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SUPPORTING A GROWING AGRICULTURAL ECONOMY BY  
UNDERSTANDING CHILD CARE IN FARM FAMILIES

A Thesis Presented

by

Emily Stengel

to

The Faculty of the Graduate College

of

The University of Vermont

In Partial Fulfillment of the Requirements  
for the Degree of Master of Science  
Specializing in Community Development and Applied Economics

October, 2015

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Thesis Examination Committee:

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## ABSTRACT

This thesis argues for the consideration of child care accessibility and costs as one factor in the success and wellbeing of farmers in the United States. There is a long tradition in rural studies of recognizing that farms are not just economic enterprises but are family-based social enterprises as well, with household level issues and family roles that are both acknowledged and contested. However, child care is missing from virtually all scholarly and public discussions of agricultural workforce development – even more so than other social services and family supports. Additionally, the agricultural sector, considered as a portion of U.S. businesses and as a locus of U.S. family life, is missing from most discussions of child care services. Although child care has been shown to be crucial to workforce development, and the need for workforce development in the agricultural sector is vital in light of an aging farm population, the agricultural sector has remained largely absent from child care policy discussions. This two-article thesis seeks to inform scholarship and public policy in both of these areas.

Using data from a national survey of 186 farm families at the Rural-Urban Interface, Article One examines child care challenges faced by farm families and the influence community networks have on these challenges. This article focuses specifically on two groupings of farmers: multi-generation (MG) and first generation (FG) farmers, as part of a larger effort to support beginning farmers; and men and women farmers, as challenges related to child care are of particular concern for the increasing numbers of women farmers, who may have multiple roles including primary child caregiver, wage-earner through off-farm employment, and farmer. Findings establish that child care is an issue that influences farm business decisions for farmers, that FG and women farmers are farming populations that are more likely to have challenges with child care, and that family networks are an influencing factor in child care problems for MG and FG farmers.

Through analysis of interviews and focus groups with 43 farmers in the Northeastern United States, a geographic region chosen for its high concentration of female farmers, Article Two seeks to understand child care in farm families by examining patterns in farmers' experiences with child care and the ways child care affects both the farm family and the farm business. Findings reveal child care as an issue in the wellbeing of both farm family and farm business: child care has economic effects on the farm business, influencing decisions about labor, growth, and financial resources; child care also has social effects on the farm family, including shifts in gender roles, stress, and reduced quality of life.

Recommendations include child care subsidies specifically for farm families and the creation of formal child care networks that could allow for collaboration and use of already-existing networks of agricultural organizations: Extension, food policy councils, and producer groups. Additionally, state level departments of family and youth services, local child care organizations, and community development corporations are urged to tailor their resources specifically to farm families.

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## **CHAPTER 1: INTRODUCTION**

Growing attention is being given to child care in the United States, as seen in the recent federal proposal for Universal Pre-K, and for good reason: child care is increasingly recognized as an important economic sector that supports both child development and parental workforce mobilization. Mildred Warner and researchers at Cornell University, as part of the Linking Economic Development and Child Care Research Project, are leaders in the growing body of work on the economic importance of child care to communities. Child care has been studied in various communities and among different populations (Morrissey, 2008). However, the impacts of child care on the agriculture sector and farming communities have been generally absent from virtually all scholarly and public discussions of agricultural success – even more so than other social services and family supports. And the agricultural sector, considered as a portion of U.S. businesses and as a focus of U.S. family life, is missing from most discussions of child care services. This two-article thesis argues for the consideration of child care accessibility and costs as one factor in the success and persistence of farmers in the United States, and the wellbeing of the agricultural sector as a whole.

The absence of child care from scholarship and public policy concerning the agricultural workforce is especially notable. Child care has been proven to play an important role in parental workforce development (Warner et al., 2004) and while many acknowledge the importance of agricultural workforce mobilization in light of an aging farm population, child care has received little attention within the discussion of agricultural development. The United States Department of Agriculture (USDA) has recognized the need for support of first-generation and beginning farmers. In fact,

USDA and other public agencies provide support to farmers in the form of capital and market access via programs such as the “Beginning Farmer and Rancher Program.” In New York state, these farmers can apply as well for student loan forgiveness (NYS HESC, n.d.), a policy that has been proposed at the Federal level by the National Young Farmers Coalition to relieve financial burden from farmers who may experience low returns in the early years of the business (Simpson, 2015). However, farms and ranches are not just economic enterprises, but are family-based enterprises, and must be viewed holistically within the life cycles of both the farm business and the farm family (Bennett, 1982; Inwood, 2013; Reinhardt & Barlett, 1989). Public agencies have thus far not considered whether family-based supports might be of equal, or even greater, value to starting or struggling farmers as these other market- and loan-oriented efforts. A consideration of child care is a natural next step in this effort to align family and agricultural concerns – a form of social support that reveals the interdependence of family and economic wellbeing that is particularly important to consider in light of the increasing numbers of principal farm operators who are women and may also be primary caregivers for their children. More generally, placing child care in the agricultural context is a significant case study in that the growth and rearing of children often overlaps with the growth and development of a farm business (Smithers & Johnson, 2004).

Child care experts have rarely considered farms as loci of child care needs. Although child care has been shown to be crucial to workforce development (Warner et al., 2004), the need for workforce development in the agricultural sector is clear, and the demand for child care is potentially greatest when the farm business needs the most

attention, the agricultural sector has remained largely absent from child care policy discussions. Scholars and policymakers have historically addressed child care as an issue of general family wellbeing and have asserted the need for public assistance with child care challenges that American families face (Michel, 1999; U.S. Congress House Select Committee on Children, Youth, and Families, 1992). More recently, efforts to strengthen rural economies by supporting children and their families, including support for child care, have recently been prioritized by USDA Rural Development and the White House Rural Council. While access to affordable, high-quality care is a challenge for families of varying socioeconomic backgrounds, geographic locations, and professions (Forry, 2006; Morrissey, 2008; Walker & Reschke, 2004), this study focuses on a sub-sector of the greater labor force, agriculture, as advocates argue that knowledge of a particular workforce and the child care challenges they face is critical in making feasible policy recommendations for appropriate care (Kimmel, 2006). Additionally, agriculture offers a window onto these challenges outside of urban centers and provides an alternative context in which to examine and understand greater social issues influencing economic development and public policy (Lobao & Meyer, 2001). At a time of increasingly diverse work hours and less conventional gender roles for parents in the U.S., a study of the agricultural sector illuminates child care needs in the context of the nontraditional hours worked by farming parents and the increasing numbers of women farmers.

