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Working households: Challenges in balancing young children and the farm enterprise

Shoshanah Inwood[a] and Emily Stengel[b]

[a]School of Environment and Natural Resources, The Ohio State University, Columbus, OH, USA;
[b]Independent Scholar

ABSTRACT

Childcare is a critical issue for working families in the United States; however childcare needs in the agriculture sector have been absent from both childcare and agricultural policy discussions. This study empirically examines the relationship between childcare, the farm business, and the farm family while probing larger questions related to quality of life, labor market outcomes, and the gendered nature of work as families negotiate on-and off-farm roles and household needs. Using data from a national survey of farm families at the Rural-Urban Interface, we highlight differences in childcare experiences among multi-generation and first-generation farmers, and men and women farmers. The majority of farmers in this sample report challenges with childcare and that these challenges affect farm business decisions. Additionally, childcare is a prevalent issue for first-generation and women farmers. To address childcare needs in rural communities and the farm population, we call for new research and engagement collaborations across community development, work and family, and farm family scholars and practitioners.

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Childcare; agriculture; women; farming

Childcare is a critical issue for working families in the United States that affects both child development and parental workforce mobilization. There is a growing body of research and

policy-work examining childcare across different types of parent and child populations and

across different geographic spaces (urban, suburban, rural) (Kimmel, 2006; Meyers & Jordan, 2006; Morrissey, 2008; Reschke, Manoogian, Richards, Walker, & Seiling, 2006; Warner, 2006a, 2006b, 2007, 2008); however, specific childcare needs in the agriculture sector have generally been absent from these larger discussions. Lobao and Meyer (2001) argue the farm population provides a rich laboratory for studying macro-level policy questions, large scale structural employment transformations, informal and household livelihood strategies, life course and family, and gendered divisions of labor. The aim of this research is to expand the community and economic development, work and family studies, and the food and agriculture literature by

CONTACT Shoshanah Inwood Inwood.2@osu.edu School of Environment and Natural Resources, The Ohio State University, Ohio Agricultural Research and Development Center, 1680 Madison Ave, Wooster, OH 44691, USA

probing larger questions related to quality of life, labor market outcomes, and the gendered nature of work as families negotiate on-and off-farm roles and household needs. This article is also, in part, a call for more collaboration and joint inquiry among social scientists and practitioners working in the spaces of agriculture, community development, work and family studies, and gender studies in order to identify new research questions that can better integrate and address farm household childcare needs as they connect to broader rural development programs and policies.

Government agencies and NGOs in the United States recognize the need to foster a young, vibrant farm economy in the face of an aging farm sector and have developed policies and programs to encourage existing farm families to remain on their farms, recruit new farmers, and create lasting agricultural economic opportunities. These initiatives attempt to foster the next generation of farmers and a stronger agricultural economy by emphasizing economic, market, and land-access issues (Inwood, Clark, & Bean, 2013). However, farms and ranches are not just economic enterprises, but are family-based enterprises, and must be viewed holistically within the lifecycle of both the farm business and the life-course of the farm family (Bennett, 1982; Inwood, 2013; Reinhardt & Barlett, 1989). The reproduction of the farm requires the reproduction of the family, and although childcare has been presented as a persistent issue in farm family research for over 30 years, ranging from a lack of adequate childcare facilities(Freeman, Schwab, & Jiang, 2008) to the difficulty of balancing work and farm family responsibilities (Schubert Walker & Walker, 1987) and to farm safety (Reschke, 2012), it has not been directly addressed by farm policy or debates on food and agricultural development.

The intersection of childcare and farm work is particularly relevant at the Rural-Urban Interface (RUI), the relatively rural and agriculturally dense spaces on the edge of urbanized areas that have been the focus of local and regional food system development (American Farmland Trust, 2013) and beginning farmer programing. The future of agriculture at the RUI is not only affected by non-farmland use decisions and farm economic viability, but also by the overall health and well-being of farm families. Understanding the social needs of first-generation and multi-generation farmers is part of a larger effort to support beginning farmers (Meyer et al., 2011), as the number of beginning farmers is at a 30-year low, and the farm population overall continues to age dramatically (United States Department of Agriculture National Agricultural Statistics Service [USDA NASS], 2012). There has been little research examining how community embeddedness, family dynamics, and quality of life, particularly for younger farm families in their prime reproductive years, influences the long-term persistence of these farms or the contributions they make to their local communities and economies.

Using data from a national survey of farm families at the RUI, this exploratory study takes the first step toward positioning the issue of childcare in the farm community context by empirically exploring the relationship between childcare, the farm business, and the farm family. This research examines four questions: 1) Do farm families at the RUI perceive childcare to be an issue influencing their farm business? 2) Do farm families experience childcare problems? 3) What aspects of childcare do farm families perceive to be a problem? 4) Do the networks of family and friends influence whether or not childcare is an issue in farm families?

To account for social distinctions that influence enterprise structure and household level decisions, we focus our analysis on two groupings of farmers at the RUI: 1) multi-generation (MG) and first generation (FG), and; 2) men and women.

