wellness (Barnett et al., 2016; Yancura et al., 2020; Yancura et al., 2013; Reschke & Walker, 2005; Reschke et al., 2006; Ozretich, 2004). This first theme has two components: "routines," which are predictable and repetitive activities occurring throughout a 24-hour period, and "roles," which are conceptualized in accordance with Olson et al.'s (1979) circumplex model of marital and family systems. We refer to this as the "family circumplex model" to differentiate from Bowen's family system theory and Bronfenbrenner's (and Morris's) ecological systems theory(ies) and model(s), both of which are equally salient, but unrelated to this application. While roles and routines were operationalized differently across the studies, the common thread was that all the studies noted their importance. In other words, was the "how" of family functioning advantageous to the system? Were people doing what was needed in ways that all family members agreed upon? When routines and/or roles were determined to be stable and functional, they equated with residential stability (Ozretich, 2004), relational and personal well-being (Reschke et al., 2006; Yancura et al., 2020), sustainability of grandmother-led childcare (Reschke & Walker, 2005), as well as increased healthy food consumption and physical activity behaviors (Yancura et al., 2013).

The second theme was the need for unique approaches to working with rural multigenerational households. Conway (2004) noted that all of the rural mothers participating in these studies stated that reliable transportation was one of the main barriers to accessing services, as well as one of the main ways that grandparents offered support through either driving grandchildren to appointments or letting mothers borrow their cars. Ozretich (2004) noted that poverty in these families ran across three generations and recommended preventative programming to disrupt the cycle of poverty. In accordance with studies of grandmothers in isolated rural areas (Bailey et al., 2020), two studies found that grandmothers were often the sole source of childcare for mothers. Both noted that this relationship was somewhat of a double-edged sword. Children were safe in the care of their grandmothers, but providing care for children was also a source of conflict between mothers and their adult daughters (Barnett et al., 2016; Reschke & Walker, 2005). Reschke and Walker (2005) recommended that such families should focus on strengths, versus deficits, to help them maximize available resources.

Increasing individuals' resource awareness and use was the third theme. Reschke and Walker (2005) advocated for including information about available community resources in ongoing outreach efforts. This article, along with Conway's (2004 study), emphasizes the notion that healthy multigenerational households know what helps their families function well and use their assets, but rarely reach out beyond their internal systems for support. Woodford and Mammen

(2010) expanded the definition of support networks to include peer groups, while Sero-Lynn (2010) demonstrated that mothers were more “well-adjusted” when they utilized a variety of supports, including those outside the family. One study noted that mothers and grandmothers often accessed external supports together by jointly visiting food banks and/or thrift shops. Thus, although grandparents were a great source of support for these families, both generations were often in poverty, which necessitated the use of outside resources available to all generations (Yancura et al., 2020).

Discussion

Themes from these studies can inform professionals who work with multigenerational and skipped-generation households. Given the prevalence, vulnerability, and increasing numbers of grandparents involved in their grandchildren’s lives, it is important to expand the view of potential populations for education and outreach beyond the nuclear family to include grandparents and fictive kin. It is equally important to be aware of the rural contexts to which these families belong, as prescribed by ecological approaches (cf. Bronfenbrenner and Morris). Many of the unique needs of these families, such as lack of reliable childcare and consistent transportation, stem from their rural contexts. Understanding each of the three themes arising from rural mothers and identified in this article may elucidate gaps in knowledge and avenues for intervention.

The first theme, the importance of rules and routines, speaks to resilience of rural families (Bailey, 2020). Even if these mothers worked night and early morning shifts outside the home, grandmothers upheld these routines to furnish children with a sense of stability and belonging. Service providers and educators can employ intergenerational techniques such as those used by the Intergenerational Learning Institute (NIFA, 2018). The second theme, the need for unique approaches, speaks to the fact that program development must look beyond the “traditional” American family. This is particularly true in light of the ongoing opioid epidemic (Davis et al., 2020) and COVID pandemic. Grandparent-parent-grandchild relationships are much more complex and stressful than parent-child relationships, due to the number of individuals involved and spillover from the challenges faced by the middle generation. Thus, educating about the warning signs of stress, their root cause, and efficacious and practical interventions may increase family strengths and decrease the negative effects of stress. Promising interventions include yoga and mindfulness (Fruhauf et al., *in press*). The third theme, increasing awareness and use of resources, is particularly relevant to low-resource rural areas. This suggests that in addition to their own programming, community educators and service providers should be aware of other resources that these small and geographically spread out areas have to offer. In the case of a multigenerational family, this includes programs and services designed for individuals across the lifespan, from cradle to grave.

The limitations of this study are common to the original RFS and RFSH studies, as well as much of the research in rural areas. Although bound by some commonalities, such as lack of transportation and opportunities for stable employment, rural areas are heterogeneous. The use of multistate samples across the nation is a strength in the sense that it speaks to many rural areas; it is a weakness in that it does not shed light on specific community characteristics, stemming from tradition and history. Another weakness comes from the small number of ethnic minorities in the interview sample. Although the dataset included information from Latinx, Black, Asian, and Native Hawaiian families, there were not enough multigenerational families in each racial group to include in analyses on this topic. Future scholarship should include voices from multigenerational families of various backgrounds, because studies have shown that non-white families place great reliance on their individual members for familial support (Yee et al., 2008).