This is a new area of research, virtually unstudied except by Reschke (2012), whose work reviews the two previously separate bodies of research on child care and agriculture and asserts the need to understand and address child care in farm families as

a matter of “community economic well-being as well as child and family well-being.” Child care that meets the desired standards of affordability, availability, quality, and matching philosophy of farmers and their families is suggested as a necessity for child safety and parent-farmer productivity (Reschke, 2012) but has not been studied empirically. This thesis contributes to the existing literature on child care, agriculture, and the nascent conversation on the intersection of the two by capturing firsthand the child care experiences of farm families and positioning the issue of child care in the farm community context.

Using data from a national survey of 186 farm families at the Rural-Urban Interface, Article One examines child care challenges faced by farm families and the influence community networks have on these challenges, as child care is an issue that is deeply embedded in communities (Meyers & Jordan, 2006). This study focuses specifically on two groupings of farmers in order to be able to provide informed recommendations on support for farmer groups of interest: multi-generation (MG) and first generation (FG) farmers, as part of a larger effort to support beginning farmers (Meyer et al., 2011); and men and women farmers, as challenges related to child care are of particular concern for the increasing numbers of women farmers, who may have multiple roles, including primary child caregiver, wage-earner through off-farm employment, and farmer. The intersection of child care and the farm business is particularly relevant at the rural-urban interface (RUI), the relatively rural and agriculturally dense space on the edge of urbanized areas (Audirac 1999) that has been the focus of local and regional food system development (AFT, 2013). Agriculture at the RUI is affected not only by economic pressures such as land-use and development,

but also by household level issues, such as child care, made complicated by the location between rural and urban communities. Examining the issue of child care in farm families at the RUI, whose nontraditional work schedules and potentially challenging location between rural and urban areas, provides an understanding of the unique child care needs of farm families in this important agricultural region.

Through analysis of interviews and focus groups with 43 farmers in the Northeastern United States, a geographic region chosen for its high concentration of female farmers (NASS, 2012), Article Two seeks to understand child care in farm families by examining patterns in farmers' experiences with various methods of child care, the ways child care affects both the farm family and the farm business, and the strategies farm families identify as solutions to their child care challenges. The sample of 43 participants is made up of 33 women and 10 men, a reflection both of women's increasing role in agriculture and the fact that women remain as primary caregivers for children.

These separate studies together contribute to the existing literature by placing child care in the farm context and asserting the need for child care in farm families to be part of federal, state and local efforts in supporting farm development and persistence. Three different audiences can benefit from understanding child care decisions made by farm families, the extent to which child care affects the farm family and farm business, and potential solutions to child care-related challenges: the farm families making these decisions, the organizations working to assist farm families and strengthen the agricultural economy, and child care advocates who work to ensure the appropriate support for all working families in the U.S..

The following section includes a review of the literature that frames and supports this thesis: child care in both economic and historical contexts; agriculture at the RUI; and motivations, values, work, and gender in farm families. The remaining chapters present the methods used for data collection and analytic strategy, the full text of both articles, and overarching conclusions that emerged from the synthesis of both studies.

## **CHAPTER 2: LITERATURE REVIEW**

Child care is an issue that has economic implications, and is important to understand from a policy perspective when considering its influence on the agricultural sector. Additionally, it is an issue that affects farm families uniquely because of their diverse motivations and values, and both traditional and changing gender roles in the farm household and farm business work. This comprehensive literature review provides an overview of scholarship in the previously separate fields of child care and farm families, and shows the importance of the emerging conversation between these two bodies of work.

### **2.1. Child Care and Workforce Development**

Child care has dual functions: it supports workforce development by allowing parents to work, and also provides childhood development. Workforce development is defined by Harrison and Weiss (1998) as the “constellation of activities from orientation to the work world, recruiting, placement, and mentoring to follow-up counseling and crisis intervention.” While wages, workers’ abilities, skills, and the structure of the labor market shape opportunities, institutional theories of labor markets and workforce development focus on organizational support for workers, and the ways other community institutions, such as child care, affect the workforce (Green & Haines, 2015). Having a skilled workforce is a requirement for economic development; however, providing services to meet the needs of the workforce is imperative so that they can work to provide adequate services to the community and foster economic development (Green & Haines, 2015). Appropriate, affordable child care supports workforce development by allowing parents to obtain professional training, search for

jobs, and maintain work schedules (Green & Haines, 2015). Child care is a service that supports employers, employees, and workforce development more generally (Green & Haines, 2015), and is common in the U.S.: nationally, more than 11 million children under age 5 are in some type of child care every week, with approximately one-quarter of these children in multiple child care arrangements to accommodate parents' working hours (NACCRRRA, 2014).

### **2.1.1 Child Care in the US: Policy Context**

There have been many efforts to create a coherent national child care program in the U.S., including day care for low-income mothers, mothers' and widows' pensions, and a child care tax deduction (Michel, 1999). Despite these attempts to address the child care needs of working mothers and families, political divisions in the U.S. have made it difficult to compromise on the all-encompassing public social support systems that are common in Western Europe (Morgan, 2006), which offer comprehensive child care and family policies with generous parental leave and subsidized formal and informal care available to all parents. The Comprehensive Child Development Act (CCDA), or Mondale-Brademas bill, of 1971 came closer to creating such a universal program of child care provision than did any other major initiative. The CCDA, which would have granted low-income families access to free child care, and made services available to other families on a sliding fee scale, passed both Houses of Congress. President Nixon vetoed the bill on the grounds that it would create a program that interfered with families' own parenting responsibilities. The Democratically controlled U.S. House and Senate failed to override the President's

veto, and the proposal failed (Berry, 1993; Dinner, 2010; Evans, 1997; Michel, 1999; Rosen, 2000).