In this article, we review and synthesize the research examining agriculture at the RUI, childcare as a factor in both community and economic development, and care work in farm families. We then present the methods, analytic strategy, findings, and discussion, where we provide recommendations for outreach and programs that can assist farm families with childcare needs. We conclude with suggestions for future research.

Farming at the RUI

The RUI is a complex landscape that includes both rural and urban land uses and is socially and economically connected to an urban core. Farmers at the RUI are affected by a variety of processes, including both global agri-food system pressures and stresses from local non-farm urban-related development (Audriac, 1999; Clark, Inwood, & Sharp, 2011). The proximity to an urban core provides greater market opportunities and off-farm employment options. Agriculture at the RUI is characterized by high value, labor-intensive production, and marketing systems. The majority of the nation's fruit, vegetable, nursery greenhouse, and organic crops, and the majority of direct sales come from RUI counties (Inwood & Clark, 2013; Jackson-Smith & Sharp, 2008). Given the increasing interest in economic development through food and agriculture, the RUI has been a target region for local food system infrastructure projects and beginning farmer programming. Understanding how household-level issues, such as childcare, affect the agriculture sector is particularly important at the RUI, where farmers must weigh family, farm worker, and farm enterprise with off-farm employment variables.

The long-term viability of agriculture at the RUI relies on the successful establishment of new farm enterprises, the growth of existing farms, and the persistence of farm enterprises across

generations (for a full discussion see Clark et al., 2011). American Farmland Trust recommends fostering agricultural development at the RUI by encouraging a favorable agricultural business climate (Unger & Thompson, 2013), and current efforts to support farmers at the RUI primarily focus on issues related to land, credit, capital, skill, and market development. However, in order to more holistically address farm persistence, viability, and growth, it is critical to expand institutional supports to incorporate the dynamic nature of farm families and address household needs such as childcare (Coleman & Elbert, 1984; Inwood, 2013; Inwood et al., 2013; Smithers & Johnson, 2004).

Childcare, communityand economic development

Research has consistently shown that childcare supports workforce development by allowing parents to work (Harrison & Weiss, 1998; Kimmel, 2006; Warner, 2008). Wages, workers' abilities, skills, and the structure of the labor market shape opportunities. However, institutional theories of labor markets and workforce development also focus on the importance of organizational support for workers and the ways community institutions, such as appropriate and affordable childcare, affect the workforce and support human capital development (Green & Haines, 2015). National, state, and local policymakers are increasingly recognizing the economic

contribution of childcare, not only to parental labor force mobilization and child development,

but also, to a region's economic development (Kimmel, 2006; Ribeiro & Warner, 2004; Warner, Ribeiro, & Smith, 2003).

Recognizing the challenges childcare poses for working families, there have been efforts to create a coherent national childcare program in the US similar to the public social support systems common in Western Europe. The Comprehensive Child Development Act (CCDA) of 1971 proposed a federally funded national daycare system for all. The CCDA was vetoed by President Nixon on the grounds that it would create a program that interfered with families' own parenting responsibilities (Michel, 1999). Political divisions have created barriers to implementing national childcare policies, and current federal childcare support programs are piecemeal. Currently, federal support is offered through two subsidy and tax deduction programs: 1) the Childcare and Development Block Grant (CCDBG) which supports the purchase of private-market childcare by subsidizing the costs for low-income parents and regulating approved care centers, and 2) the Child and Dependent Care Tax Credit, which is available to cover a portion of employment-related childcare (Internal Revenue Service [IRS], 2014). Access to public childcare assistance is means-based and is only available to low-income families. Hipp, Morrissey, and Warner (2017) highlight the childcare access gap in the US where many families are too wealthy to qualify for public programs but are without the means to pay for high-quality childcare. In addition to the cost, the availability and quality of childcare remain a serious problem for working parents in both rural and urban communities (National Association of Child Care Resource and Referral Agencies [NACCRRA], 2011).

Nationally, more than 11 million children under age five are in some type of childcare every week, with approximately one-quarter of these children in multiple childcare arrangements to accommodate parents' working hours (NACCRRA, 2014; Stoney, Mitchell, & Warner, 2006).

Care arrangements can be formal or informal (Michel, 1999). In this paper, *formal care* refers to paid care with a licensed family, friend or neighbor, or a regulated or unregulated daycare center, and *informal care* refers to care provided outside of formal care centers, often by unlicensed relatives, neighbors, friends or other non-relatives (Swenson, 2008)

The cost of childcare is cited as one of the biggest challenges for working parents. Laughlin (2013) found working families with children under age five paid an average of 9,300 USD per year for childcare arrangements, or ten percent of their income. Formal center-based daycare in the US can be one of the most expensive options, with the cost varying by state, from 5,496 USD to 16,549 USD per year (NACCRRA, 2014). Research has found there are differences in rural and urban childcare trends. For example, while childcare tends to cost less in rural areas compared to urban centers, studies have found rural children are more likely to have both parents in the labor force compared to urban children (Swenson, 2008). Both rural and urban parents report having to navigate the lack of available spots, long wait-lists, and the wide variation in the philosophy and quality of providers available, challenges that are exacerbated in rural areas (Davis, Grobe, & Weber, 2010; NACCRRA, 2011; Reschke, 2012). Taken together, the rising cost of child-care in combination with the longstanding issues of supply and quality continue to affect the choices of working parents of varying incomes and geographic locations (NACCRRA, 2014).