Implications

Concrete recommendations for program development and evaluation include the following:

- Sharing information about parenting styles and methods, available resources, and relationships with grandparents, as well as adult children.
- Considering innovative means such as tele-conference classes and use of mobile technologies and social media to reach all generations of rural families.
- Teaching conflict reduction and communication skills to enhance family function.

In essence, we strongly advocate continuation of Extension's century-long approach with regard to multigenerational and skipped-generation households: reach out to those in need where they are with practical, research-based solutions that increase their quality of life.

References

Bailey, S. J., Letiecq, B. L., Visconti, K., & Tucker, N. (2019). Rural Native and European American Custodial Grandparents: Stressors, Resources, and Resilience. *Journal of Cross-Cultural Gerontology*, 34(2), 131–148. <https://doi.org/10.1007/s10823-019-09372-w>

Barnett, M. A., Yancura, L., Wilmoth, J., & Sano, Y. (2016). Wellbeing Among Rural Grandfamilies in Two Multigenerational Household Structures. *GrandFamilies: The Contemporary Journal of Research, Practice and Policy*, 3(1), 4.

Barnett, M. A., Scaramella, L. V., Neppl, T. K., Ontai, L., & Conger, R. D. (2010). Grandmother involvement as a protective factor for early childhood social adjustment. *Journal of Family Psychology*, 24, 635–645.

Barnett, M. A., Mills-Koonce, W. R., Gustafsson, H., & Cox, M. (2012). Mother-grandmother conflict, negative parenting, and young children's social development in multigenerational families. *Family Relations*, *61*, 864–877.

Bengtson, V. L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bond. *Journal of Marriage and Family*, *63*, 1–16.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner (Ed.), *Handbook of child development: Vol. 1. Theoretical models of human development* (6th ed., pp. 793–828). Hoboken, NJ: Wiley.

Bullock, K. (2004). The Changing Role of Grandparents in Rural Families: The Results of an Exploratory Study in Southeastern North Carolina. *Families in Society*, *85*(1), 45–54.
<https://doi.org/10.1606/1044-3894.258>

Cherlin, A. J., & Seltzer, J. A. (2014). Family Complexity, the Family Safety Net, and Public Policy. *The Annals of the American Academy of Political and Social Science*, *654*(1), 231–239.

Conway, M. A. (2004). *Rural grandparents raising grandchildren: Predictors of parental stress*. [Master's thesis, Montana State University Bozeman] Scholarworks, MSU.
<https://scholarworks.montana.edu/xmlui/handle/1/1098> .

Cross, C. J. 2018. Extended family households among children in the United States: Differences by race/ethnicity and socio-economic status. *Population Studies*, *72*(2), 1–17.

Davis, M. T., Warfield, M. E., Boguslaw, J., Roundtree-Swain, D., & Kellogg, G. (2020). Parenting a 6-Year Old Is Not What I Planned in Retirement: Trauma and Stress among Grandparents Due to the Opioid Crisis. *Journal of Gerontological Social Work*, *63*(4), 295–315.
<https://doi.org/10.1080/01634372.2020.1752872>

Dunfee, M. N., Brown, R. L., & Schoenberg, N. E. (2020). Perspectives on Religious and Spiritual Coping among Rural Grandparent Caregivers. *Journal of Family Issues*, *0192513X20938857*. <https://doi.org/10.1177/0192513X20938857>

Ellis, R. R., and Simmons, T. (2014). Coresident Grandparents and Their Grandchildren: 2012. United States Census Bureau. 20–576.

Fruhauf, C., Yancura, L., Greenwood-Junkermeier, H., Mendoza, N., Riggs, N., & Fox, A (*in press*). Grandfamily self-care: A resilience, strengths-based, and multigenerational approach. *Journal of Family Theory and Review*.

Hansen, A. C., Brown, R., Keller, P., & Schoenberg, N. (2020). Sources of Stress and Strength: Contextualizing the Experience of Grandparents Rearing Grandchildren in Appalachia. *Journal of Intergenerational Relationships*, 0(0), 1–21. <https://doi.org/10.1080/15350770.2020.1774461>

Hayslip, B., C. A. Fruhauf, & M. L. Dolbin-MacNab. (2017). Grandparents raising grandchildren: What have we learned over the past decade? *The Gerontologist*, 57(6), p. 1196. <https://doi.org/10.1093/geront/gnx106>

Letiecq, B. L., Bailey, S. J., & Kurtz, M. A. (2008). Depression Among Rural Native American and European American Grandparents Rearing Their Grandchildren. *Journal of Family Issues*, 29(3), 334–356. <https://doi.org/10.1177/0192513X07308393>

Malik, R., Hamm, K., Adamu, M. & Morrissey T., (2016). *Child care deserts: An analysis of child care centers by ZIP code in 8 states*. Washington, DC: Center for American Progress. <https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts/>

Mammen, S., & Sano, Y. (2013). *Basebook Report: Rural Families Speak about Health (RFSH) (2008-2014)*. North Central Region, Multi-State Project NC, 1171.