In the early twenty-first century, federal support for child care comes in the form of subsidies and tax deductions. The Child Care and Development Fund (CCDF), a block grant created in 1990, subsidizes the purchase of private-market child care for low-income parents via a finite number of vouchers issued to families at the state level. Some scholars have argued that this public-private system conflates public child care support with poverty and welfare, and leaves parents in paid work or parents at home with limited support (Michel, 1999; Morgan, 2006). As an alternative, the Child and Dependent Care Tax Credit is available to all families to cover a portion of employment-related child care (IRS, 2014). However, neither program addresses directly the supply, availability or quality of child care.

Regardless of subsidy eligibility or tax credit claim, most American families make child care arrangements through a market system of formal, informal, and family care (Stoney, Mitchell, & Warner, 2006). Dependence on the private sector for child care in the U.S. is caused by the past and present lack of support from federal or state government, which, in turn, reduces pressure on the government to promote expensive new social programs and places heavy responsibility on the private sector to meet parents' work and family needs (Morgan, 2006). Despite public funds for child care, longstanding issues of supply and quality continue to affect the choices of all families seeking child care. This is equally true for welfare recipients facing mandates to participate in the waged labor force, who receive child care subsidies on a priority

basis, and middle-income families, for whom the costs of child care have continued to rise.

### **2.1.2 Child Care as a Factor in Community and Economic Development**

National, state and local policy makers are increasingly recognizing the economic contribution of child care to not only parental labor force mobilization but also the greater community and economic development (Hoffer, 2002; Ribeiro & Warner, 2004; Warner, Ribeiro, & Smith, 2003). Although its provision in the U.S. relies overwhelmingly upon the private sector, child care may be seen as an essential social service that affects the economy because it is made up of many small businesses and it enables parents to work (Warner, 2008; Hoffer, 2002). A case study of the economic impact of Vermont's child care industry illustrates how investments in child care infrastructure can have a direct positive economic impact in Vermont through integration in economic development planning (Hoffer, 2002). Child care is deeply embedded in social structures and community networks, where parents get most of their information about the location, supply, and quality of care options (Meyers & Jordan, 2006). Although child care is often thought of as only benefitting parents and providers, an economic development and employment frame shows child care benefitting businesses and the community as a whole and provides the tools and language to enable child care resources and economic development agencies to work together to increase public and private support for childcare. (Warner, Ribeiro & Smith, 2003).

In addition to cost and availability, type and quality of care also matter to economic development. Warner (2007) calls attention to the structure of the child care sector and its various forms of care: formal/market versus informal/nonmarket, paid

regulated, paid care by family/friends/neighbors, unpaid parents care, unpaid care by family/friends/neighbors. When evaluating the economic impact of child care sector, both market and non-market care must be considered (Pratt, 2009; Warner, 2007). Non-market care is particularly relevant for farm families, who may need to utilize non-market, informal care for an affordable option that accommodates non-traditional work schedules (Reschke, 2012), as parents who work nontraditional hours are more likely to utilize informal care (Presser, 2003; Kimmel & Powell, 2001). In general, parents may even choose self-employment for perceived flexibility of hours and location (Hildebrand & Williams, 2003), although caring for children has a negative effect on the duration of self-employment in parents (Williams, 2004).

Reschke (2012) links the economic importance of child care to farm families. Appropriate, accessible and affordable child care within a farming community is an economic issue for farmer-parents, their off-farm employers, and the surrounding communities that depend on their economic well-being (Reschke, 2012). Child care is particularly important to the changing farm family employment structure, as it is now common in farm families for one spouse to work as the principal farmer while the other works off the farm to secure benefits such as health insurance (Brown & Weber, 2013). Despite efforts to promote workforce mobilization and economic development in the agriculture sector, the child care challenges of farmers and their potential relationship to farmer development and retention have been absent from the wider policy discussion regarding rural and agricultural development.

## **2.2 Farm Families and Farm Work**

### **2.2.1 Agriculture at the RUI**

As child care is an issue faced by families of varying locations and socioeconomic backgrounds, it is important to understand why child care in farm families at the RUI is worthy of attention. Approximately half of all counties in the United States are RUI counties and fit one of the following criteria: large metro area of 1+ million residents, small metro area of less than 1 million residents, micropolitan area adjacent to large metro area, noncore adjacent to large metro area, or area adjacent to a small metro area that has experienced population growth above the national average in the past ten years (Jackson-Smith & Sharp, 2008). Agricultural opportunities exist in this geographic space because of its proximity to dense urban markets (Heimlich & Barnard, 1997; Unger & Thompson, Jr., 2013; AFT, 2013). Farmers in RUI areas are more likely to use direct marketing at farmer's markets, roadside stands, or local restaurants and stores, and produce more labor-intensive commodities including vegetables, nuts, and fruits (Jackson-Smith & Sharp, 2008). Agriculture at the RUI is both resilient (Inwood & Sharp, 2012; Inwood et al., 2013) and significant, as RUI counties accounted for 55 percent of all farm sales in the U.S. in 2002, while only occupying 40 percent of the country's farmland (Jackson-Smith & Sharp, 2008). The long-term viability of agriculture at the RUI relies on successful establishment of new farm enterprises, growth of existing farms, and the persistence of farm enterprises across generations. In order to foster a healthy agricultural economy, it is necessary to understand factors that influence agricultural persistence and growth.

Agriculture at the RUI is affected by a variety of economic pressures as it is situated between the rural agricultural system and local urban development. Land competition, increasing nonfarm population, rising land rents, taxes, and increased regulation at the local level make farming at the RUI increasingly difficult (Bryant & Johnston 1992; Heimlich & Anderson 2001). Despite potentially low returns from farm sales and potentially lucrative gains from real estate sales for development, farm families continue to persist in RUI areas (Bryant & Johnston 1992; Heimlich & Barnard, 1997; Beauchesne & Bryant, 1999). While accessible land and capital are important factors in the sustainability of agriculture at the RUI, social infrastructure and household level issues, such as the cost and availability of child care, also have a significant role in the persistence and growth of small and medium farms. Household motivations, cultural values and social values have a primary influence on farm business structure and adaptation (Coleman & Elbert, 1984).