Farm families, work, and childcare

Childcare as a community and economic development issue extends to farming and directly affects farmer-parents, their off-farm employers, and the communities in which they are embedded (Reschke, 2012). Though there has been attention to the childcare needs of farm workers (Liebman, Mainster, & Lee, 2014), there has been little research to understand how childcare affects farm owner-operators. Despite efforts to promote workforce mobilization and economic development in the agriculture sector, the child-care challenges of farmers and their potential relationship to farm development and retention have been largely absent from these broader policy discussions. While efforts to strengthen rural economies by supporting children and their families had been prioritized by USDA Rural Development and the White House Rural Council under the Obama administration (O'Brien, 2015), public agencies have not yet targeted farmers specifically as a population that may have unique program needs.

National and state initiatives to support young and beginning farmers and encourage Small and Medium farms to scale up require farm families to invest more time and energy into their enterprise. Families must balance enterprise and household needs and accommodate the needs of children in light of the fact that the farm business life-cycle stage of growth and development is more likely to occur early in the family life-course and the arrival of children (Bennett, 1982). Young children, especially at the infant, toddler, and preschool age, present unique constraints, as they often require more time and attention, and it is often more difficult to find care for younger children. While farmers often express a desire to live and work on a farm with their children (Johnson, Bowlan, McGonigal, Ruhf, & Sheils, 2001) and may even choose a self-employed profession, like agriculture, for perceived flexibility of hours and location, childcare accommodations of some kind are necessary to allow for productive time for farm business responsibilities in addition to ensuring farm safety. Farming ranks among the most dangerous occupations in the US, and farm accidents are a common occurrence for adults and children (Bureau of Labor Statistics [BLS], United States Department of Labor, 2011; National Institute for Occupational Safety and Health [NIOSH], 2011; Occupational Safety and Health Administration [OSHA], 2013). The CDC (2013) reports approximately 14,000 children and adolescents were injured on farms in 2012, with 2,700 of these injuries directly related to farm work and the remaining 78.8% linked to the farm environment. Farm safety programs, especially those targeting children, are designed to mitigate and minimize these risks; however, the reality is parents are embedded in a complicated environment with their attention divided between production and childcare needs. This reality lead Reschke (2012) to stress adequate attentive care for children on farms is a strategy to mitigate accidents and injury.

Childcare decisions can be complicated by farm structure, as farm families typically run their own businesses, work non-traditional erratic hours, and may have one or both farm parents working off-farm to supplement farm income fluctuations and obtain benefits. According to the 2012 Census of Agriculture, 61% of farmers worked off the farm at least some days, and 40% worked off the farm 200 or more days (United States Department of Agriculture National Agricultural Statistics Service [USDA NASS], 2014). Formal daycare providers are typically structured to accommodate a conventional workweek schedule, with hours ranging from 7:30 am to 5:30 pm, Monday through Friday, being closed on weekends, yet the rhythms of farming rarely correlate to this rigid schedule. Low returns

from farming, especially for Small and Medium farms, may make it difficult for farm families to afford daycare, even if they are able to find a provider who can also accommodate their schedule. As in the general population, farmers who are self-employed can face obstacles accessing childcare assistance programs. For example, under federal regulations self-employed individuals are not eligible for tax-exempt Flexible Spending Accounts (FSAs) for dependent care (Internal Revenue Service [IRS], 2018). Additionally, self-employed farm families may be challenged to fully access federal childcare support subsidies that are available only to low-income families and tax credits available to employed parents.

Due to the variability of farm work and income sources, Reschke (2012) postulates that farmers are more likely to need non-market, informal care for an affordable option that accommodates non-traditional work schedules, since parents who work nontraditional hours are more likely to utilize informal care (Presser, 2003; Verhoef, Tammelin, May, Ronka, & Roeters, 2016). Relative care is an attractive option for rural families because it is often more affordable and offers flexible schedules (Reschke et al., 2006) that are more difficult for women, in particular, to find in rural areas where work-family experiences may be more rigid (Glauber & Young, 2014). Additionally, research has shown the type of childcare pursued and a parents' understanding of their childcare options is embedded in cultural norms and social networks (Meyers & Jordan, 2006).