Mammen, S., & Sano, Y. (2018). Rural, low-income families and their well-being: Findings from 20 years of research. *Family Science Review*, 22(1).

Nadorff, D., Yancura, L., Berry, A., and Metzger, B. The financial impact of raising grandchildren. Manuscript in preparation.

Neugarten, B., & Weinstein, K. (1964). The changing American grandparent. *Journal of Marriage and Family*. 26, 199–204.

NIFA (2018, November 9). *Aging-Related Programs Developed and/or Delivered by Extension* <https://nifa.usda.gov/resource/aging-related-programs-developed-andor-delivered-extension>.

Ozretich, R. N. (2004). *Because we didn't have nowhere to go? Residential instability among rural low-income families* [Unpublished master's thesis]. Oregon State University.

Pinquart, M., & Sörensen, S. (2003). Differences between caregivers and noncaregivers in psychological health and physical health: a meta-analysis. *Psychology and Aging*, 18(2), 250–267. <https://doi.org/10.1037/0882-7974.18.2.250>

Reschke, K. L., Manoogian, M. M., Richards, L. N., Walker, S. K., & Seiling, S. B. (2006). Maternal grandmothers as child care providers for rural, low-income mothers: A unique child care arrangement. *Journal of Children and Poverty*, 12(2), 159–174.

Reschke, K., & Walker, S. (2005, December). Grandmothers as child caregivers: A unique child care arrangement. *Occasional Paper Series, 2005(15). Perspectives on family, friend and neighbor child care: Research, programs and policy* (pp. 33–37). New York: Bank Street College of Education. <https://educate.bankstreet.edu/occasional-paper-series/vol2005/iss15/6>

Seo, J., Stafford, K., & Seiling, S.B. (2005). Mothers' share of child care in rural low-income families. *Consumer Interests Annual: Proceedings of the American Council of Consumer Interests*, 51, 107–120.
https://www.consumerinterests.org/assets/docs/CIA/CIA2005/seiling_mothersshareofchildcareinrural-low-incomefamilies.pdf

Sero-Lynn, R. (2010). The impact of formal & informal supports on a mother's well-being: Examining the lives of low-income, rural women over time [Unpublished doctoral dissertation]. Purdue University.

Smalls, B. L., Adegboyega, A., Contreras, O. A., Palmer, K., & Hatcher, J. (2020). Assessing Diabetes Risk Factors in Rural Dwelling Grandparent Caregivers. *Gerontology and Geriatric Medicine*, 6, 2333721420924986. <https://doi.org/10.1177/2333721420924986>

Smalls, B. L., Palmer, K. N., Contreras, O. A., & Hatcher, J. (2020). 1595-P: Evaluating Social Support and T2D Risk Factors among Members of Rural-Dwelling Grandparent-Headed Households. *Diabetes*, 69(Supplement 1). <https://doi.org/10.2337/db20-1595-P>

Stephens, M. L. (2020). Literacy, Learning, and Human Capital Development among Rural African American Grandmothers. *Journal of Intergenerational Relationships*, Advance online publication. <https://doi.org/10.1080/15350770.2020.1712295>

Woodford, M., & Mammen, S. (2010). Escaping Poverty: Rural Low-Income Mothers' Opportunity to Pursue Post-Secondary Education. *Career and Technical Education Research*, 35(2), 81–102.

U.S. Census. (2018). *Grandchildren Under 18 Years Living Within A Grandparents Household By Grandparent And Presence Of Parent*.
<https://data.census.gov/cedsci/table?q=Grandchildren%20under%2018%20years%20living%20within%20a%20grandparents%20household%20by%20grandparent%20and%20presence%20of%20parent.&tid=ACSDT1Y2018.B10063&hidePreview=false>

Yancura, L. A. (2013). Service Use and Unmet Service Needs in Grandparents Raising Grandchildren. *Journal of Gerontological Social Work*, 56, 473–486.

Yancura, L., Barnett, M., Mammen, S. & Sano, Y. (2020). Context matters: Nonresident grandparent contributions to low-income rural families. *Child & Family Social Work*, 25(2), 267-276. <https://doi-org.eres.library.manoa.hawaii.edu/10.1111/cfs.12682>

Yancura, L., Barnett, M., & Walsh, B. (2020). Triparenting or try parenting?: Online responses to a nontraditional family structure. *Journal of Family Issues*, 1–25.

Yancura, L. A., Sano, Y. & Ontai, L. (2013, April). Effects of family structure on food, nutrition, and physical activity in the rural families speak about health project [Paper presentation]. Health Wellness and Society Conference, Sao Paulo, Brasil.

Yee, B. W. K., Su, J., Kim, S. Y., & Yancura, L. (2008). Asian American and Pacific Islander Families. In A. Alvarez & N. Tewari (Eds.), *Asian American Psychology: Current perspectives*. Mahwah, NJ: Lawrence Erlbaum and Associates.