Child care is a household level issue in RUI farm families that may be made complicated by its location in the urban fringe, as there are discrepancies in child care availability, affordability, and government support among rural and urban areas. While the use of formal and informal caregivers is similar for rural and urban families, rural families access child care subsidies less frequently and for shorter periods of time than urban families, despite higher poverty and unemployment rates (Davis, Grobe, & Weber, 2010). Such discrepancies could be attributed to lack of access to formal care, complicated nontraditional work schedules, and resulting inflexibility of providers in rural areas, as child care choices are made based on need and availability of options (Meyers & Jordan, 2006; Reschke, 2012). Relative care is an attractive option for rural

families because of flexibility of schedule and affordability (Reschke et al. 2006, Reschke et al. 2005); however, young and beginning farmers who start farm businesses in locations without relatives nearby will not have relative care as an option and may need other forms of support. The location of the RUI between the rural areas, where relative care is more attractive and subsidies are used less frequently, and the urban areas, with higher subsidy use and more care centers, may create unique challenges for farm families compared to other areas.

### **2.2.2 Farm Values and Motivations**

Child care choices are made based not only on need, availability, and cost, but also on values and social norms (Meyers & Jordan, 2006). Because farmers are a diverse group with differing values and motivations, it is important to recognize the ways these differences may contribute to both farm business and household level decisions, like child care. Despite development pressures and low economic rewards from farming, particularly in the early years of a farm business (Ahearn, 2013), farmers continue to persist, citing social fulfillment, connection to the earth, and creating a good life for one's family as primary motivations (Liffmann, Huntsinger, & Forero, 2000).

To achieve social fulfillment and sustain farming lifestyle goals, farm families balance household needs, such as child care, and farm enterprise needs, including land, capital, labor, sometimes sacrificing household needs for farm business success, and vice versa (Inwood et al., 2013). Social values of farm families influence the structure of their farm businesses (Inwood et al., 2013; Bennett, 1982), while these nuances in family farm business structures contribute to the resiliency and growth of agriculture at

the RUI (Inwood & Sharp, 2012). Because of this link between social values, farm structure, and resiliency of agriculture at the RUI, and because of the agricultural importance of RUI counties to our country's food system, it is important to understand the ways social and domestic factors influence farm businesses for different farm populations.

Multi-generation (MG) and first generation (FG) farmers (farmers who do not come from a farm family, distinct from "Beginning Farmer," defined by the USDA as one who has operated his or her farm for less than 10 consecutive years) are two subgroups of farmers that embody these differences in social values and farming motivations. Though MG and FG farmers demonstrate similar economic motivations for achieving and maintaining a livelihood (Inwood & Sharp, 2012), these groups differ in social motivations: MG farmers are focused on farm production, farm succession, and their children's interest in the farm, while FG farmers place greater emphasis on transcendental interests such as environmentalism and spirituality and focus less on how children influence their business structure and decisions (Inwood et al., 2013). Young and beginning farmers in particular are drawn to agriculture because of non-economic factors: health, environmental sustainability, and independence (Raftery, 2011; Reuteman, 2011).

Male and female farmers also exhibit differing values and motivations for farming, and these gendered values have an impact on farm structure and land management decisions (Inwood, 2013). For example, women emphasize the environmental and economic benefits of sustainable agriculture, and are also more likely to connect their work in agriculture to community sustainability and well-being

(Chiappe & Flora, 1998; Trauger et al., 2008). These values have been correlated with use of low-input production, cooperative farm markets, direct marketing, and value-adding (Inwood, 2013).

### **2.2.3 Gender and Farm Work**

Gendered divisions of labor on farms mimic the greater labor force in the U.S.: as more women join the workforce and demands of families increase, there is often little change in the traditional division of domestic labor wherein women care for the household and adapt to their husbands' job demands (Gerstel & Clawson, 2014). Liepens and Schick (1998) use the concept of seriality, categories of identity shifting over time and space, to suggest a more flexible approach when working with women in agriculture, whose identity may prioritize various categories, such as 'woman,' 'farmer,' 'mother,' 'off-farm worker' at different times. While Smithers & Johnson (2004) found that farm business and farm family life cycles often overlap in periods of growth (both farm business and children), women have been found to be less involved in farm business tasks and decision-making when young children are present (Jones & Rosenfeld, 1981). Additionally, self-owned small businesses, such as farms, are often pursued by women for noneconomic reasons, such as job flexibility and access to work, especially in rural areas where child care and employment options are more limited (Tigges & Green, 1994). "Flexible" employment, often characterized by nonstandard work hours and instability of salary, both common in agricultural work, can disrupt traditional ways of caring for children and cause stress for working parents who struggle to balance business and family needs (Pugh, 2015).

### **2.3 Child Care in Farm Families**

The child care situation faced by farm families has been shaped by past and present social policy in the U.S. and the unique needs, values, and motivations of farm families. Historically, child labor was a common form of “care” among agricultural families as it served a dual purpose: children were productive workers and child labor eliminated the need for outside care (Michel, 1999). While farmers often express a desire to live and work on a farm with their children (Johnson, Bowlan, McGonigal, Ruhf, & Sheils, 2001), they are recognized by some as potentially hazardous places for children. Approximately 16,100 children and adolescents were injured on farms in 2009, with only 3,400 of these injuries directly related to farm work (CDC, 2013), making child care accommodations of some kind necessary to ensure safety and to allow for productive time for planting, harvesting, marketing, selling, bookkeeping, and other farm business responsibilities. However, the average cost of center-based daycare in the United States ranges from \$5,496 to \$16,549 per year (NACCRRRA, 2014). Low and fluctuating returns from farming may make it difficult for farm families to afford off-farm care, particularly for farmers of small farms (categorized by the USDA as less than \$250,000 in sales per year) that are common in both the Northeast (NASS, 2012) and the study samples in this thesis. Beginning and women farmers are more likely to operate small farms (Ahearn, 2013; Hoppe & Korb, 2013), which are likely to have a negative net income in their first year and to have off-farm income (USDA, 2012), which could both necessitate and complicate child care and related expenses. Without qualifying for federal or state subsidies, child care tax credits or public programs, farm families can be challenged to find available, affordable, high

quality care (either in a center or home setting). The current system of child care subsidies and employment-based tax credits may not be appropriate to farm families who prefer informal care or family caregivers, have nontraditional hours or off-farm jobs, and run their own businesses. Additionally, child care is a household level issue in farm families that may be complicated by geography, both at the RUI and in more rural areas where child care centers are few and relatives and neighbors may not be close.