Awareness and access to information about available care providers (especially those in the informal sector, often provided by family and friends) can be affected by the degree to which an individual is embedded in their community and, potentially, the number of family and friends residing in the locality. However, young (individuals younger than 35 years old), first-generation (individuals with no farm background) and beginning farmers (individuals who have been farming ten years or less) may start farm businesses based on land prices, distance to markets, and soil quality, rather than proximity of family, and therefore may not have relatives or be part of community networks that are able to provide assistance with care or share information about available childcare providers. Understanding the community networks of farmers at the RUI, and the ways these communities, or lack thereof, influence childcare challenges, is important for supporting a young and active agricultural population at the RUI and economic development efforts rooted in food and agriculture. We therefore focus our analysis on childcare in *Multi-Generation* (MG) farm families (one or more household members grew up on a farm) and *First-Generation* (FG) farm families (none of the household members have a farm background). To date, there has been no research examining how childcare impacts farm families, particularly young and new farmers with children who move to a new community to start farming but have no family and limited social support network in the area.

We also focus our analysis on men and women farmer groups. More women than ever are choosing to farm as their primary work: the 2012 Census of Agriculture reported 14% of farms had a woman principal operator, a 30% increase from 2002, the year the USDA began differentiating principal operators based on sex (USDA NASS, 2012). Furthermore, 31% of farms at the RUI have a woman principal operator (Inwood & Clark, 2013; USDA NASS, 2007). The number of women operators being counted continues to grow. Recognizing that multiple individuals within the family and enterprise contribute to agriculture production, the 2017 Census of Agriculture revised its demographic data collection method; as a result, the most recent statistics indicate there are 1.2 million female producers in the US, accounting for 36% of the country's 3.4 million producers (National Agricultural Statistics Service

[NASS], 2019). Of the farms with women principal operators, 90% make less than 50,000 USD per year in gross profit and government payments, and the majority operate Small and Medium farms (NASS, 2014). Women historically are the primary childcare providers within the family unit, so understanding how childcare factors into female operator decision-making has implications for both farm economic development, non-farm labor market participation, quality of life, and family dynamics.

Childcare is essential to the community and economic development and to workforce development yet is largely unaddressed in the agriculture and food systems literature. We seek to empirically understand the childcare challenges of two different segments of the farm population and to bring together two previously unconnected bodies of literature: childcare and agriculture.

Methods

To answer our research questions, we utilized a cross-sectional survey approach (Babbie, 1973) that allowed for a preliminary investigation of the relationship between childcare, the farm family, and community networks at the RUI. The data for this article come from a larger project examining how succession, family goals and motivations affect farmer persistence and growth at the RUI. A subset of the farmer survey included questions on childcare. Of the 654 farmer surveys returned, this paper is based on the 186 farm families who indicated they had children under age 18 and answered the childcare section of the survey.

This research is based on farmer surveys in five RUI agricultural regions in the United States. The five case study locations include counties within the Core Based Statistical Areas (CBSA) of Burlington, VT; Columbus, OH; Honolulu, HI; Miami-Fort Lauderdale-Pompano Beach, FL; and one Combined Statistical Area: Portland-Lewiston-South Portland, ME. The study areas were selected based on the following criteria: 1) located at the RUI (counties in the top four categories of the USDA's ERS Urban Influence Codes (Parker, 2003), p. 2) exhibited a healthy agricultural sector (in the top quartile of US agricultural sales during 2007); 3) represented different commodity histories and geographic regions (one study area in each of the four different regions of the U.S); 4) had a higher than regional average percentage of Small and Medium-size farms to assure the existence of a meaningful population of farms of interest; and 5) had a higher than regional average presence of farmer diversity measured by women, minority, and beginning farmers.

The research was conducted in three phases. In phase one, published data sources, online resources, and telephone interviews with local extension agents and key informants were used to become more familiar with the agricultural and farm policy context in each site. In the second phase, occurring in 2011, team members traveled to each case study site to conduct in-person interviews with farmers utilizing a snowball sampling methodology (Lofland, Snow, Anderson, & Lofland, 1995). The farm operator interviews were designed to examine the farm household decision-making, gender roles, opportunities for the next generation, motivations for farming, and business development. In 2014, the final phase was completed with a mail survey sent to 2000 farms across the sites. Following a tailored Dillman design, respondents received advanced letters, reminder postcards, and multiple mailings of the survey packet, and the first survey had a one-dollar bill incentive attached to the survey (Dillman, 2009); the response rate was 43.5 percent.

The survey covered basic personal and household demographics, motivations for land use, succession plans, farm structure, and asked about family and friend networks in the nearby community. The childcare questions specifically asked respondents the degree to which: affordability of childcare, the availability of childcare, the quality of childcare (education stimulation and curriculum), and finding caregivers who fit their philosophy of raising a child were a problem. Respondents were provided with a five-point Likert Scale ranging from "not a problem" to "serious problem." Respondents were also asked about how childcare needs affect farm decisions. Since childcare was not the primary focus of the survey, we were unable to ask questions about the number and age of children in the household and marital status. We acknowledge this limitation and suggest these data points be included in future research. Data was analyzed with SPSS v. 21, to assess the significance of childcare across sub-groups within the data set. We report significant results at the.05, .01, and .001 levels.