Farm families are dynamic entities (Inwood et al., 2013) that negotiate production and work as part of the farm enterprise within the context of the family and business life-cycles (Coleman & Elbert, 1984). Previous research has found that the farm business life-cycle processes of growth, persistence, redevelopment (if an heir is apparent) or decline (if there is no heir to take over the farm) influence farm-management styles, business enterprise growth and adaptation (Bennett, 1982). Smithers and Johnson (2004) identify five stages of family life-cycle classification, from the initial development of the farm household, to the arrival, adolescence and eventual departure of children, and the final ‘empty nest’ stage. The farm business life-cycle stage of growth and development is more likely to occur early in the family life-cycle, during the formation of the farm foundation and the arrival of children (Smithers & Johnson, 2004). It follows from these findings that the care and rearing of children is a factor in farm development, adaptation, and persistence, and must be considered as a factor in farm business decision-making.

The American Farmland Trust report on “Growing Cities, Preserving Farmland” recommends fostering agricultural development at the RUI by encouraging a favorable agricultural business climate (Unger & Thompson, Jr., 2013). Because child care is

essential to workforce and community economic development, and is necessary to ensure farm safety and farm business productivity, understanding child care in farm families can contribute to the conversation on creating and encouraging a favorable agricultural business climate. However, child care is a difficult and nuanced issue, affecting different types of farm families in different ways. This thesis aims to empirically understand the child care experiences and challenges of the farm population and how they differ amongst farmer groups in order to make informed, appropriate recommendations in support of a growing agricultural economy.

## **CHAPTER 3: METHODS**

In order to develop a thorough understanding of the interplay between farm families, their farm businesses, and child care, this research will draw on two separate data sets, one quantitative and one qualitative. First, through pragmatic analysis of large-scale, national data, this study seeks to establish whether child care is a challenge for farm families, if it affects their farm business decisions, and how their community networks influence their challenges with care. Then, through interviews and focus groups with farmers, this research will reveal the methods of child care used by farm families and explain the ways in which child care affects the management of the farm business and farm family systems. Quantitative measurement tools, in the form of a cross-sectional survey, allow for the determination of relationships between variables at the time of study within populations too large to observe directly (Babbie, 1973; Babbie, 2010), such as the national farm population. Interviews and focus groups, distinctly qualitative methods, will provide an explanation of “why” and “how” child care poses difficulty for farm families (Creswell, Plano Clark, Smith, & Meissner, 2012).

### **3.1 Quantitative Data: Survey Methods**

The researchers developed questions for a national survey as part of a larger Ohio State University and University of Vermont project titled “Small and Medium Scale Farm Growth, Reproduction and Persistence at the Rural-Urban Interface: Balancing Family, Goals, Opportunities and Risks” which was funded by the Agriculture and Food Research Initiative of the National Institute of Food and Agriculture (USDA Grant # 2011-67023-30139). Using knowledge gained from

interviews with farmers and key informants in the study areas, the research team adapted questions from a previously successful survey conducted by the principal investigators to develop a farm survey. The purpose of the farm survey was to describe motivations and household decision-making among different types of farmers affecting agricultural change in peri-urban areas. In order to understand more about the individual child care choices being made by farm families and the effect these choices have on expected farm persistence and growth, several Likert-scale questions targeting child care in farm families were included in the survey [see Appendix A]. Existing literature was used to develop questions gauging the importance of child care to farm business decisions, the pervasiveness of the challenges associated with child care, farmers' ability to access different types of care. Closed-ended questions were used to provide uniformity of response and ease of analysis (Babbie, 2010). The final instrument was reviewed by the Institutional Review Board.

### **3.1.1 Survey Sampling**

The target population included small and medium farmers at the rural-urban interface. Study sites were selected based on the following criteria:

- a) high rates of population growth and development in metropolitan statistical areas
- b) an active agricultural base
- c) higher than regional average percentage of small and medium size farms
- d) inclusion of sites in each of the USDA regions (Northeast, South, Midwest, and West)

Based on these criteria, the questionnaire was mailed to farmers in four Core Based Statistical Areas: Burlington-South Burlington, VT; Columbus, OH; Honolulu, HI; Miami-Fort Lauderdale-Pompano Beach, FL; and one Combined Statistical Area: Portland-Lewiston-South Portland, ME Combined Statistical Area.

The following site profiles have been compiled using the 2012 NASS Census of Agriculture:

**3.1.1.1 Lewiston, ME.** Lewiston has seen a growth in the number of farms while overall sales and farm acres have declined. The vast majority of farms (nearly 60.3 percent) are small, while the majority of farm sales are from livestock and some fruit production. Lewiston has a large portion of beginning farmers (18 percent), women involved in farming (39.0 percent), and women principal operators (25.1 percent).

**3.1.1.2 Burlington, VT.** Burlington is a northern CBSA with the vast majority of agricultural sales from livestock and dairy products. 84.4 percent of sales come from large farms, while 55.8 percent of farms in Burlington are small. Burlington is notable for having a high percentage of female principal operators (19.2 percent) and a high population of women involved in farming (35 percent).

**3.1.1.3 Columbus, OH.** Columbus is an agriculturally dense area with the highest percentage of sales (78.9 percent) coming from large commodity producers of corn, soybeans, livestock, etc., while small-scale farms are the most numerous (54.1 percent). Columbus has a high population of women involved in farming (28.7 percent) with a lower-than-national-average of 10.5 percent women-principal operators.

**3.1.1.4 Honolulu, HI.** Honolulu is a major population center on the island of Oahu with an agricultural focus on fruit and vegetable production. Though small-scale farms are the most numerous (73.2 percent), the highest percentage of sales comes from large farms (82.6 percent). Honolulu has high populations of minority farmers (64.8 percent), women involved in farming (36.7 percent) and women principal operators (16.3 percent).