Respondent demographics and analytic strategy

Respondent demographics of the full survey sample and demographics of the childcare sample pulled from the larger survey for this analysis are compared to the national farm population (NASS, 2014) in Table 1 found on the On-line Appendix. The average age of farmers in our sample of analysis is 45, reflecting that parents with children under the age of 18 tend to be younger. We use *young* and *old* in this study to account for the different perspectives, priorities, and economic needs of farm families in various stages of the life course and enterprise life cycle. We divided farmers using the median age of our sample, 44. Farmers 44 years and younger were categorized as *young*, and farmers 45 years old or more were categorized as *old*. The sample for analysis has higher percentages of young farmers (51.1%), beginning farmers (43.6%), and women farmers (43.2%) compared to the total sample of respondents and the national farm population. The survey sample and the sample for analysis have similar percentages of MG and FG farmers. FG farmers are distinct from MG farmers, as they do not come from a farm family, and are further distinguished from *Beginning Farmer*, which is defined by USDA as one who has operated their farm for less than 10 consecutive years and may or may not be an MG farmer.

The study purposefully sampled Small and Medium farms at the RUI. Farms with sales less than 10,000 USD were classified as Hobby Farms representing less than a quarter (24.6%) of the sample. Small farms (33.9%) reported sales between 10,000 USD and 99,999. USD During the study period, USDA changed the definition of a mid-sized farm from 100,000 USD to 249,999 USD in sales to the range of 250,000 USD to 500,000 USD in sales (United States Department of Agriculture Economic Research Service [USDA ERS], 2013). To account for this change within the pre-defined parameters of this study, farms reporting between 100,000 USD and 499,999 USD were categorized as Medium and represent 26.8% of the sample for analysis. The relatively small portion of the sample that reported over 500,000 USD in sales were categorized as Large (14.8%).

Participants in this study, and at the RUI more generally (Inwood & Clark, 2013), are more likely to participate in more labor-intensive production methods including fruit, vegetable, and value-added production, and to sell direct to consumers than the national farm population. While race was not a demographic variable used in this study's analysis, it is worth noting that there were a higher number of respondents identifying as Asian

Table 1. Summary descriptive statistics for survey respondents and survey respondents with children under 18.

Characteristic	National Farm Population	Survey Sample	Survey Sample with Children Under 18
	(n = 2,109,303)	*(n = 654)*	*(n = 186)*
Average Age	58.3	54.7	45.0
Young (%)		22.9	51.1
Old (%)		77.1	48.9
Beginning Farmers (%)	18.0	27.2	43.6
Multi-Generation (%)		48.5	47.0
First-Generation (%)		51.5	53.0
Gender (%)			
Male	86.0	59.1	56.8
Female	14.0	40.9	43.2
Value of Sales (%)			
Less than $10,000 (Hobby)	56.6	21.0	24.6
$10,000 to $99,999 (Small)	25.0	39.6	33.9
$100,000 to $499,999 (Medium)	11.0	26.0	26.8
$500,000+ (Large)	7.4	13.4	14.8
Farm Type			
Vegetables, Fruits, Nuts, Orchard	8.4	49.4	51.9
Livestock	37.8	28.0	35.5
Nursery/Greenhouse	2.5	25.2	21.3
Dairy	7.8	11.9	14.8
Grain	23.9	8.4	11.5
Value-added	4.5	26.4	24.6
Direct Sales	6.9	88.4	87.7
Race (%)			
American Indian/Alaska Native	1.8	1.0	1.1
Asian	0.6	6.5	5.0
Black or African American	1.6	0.2	0.6
Native Hawaiian or Other Pacific Islander	0.1	1.1	0.6
White	95.4	84.1	85.1
Other/more than one race	0.5	7.1	7.6

(6.5%), Islander (1.1%), and other/more than one race (7.1%) compared to the national farm population, likely reflecting the inclusion of farmers from Hawaii. Overall this sample is younger, more likely to be a beginning farmer, more demographically diverse, includes a higher number of Small and Medium farms, and is more likely to engage in intensive production and marketing systems compared to the national farm population.

Respondents were asked to report if balancing farm and household needs, and childcare more specifically, is an influencing factor in farm decisions. To further understand the relationship between childcare problems, farmer demographics, and community relationships, respondents were asked to assess how much of a problem affordability, availability, quality, and philosophy of childcare providers are when making childcare decisions. Farmers who reported any problems with any of these childcare characteristics were categorized as *farmers with childcare problems* and were examined separately. To understand the characteristics of farmers who reported childcare problems, we further categorized the sample for analysis into *MG with Childcare Problems, FG with Childcare Problems, Men with Childcare Problems*, and *Women with Childcare Problems*. Because childcare is an issue embedded in community relationships and networks, we also asked about proximity of family and friends.

Results

The analysis examined only farmers with children under age 18 (n = 186, or 28.8% of the total survey sample). At a broad level, the majority of farmers with children under 18 report experiencing childcare problems of some kind (Table 2). Over two-thirds of FG farmers experience childcare problems, while just over half of MG farmers report problems with childcare. Men and women farmers with children under 18 are almost equally as likely to report experiencing childcare problems.

While the importance of childcare and balancing farm and household as factors in farm decision making is similar in both MG and FG farmers, a greater percentage of FG farmers reported having trouble with all four aspects of childcare: affordability, availability, quality, and philosophy (Table 2). This analysis also revealed significant differences between men and women farmers. Women are almost twice as likely to report childcare is an important factor in farm decisions, with 43.9% of women reporting the importance of childcare in decision-making, compared to only 23.9% of men. Balancing farm and family is significantly more likely to be a factor in farm decision making for women farmers (87.0%) compared to men (71.2%). Although not statistically significant, women are more likely to report problems with all aspects of childcare (affordability, availability, quality, and philosophy) than men.

In Table 3, FG farmers with childcare problems are more likely to also be beginning farmers (59.4%) than MG farmers with childcare problems (41.9%). FG farmers with childcare problems are also more likely to have Hobby, Small or Medium-size farms (82.8%), reporting lower farm sales compared to MG farmers who reported childcare problems. Production and sales are also significant: all MG farmers with childcare problems and 86% of FG farmers with

childcare problems reach consumers through direct sales.

Women with Childcare Problems are more likely to be young farmers (70.8%) than *Men with Childcare Problems* (49.2%). Nearly all women (97.7%) and three-quarters of men (84.1%) with childcare problems are also involved in more labor-intensive direct sales. Additionally, though not statistically significant, women farmers with childcare problems are also more likely to have Hobby, Small or Medium-sized farms (81.3%) than men (71.4%), indicating women with childcare problems have lower farm sales.

The analysis reveals significant differences between the family and friend networks of FG and MG farmers with childcare problems. FG farmers are significantly more likely than

Table 2. Child care challenges of farmer groups.

	Multi-Generation	First-Generation		Men	Women	
	(n = 86)	*(n = 97)*	*P*-Value	*(n = 104)*	*(n = 79)*	*P*-Value
Experience Child Care Problems	52.3%	67.0%	0.05*	62.5%	60.8%	0.878
Child Care is Important Factor in Farm Decisions	28.4%	32.5%	.717	23.9%	43.9%	.017*
Balancing Farm & Household is Important Factor in Farm Decisions	81.4%	74.7%	.370	71.2%	87.0%	.012*
Child Care Problems						
Affordability	37.8%	46.7%	.283	40.4%	48.7%	.286
Availability	34.1%	46.2%	.122	39.4%	42.7%	.756
Quality	39.5%	52.7%	.093†	44.3%	51.3%	.443
Philosophy	31.3%	49.4%	.019*	37.5%	47.3%	.213

†.05 < P <.10, *P <.05, **P <.01, ***P <.001.

Table 3. Demographic characteristics of farmer groups with child care problems.

Characteristic	MG with Child Care Problems	FG with Child Care Problems		Men with Child Care Problems	Women with Child Care Problems	
	(n = 45)	*(n = 65)*	*P*-Value	*(n = 65)*	*(n = 48)*	*P*-Value
Age						
Young	57.8%	58.5%	1.00	49.2%	70.8%	.033*
Old	42.2%	41.5%		50.8%	29.2%	
Experience						
Beginning	41.9%	59.4%	.081†	50.8%	54.3%	.845
Non-beginning	58.1%	40.6%		49.2%	45.7%	
Farm Size						
Hobby	18.2%	29.7%	.285	23.8%	25.0%	.747
Small	38.6%	35.9%		36.5%	37.5%	
Medium	22.7%	25.0%		22.2%	27.1%	
Large	20.5%	9.4%		17.5%	10.4%	
Production Type						
Direct	100.0%	86.0%	.047*	84.1%	97.7%	.058†
Not Direct	0.0%	14.0%		15.9%	2.3%	
Sex						
Men	62.2%	52.3%	.333	45.2%	35.4%	.333
Women	37.8%	47.7%		54.8%	64.6%	

†.05 < P <.10, *P <.05, **P <.01, ***P <.001.

Table 4. Community networks of farmer groups with child care problems.

	MG with Child Care Problems	FG with Child Care Problems		Men with Child Care Problems	Women with Child Care Problems	
	(n = 44)	*(n = 62)*	*P*-Value	*(n = 64)*	*(n = 45)*	*P*-Value
Friends Nearby	84.10%	91.90%	.229	89.10%	88.90%	1.000
No Friends Nearby	15.9%	8.1%		10.9%	11.1%	
Relatives Nearby	86.0%	57.8%	.003**	66.7%	72.3%	.541
No Relatives Nearby	14.0%	42.2%		33.3%	27.7%	

†.05 < P <.10, *P <.05, **P <.01, ***P <.001.

MG farmers to live in an area without familial support (Table 4). Though similar percentages of MG and FG farmers with childcare problems have no friends nearby, FG farmers with childcare problems are much more likely to live without family nearby: 42.2% of FG farmers with childcare problems have no relatives nearby, while only 14.0% of MG farmers with childcare problems have no relatives nearby. Nearly equal percentages of men and women with childcare problems report having friends/no friends and relatives/no relatives nearby.

Discussion

Our study aimed to quantitatively assess the relationship between childcare, farm families, farm businesses, and their communities, and to understand how this relationship plays out across different farmer groups. We found that farm families do perceive childcare to be an issue influencing their farm business and that the childcare challenges reported by different farmer groups (MG/FG, Men/Women) are notable and significant.