**3.1.1.5 Miami, FL.** Miami is made up of three primary export agricultural systems: row crops (vegetables), tropical fruit and nursery operations that are located on extremely flat, rock ground soil terrain. The highest percentage of sales comes from small-scale farms (62.5 percent). The region has a high population of minority farmers (35.7 percent), women involved in farming (30.3 percent) and women principal operators (13.2 percent).

### **3.1.2 Survey implementation**

Lists of farmers were identified by developing relationships with agricultural leaders in each of the study sites and obtaining lists from local, state, and national agencies. The survey took place in two stages. In the first stage, about 1200 recipients in Ohio, Maine, and Vermont were surveyed in March and April of 2014. During the second stage, about 800 recipients in Florida and Hawaii were surveyed in May and June of 2014. A modified Tailored Design Method was used (Dillman, 2009). Each participant first received an advance notification letter. The first survey mailing, including a cover letter, survey, prepaid return envelope, and a one dollar bill was mailed on the fourth day. Any non-respondents received a reminder postcard on the

eleventh day. Remaining non-respondents received a second survey mailing on the twenty-fifth day, then a third survey mailing on the fiftieth day.

Knowing from previous experience the difficulty in obtaining current farm address lists, the research team anticipated 25% bad addresses and a 50% response rate. Planning roughly 400 mailings per study site with the goal of 150 usable responses per site, the team mailed a total of 2044 questionnaires. After subtracting the bad addresses from the number sent, a total of 782 farmers responded for an overall response rate of 43.5% percent,

Farm operators who received the survey were encouraged to complete the survey with as many family members as possible, particularly those that are involved in farm operations and household decision-making.

### **3.1.3 Survey participants**

Of the 782 respondents, 186 were identified as parents of children under age 18 and made up the sample for analysis. Table 1 compares the survey sample and the survey sample with children under 18 (the sample for analysis) to the national farm population and shows that our survey sample (N=782) is comparable to the national farm population. In this sample, the average age of the farmer respondents is 54.7, paralleling the national average, which for principal operators is 58.3. The average age for the survey sample with kids under 18 is 45.0, with no comparable national data but understandably slightly younger than the average age of the aging farm population.

Following the work of Inwood et al. (2013), 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 both family and enterprise life cycles, dividing farmers

using the median age of our sample, 44. Farmers who are 44 years of age and younger were categorized as young and farmers 45 years old or more were categorized as old. The sample for analysis, farmers with children under 18, has significantly higher percentages of young farmers (51.1), beginning farmers (43.6), and women farmers (43.2) than the total sample of respondents and the national farm population, where applicable. As discussed in the literature review, it is important to support all three farmer populations in their farming efforts as the average age of farmers increases, the number of beginning farmers drop, and the number of women farmers steadily increases.

Farmers were asked directly on the survey if they were a multi-generation farmer. Similar percentages of the survey population and survey population with kids under 18 are MG and FG farmers.

Farm size was determined from farmers' reporting of annual farm sales. For analysis, farms with sales less than \$250,000 per year were identified as 'Small/Medium' and farms with sales greater than \$250,000 per year were identified as 'Large.' However, the US Census of Agriculture only reports percentages of farms with sales between \$100,000 and \$499,999, as reflected in Table 1.

Farm type includes product type as well as figures on direct sales and value-added products, to show that participants in this study, and at the RUI more generally, are more likely to participate in more labor-intensive production methods (fruits and vegetables, value-added) and sell direct to consumers.

While race was not a demographic variable used in this study's analysis, it is worth noting that survey respondents are comparable to the national population of

farmers, with white as the predominant race in survey respondents (84.1), survey respondents with children under 18 (85.1), and the national farm population (95.4).

Table 1: Summary Descriptive Statistics for Survey Respondents, Survey Respondents with Children Under 18, and the National Farm Population

Characteristic	National Farm Population ( <i>n</i> = 2,109,303)	Survey Sample ( <i>n</i> = 782)	Survey Sample with Children Under 18 ( <i>n</i> = 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	50.0	56.8
Female	14.0	34.6	43.2
Value of Sales (%)			
Less than \$10,000	56.6	21.0	24.6
\$10,000 to \$24,999	11.6	15.5	15.3
\$25,000 to \$99,999	13.4	24.1	18.6
\$100,000 to \$249,999	11.0	15.6	15.3
\$250,000 to \$499,999		10.4	11.5
\$500,000+	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

Source: 2012 National Ag Census.

### **3.1.4 Analytic Strategy**

When considering how to encourage the growth of a vibrant, young farm economy by supporting household level issues, it is necessary to understand the various needs of different farmer groups in order to provide appropriate support. In order to understand the ways child care issues play out across farmer groups, respondents were classified into two separate groupings for analysis: first generation (FG) farmer or multi-generation (MG) farmer; men or women farmers.

**3.1.4.1 Farmer Demographics.** Though farmers are often treated as a homogenous group, it is important to recognize distinctions among farmer groups that contribute to these nuanced family farm enterprises and household level decisions, such as child care. As reviewed in the literature, farmers are a diverse group with social differences, creating a need to understand how household level issues influence the various farmer groups in order to provide appropriate support for burgeoning farmers groups in light of the dramatic aging of the U.S. farm population. This study focuses specifically on multi-generation (MG) and first generation (FG) farmers, and on men and women farmers, and aims to understand the differences among these groups with regards to child care so as to provide informed recommendations on appropriate support for growing farmer groups.

**3.1.4.1.1 Multi-Generation and First Generation.** Understanding the differences between MG and FG farmers is part of a larger effort to support beginning farmers (Meyer et al., 2011). The number of beginning farmers is at a 30-year low, with a 20 percent drop between 2007 and 2012, while the farm population overall has aged dramatically (NASS, 2012).

FG farmers are an important population to understand because they 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). These differing motivations of these two groups may affect the ways these groups of farmers view child care and associated challenges as an influencing factor in the farm business, potentially creating a need for different types of support for these farmer groups. Building on the work of Inwood et al. (2013) that examined differences in motivations between MG and FG farmers (in Literature review above), this study will continue to examine the differences between FG and MG farmers, specifically the child care challenges they face and the relationship between their community networks and child care, as part of the larger national policy movement to support beginning farmers in light of the dramatic aging of the U.S. farm population (Meyer et al., 2011).

**3.1.4.1.1 Male and Female.** Distinctions between male and female farmers are also important to consider when exploring child care in farm families. Challenges related to child care are of particular concern for female farmers, who may have multiple roles, including primary child caregiver, wage-earner through off-farm employment, and farmer. More women than ever are choosing to farm as their primary work: the 2012 Census of Agriculture reported 288,264 women principal operators and 969,672 women farm operators (NASS, 2012). 14 percent of farms had a woman principal operator, a 30 percent increase from 2002, the year the USDA began differentiating principal operators based on sex (NASS, 2012). Even more applicable to this study is that 31 percent of farms at the Rural-Urban Interface (RUI) have a

woman principal operator (NASS, 2007). Of the farms with women principal operators, 90 percent make less than \$50,000 per year in gross profit and government payments (NASS, 2012).

Despite their growing role in agriculture, women farmers' needs are not often met by agricultural education and technical assistance. For example, because of long held social constructions of farm women as farm wives rather than farmers, educational programming neglects women's physical abilities as farmers and often pushes women farmers to adopt production methods that don't play to physical strengths, rather than providing strategies and tools to use their bodies differently than male farmers (Trauger et al., 2008). When considering women and agricultural education, Liepens and Schick (1998) use the concept of seriality, categories of identity shifting over time and space, to suggest a more flexible approach when working with women in agriculture, whose identity may prioritize various categories, such as 'woman,' 'farmer,' 'mother,' 'off-farm worker' at different times. Women farmers need adequate and appropriate education and support that recognizes their shifting identities (Trauger et al., 2008). While Smithers & Johnson (2004) found that farm business and farm family life cycles often overlap in periods of growth (both farm business and children), women in particular have been found to be more involved in the farm business tasks and decision-making during child-bearing and child-rearing years, with decreased involvement in later years (Jones & Rosenfeld, 1981).

There is an ongoing national effort to strengthen women's role in agriculture and connect women principal operators with necessary education and access to land and credit, supported by such organizations as Women, Food and Agriculture Network

(WFAN) and Annie's Project, and doing so means understanding women's specific needs and motivations as farmers. By exploring the prevalence of child care as a factor in farm business decisions and the nuances of the issue among different farmer groups, this study contributes to the conversation on the unique needs of women in agriculture and builds on the work of Reschke (2012), who asserts the need for attention to the issue of child care in farm families.

Child care in farm families at the RUI is expected to be complicated, not just for women but for all farmer groups, because of the intersection of family and business on the farm, and also because of being situated between the urban centers with greater resources and the rural areas with fewer resources. Knowledge of the child care challenges faced by farm families and the ways child care affects the farm business will be helpful in understanding how to foster farm household well-being and a healthy agricultural economy in general.

### **3.1.5 Survey Analysis**

Recognizing the introductory nature of this study, survey questions were designed to ascertain a basic picture of the relationship between child care and the farm enterprise, and to gain a preliminary understanding of the child care challenges faced by different types of farm families and the affect community has on these challenges. The survey included questions on the importance of both child care and also balancing farm and household needs when making farm decisions; factors and conditions that pose problems when making child care decisions; and access to various forms of child care. In addition to farmer demographics such as MG/FG, sex, beginning/non-beginning, age, we also asked about basic demographics of the firm, such as size

(classified by sales), to determine factors that play a role in the child care challenges reported by farm families.

Survey questions addressed several aspects of child care. Farmers were asked to describe how important several factors are when making decisions about the farm, including ‘finding child care for my children’ and ‘time it takes to balance the farm and household needs.’ The responses of these questions were on a five-point scale, with a ‘1’ being not important and a ‘5’ being very important. Farmer responses from ‘1’ to ‘3’ (‘neutral’) were recoded as ‘not important,’ whereas responses of ‘4’ and ‘5’ were recoded as ‘important.’ Farmers were also asked to describe characteristics of child care: affordability, availability, quality, philosophy, and access. Again, the responses of these questions were on a five-point scale, with a ‘1’ being ‘not a problem’ and a ‘5’ being a ‘severe problem’. Farmer responses from ‘1’ to ‘2’ were recoded as ‘not a problem’ whereas responses of ‘3’ (‘modest problem’) through ‘5’ (‘severe problem’) were recoded as ‘problem.’ Farmers who reported any level of problem with any of the child care characteristics listed above were ultimately categorized as ‘child care problems.’

In order to understand farmers’ connection to their community, the question “What proportion of your family and close adult friends live in your community?” was used to categorize respondents, where those who answered ‘I have none’ or ‘None of them live here’ were categorized as ‘No friends nearby’ or ‘No family nearby,’ and those who answered ‘Less than half,’ ‘About half,’ ‘Most of them,’ or ‘All of them’ were categorized as ‘Friends nearby’ or ‘Family nearby.’

Using SPSS software, we ran bivariate analyses to compare the demographics, child care challenges, and community connection of FG/MG farmers and men/women farmers. We report significant results at the  $p = 0.05$  significance level, but also note near significant results at  $0.05 < p < 0.10$ .

The differing social motivations of FG and MG farmers (Inwood et al., 2013) may affect the ways these groups of farmers view child care and associated challenges as an influencing factor in the farm business. Table 2 shows the characteristics of MG and FG farmer groups. FG farmers are younger than MG farmers and are significantly more likely to be beginning farmers (statistically significant at  $P < 0.05$ ;  $P = .000$ ) and have smaller farms (statistically significant at  $P < 0.05$ ;  $P = .027$ ). Women make up 44.8 percent of FG farmers and 42.9 percent of MG farmers.

Table 2: Descriptive Statistics of MG and FG Farmer Groups

Characteristic	MG ( <i>n</i> =84)	FG ( <i>n</i> =96)	<i>P</i> -Value
Age			
Young	47.6%	53.6%	0.458
Old	52.4%	46.4%	
Experience			
Beginning	28.9%	56.3%	.000*
Non-beginning	71.1%	43.8%	
Farm Size			
Small/Med	65.9%	81.1%	.027*
Large	34.1%	18.9%	
Sex			
Men	57.1%	55.2%	.881
Women	42.9%	44.8%	

Note. \*Pearson chi-square significant at the  $P$ -Value = .05 level; \*\* Pearson chi-square significant at the  $0.05 < P < 0.10$  level.