In this study, FG farmers are more likely than MG farmers to report childcare challenges with quality of care and in finding caregivers that match their philosophy of raising a child. The lack of proximity of family may be a factor in explaining the differences between MG and FG in regard to childcare. For FG and beginning farmers, the most important qualities for selecting farmland include proximity to markets and land price (Lusher Shute, 2011), qualities that can land FG farmers in areas without the support of family or friends (Johnson et al., 2001). Childcare is deeply embedded in social structures and community networks, and are the mechanisms by which parents learn much of their information about the location, supply, and quality of care options (Meyers & Jordan, 2006). FG farmers tend to be more socially isolated in the communities they are embedded in, with fewer family members nearby compared to their MG counterparts, which in turn exacerbates childcare challenges. Without strong community networks, FG farmers may lack the social resources that help in identifying and finding a provider. FG farmers are less likely to inherit farming land, knowledge of agricultural production, and business practices from previous generations than their MG counterparts (Meyer et al., 2011; Sureshwaran & Ritchie, 2011); this lack of familial support with the farm business seems to extend to the social resources farm families can draw on as well.

In contrast to FG farmers, MG farmers are more likely to receive familial support in the form of inherited farmland, knowledge of agricultural production, business practices, and community connections (Meyer et al., 2011; Sureshwaran & Ritchie, 2011), and in this study, are more likely to have relatives nearby. MG farmers have a denser set of community and family relationships and networks that alleviate some of the strain on childcare. Relative care is an attractive option for rural families because of the flexibility of schedule and affordability (Reschke et al., 2006). However, there is a tendency to romanticize the multi-generational farm family embedded in an ideal community of care and support. It is important to note that even though MG farmers are more likely to have family nearby, over half (52.3%) of MG still report experiencing childcare problems. These results reinforce the need to consider the varying childcare issues all farm families experience and recognize that family solutions alone will not address the real childcare problems families face.

In this sample, high percentages of both women and men report experiencing childcare problems, while women are more likely than men to consider childcare and balancing farm and household as factors important in farm business decisions. Dreby and Carr (2019) found that some women and families seek self-employment through farming for the flexibility in childcare an at-home business theoretically provides; however, the results in this study indicate childcare problems can be a real issue and are likely to influence the trajectory of the farm enterprise. The majority of women with childcare problems operate Small and Medium farms and are significantly more likely than their male counterparts to engage in direct sales. These findings align with more general workforce development studies documenting that women still take on a disproportionate share of child rearing and are more likely to change their employment, work patterns, and make lower wages to accommodate children despite gains made to increase equality across the sexes (Hochschild & Machung, 2012; Pugh, 2015). In this study, evidence of these more macro trends emerges among Small and Medium farmers at the RUI and contributes to bigger questions related to gender, work and family, and livelihood strategies.

Nationally, even though women are one of the fastest growing segments of farmers, 91% report less than 50,000 USD in sales in contrast to 75% of all farms (USDA NASS, 2014). Childcare is most likely not the only variable explaining this pattern; however, women's role as a primary caregiver for children may be a significant contributor and is a question worthy of further research. When considering the future trajectory, growth, and persistence of these farms, the role of childcare cannot be ignored. A survey of US farm women conducted by Jones and Rosenfeld (1981) almost forty years ago, identified specific policy and program needs farm women would like USDA to provide, with one of the requests being for programs sponsoring childcare services to help women in furthering their agricultural careers. Childcare has been a persistent issue in farm families for over forty years, ranging in focus from a lack of adequate childcare facilities (Freeman et al., 2008) to the difficulty of balancing work and farm family responsibilities (Schubert Walker & Walker, 1987). The degree to which USDA and Extension programs can address the intersectionality of women's work as farm operator, decision maker, farm laborer, off-farm income earner, housekeeper, cook, primary caregiver, and mother will influence the farm enterprise trajectory and quality of life of all family farms (Sachs, 1996).

The challenges associated with childcare are also partially a reflection of where the farm family falls along the life-course. In this sample, FG farmers with childcare problems are predominantly beginning farmers, and women farmers with childcare problems are predominantly young and are more likely to be so than their respective MG and male counterparts. These results mirror other studies documenting the way life-course effects – particularly the influence of children – intersect with the business cycle, where the enterprise must simultaneously grow to support an expanding family, while also contending with less family labor (Bennett, 1982; Gasson & Errington, 1993; Schubert Walker & Walker, 1987; Smithers & Johnson, 2004). The tensions reported by FG and women farmers reflect the challenges of being at a stage of simultaneously starting their farm businesses and growing their families.

Our purposive sample of Small and Medium farm enterprises raises complicated questions regarding the issue of childcare in farm families and the cycle through which childcare challenges may be perpetuated. Women and beginning farmers are more likely to have Small and Medium farms and report lower farm sales (Ahearn, 2013; Hoppe & Korb, 2013), while Small and Medium farms are more likely to have off-farm employment to increase household income and secure benefits like health insurance (Hoppe, MacDonald, & Korb, 2010). Small and Medium farmers with children are placed in a challenging position – in order to ensure sufficient income and capital to invest in their farms, they need to work off-farm and arrange for some form of childcare (often made more affordable by higher wage off-farm jobs); however, off-farm work takes time and energy away from the enterprise and can limit farm growth and development. If a farm family opts to leave or reduce their off-farm work, their lower on-farm incomes make paid childcare options less affordable, even though childcare is still needed to ensure time for farm work. Additionally, in our sample, almost all FG and women farmers report selling directly to consumers, a more time-consuming and labor-intensive production and marketing system that requires more direct and focused attention. Without appropriate, affordable and accessible childcare options, farmers may choose to keep children on the farm, which could limit the time for farm business responsibilities and result in familial role conflict and stress (Berkowitz & Perkins, 1984; Hedlund & Berkowitz, 1979).

As an issue, childcare is currently divorced from farm risk management, farm economics and farm business planning. Most farm planning workshops focus on goal setting, business plan development, financial management, risk management, record keeping, and marketing practices. These skills are critical; however, equally important yet rarely discussed are social and life course events – such as having children – that affect the long-term viability and quality of life of the farm enterprise. As a practical first step to addressing childcare issues in the farm sector, there is a need to draw on existing childcare resources to develop and integrate curriculum modules that enable FG and MG farm families to identify and map how childcare needs and options will affect their farm structure, management and marketing strategies, and household dynamics. These planning tools should be flexible, allowing childcare plans to be revisited and evolve over time as children age and household and farm goals change. The more explicitly issues such as childcare can be acknowledged and planned for, the better equipped farmer-parents will be to anticipate and handle the conflicting demands on their time and attention.

At the local level, a low-cost strategy for bridging family and friend network gaps essential for childcare, is for the Extension and farm nonprofit organizations FG and MG are already embedded in to create new strategic partnerships with organizations and institutions engaged in local childcare networks. Examples include civic organizations, religious institutions and Child Care Aware® of America, an organization that works with over 400 Child Care Resource and Referral agencies across the country. Extension and farm nonprofit organizations can publicize already existing, easily accessible and user-friendly childcare resources on county or state-wide online listservs, and co-sponsor in-person parent networking nights to facilitate information exchanges around formal and informal care options. At the state level, fostering new collaborations across state departments of Agriculture, jobs and family services, childcare advocacy organizations, community development corporations, industry, commodity groups, and farm nonprofits can expand and broaden conversations and debates around childcare programs and policies to include the needs of farmer and farm worker parents.

Conclusion

This article seeks to contribute to larger national policy discussions aimed at supporting young and beginning farmers in light of the dramatic aging and shrinking of the US farm population by considering the relationship between childcare and the health and vitality of the farm household and farm enterprise. Childcare is essential to workforce and community economic development and is necessary to ensure farm safety and farm business productivity. Additionally, reducing stress surrounding the issue of childcare can improve farm family quality of life, and create a more pleasurable agricultural environment where farm children may be more interested in farming as a career and new farmers may be more motivated to remain in the field.

Although childcare is often thought of as only benefitting parents and providers, Warner et al. (2003) found that framing childcare as an issue of economic development provides the tools and language to enable childcare resources and economic development agencies to work together to increase public and private support for childcare and wellbeing of the

community as a whole. The availability, quality, and affordability of childcare is a national issue for all working parents. To fully realize the potential benefits of economic development projects rooted in food and agriculture, we need to better integrate and reconcile how childcare affects the economic opportunities and quality of life for workers across the supply chain including farm families, farm workers, food-hub workers, food processing workers, food retail workers, and restaurant workers. To address the childcare knowledge gap in food systems studies, we reiterate our call for new collaborations across community development, work and family, gender and agriculture scholars, and practitioners to identify new research questions, programs, and policies that can better integrate childcare into food and agriculture initiatives and broader rural development programs.

Our study very broadly examines farmer respondents with children under age 18. Future research should focus on farm families and farm workers with children under school-age (kindergarten and younger) for whom childcare is a more pertinent issue and should expand the study scope by capturing data reflecting the number of children in the home, the off-farm employment status of parents, number of adults in the household, and other family and farm business data points that may influence childcare. Comparison with non-farm families in similar geographic areas would also be valuable. The way childcare issues overlap with different points in an individual's life course could be more thoroughly understood through the use of longitudinal data over a prolonged period of time. The generalizability of our findings is limited due to the relatively small sample size. Future research can expand on the findings of this paper through a larger sample and expand the spatial component of this study to non-RUI, rural areas, which would provide a more thorough understanding of the effects of childcare on the agriculture sector. Incorporating farm family childcare needs into broader farm and rural development programs and policies will contribute to building a more vibrant and resilient farming economy that simultaneously improves farm family and community quality of life.

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ORCID

Shoshanah Inwood http://orcid.org/0000-0002-0941-0394

Working households

Working households: Challenges in balancing young children and the farm enterprise.

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