Women are a growing group of farmers who may hold multiple roles such as primary child caregiver, wage-earner through off-farm employment, and farmer, making child care a particular concern for them. Table 3 shows the demographic characteristics of Men and Women farmer groups. Women farmers are more likely than men to be young (statistically significant at  $P < 0.05$ ;  $P = .017$ ), while high percentages of women farmers report also being beginning farmers, and having small or medium farms. Nearly equal percentages of men and women are also FG farmers.

Table 3: Descriptive Statistics of Men and Women Farmer Groups

Characteristic	Men ( <i>n</i> =101)	Women ( <i>n</i> =79)	<i>P</i> -Value
Age			
Young	43.3%	62.0%	.017*
Old	56.7%	38.0%	
Experience			
Beginning	41.0%	48.7%	.359
Non-beginning	59.0%	51.2%	
Farm Size			
Small/Med	68.6%	79.5%	.126
Large	31.4%	20.5%	
Family History			
MG	47.5%	45.6%	.881
FG	52.5%	54.4%	

Note. \*Pearson chi-square significant at the  $P$ -Value = .05 level; \*\* Pearson chi-square significant at the  $0.05 < P < 0.10$  level.

The above tables support our focus on understanding the needs of FG and women farmers, as these groups also include significant populations of beginning, young, and small/medium-scale farmers who may face household level challenges as they work to establish their farm enterprises.

### **3.2 Qualitative Data: Interview and Focus Group Methods**

This study was designed as an exploratory inquiry to understand the use of child care by the farming population in the Northeast, the ways child care influences farm business decisions, and in turn, the wellbeing of the farm business and farm family. A purposive sample of farmers with children were invited via agricultural organizations' listservs, newsletters, social media and direct contact by the researchers, to participate in focus groups in nine Northeastern states: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. However, interested farmers who were unable to attend focus groups, ironically often for reasons related to child care, were invited to participate in either in-person or phone interviews. Additionally, when critical mass (three participants) was not reached for a focus group, interviews were conducted instead with interested participants. Phone interviews lasted approximately thirty minutes and the focus groups, ninety minutes. Both were semi-structured with pre-determined open-ended questions that allowed flexibility to digress or forgo certain questions, or probe further and clarify based on the individual's responses and experiences (Patton, 1990) [Appendix B]. The final protocol was reviewed and approved by the Institutional Review Board.

Forty-three participants are included in the analysis: twenty-five participated in interviews (a mix of in-person and phone) and the other eighteen attended one of four focus groups, with a total of three to six participants at each. Demographic information of the participants is provided in Table 4. The sample includes thirty-three females and ten males. Thirty-four are first generation (FG) farmers and nine are multi-generation (MG) farmers. Nearly three-quarters of the sample is under 40 years old. The majority

(74.4 percent) of farmers sampled have small farms (defined by the USDA as making less than \$250,000 in annual farm sales), seven have large farms (greater than \$250,000 in annual farm sales), one runs a not-for-profit farm business, and three participants are future farmers in the process of establishing their own farms. These three farmers are also currently childless but planning for children, and provide the perspective of both future farmer and future parent. Most participants have either one or two children. Though not noted in the table, one participant has custody of grandchildren and one cares for foster children but currently does not have any in custody. The four participants without children, three who are planning for children in the near future and one who cares for foster children but currently does not have any in her custody, are included under 'Number of Kids' as "0".

Table 4: Participants in the Study

	Male <i>n=10</i>		Females <i>n=33</i>		Total <i>N=43</i>	
	Cases	%	Cases	%	Cases	%
Family History						
Multi-Generation	0	0.0	9	27.3	9	20.9
First Generation	10	100.0	24	72.7	34	79.1
Age						
21-30	1	10.0	3	9.1	4	9.3
31-40	6	60.0	21	63.6	27	62.8
41-50	2	20.0	7	21.2	9	20.9
51-60	1	10.0	2	6.1	3	7.0
No. of Children						
0	1	10.0	3	9.1	4	9.3
1	5	50.0	11	33.3	16	37.2
2	3	30.0	13	39.4	16	37.2
3	1	10.0	4	9.1	5	11.6
4	0	0.0	2	6.1	2	4.7
Farm Size/Type						
Small/Medium	10	90.0	23	69.7	33	76.7
Large	0	0.0	7	21.2	7	16.3
Future Farmer	1	10.0	2	6.1	3	7.0

43 parents including 3 couples, representing 40 families

Because the importance of child care in farm families has been established (Reschke, 2012) but not studied through primary research, the interview protocol was based on a review of literature on farm families in the United States and child care as a factor in workforce mobilization and community and economic development. Questions sought to gather data on child care methods used, factors contributing to child care decisions, the effects of child care on the farm business and the farm family, and potential solutions to child care related challenges. All interactions were recorded and transcribed. Potentially identifying information, such as names or names of farms,

was removed to ensure anonymity. Time was allotted after each interview for collecting demographic data, debriefing, and questions from the participants.

### **3.2.1 Analysis**

Interviews and focus groups were coded and analyzed with Nvivo software, used to identify themes and map patterns in qualitative data (Bazeley & Jackson, 2013). Themes were constructed and reviewed using Braun and Clarke's (2006) six phases of thematic analysis: familiarization with data, generating initial codes based on data, searching for themes, reviewing themes, defining and naming themes, and producing the report. As this is an exploratory study on the subject of child care in farm families, codes were developed through inductive thematic analysis (Braun & Clarke, 2006) and strongly linked to the data themselves (Patton, 1990). The resulting patterns and representative quotations reflect participating farmers' experiences with child care.

## **CHAPTER 4: COMMUNITY AND CARE: EXPLORING CHILD CARE IN FARM FAMILIES AT THE RURAL-URBAN INTERFACE**

### **4.1 Introduction**

Child care is increasingly recognized as an important economic sector that supports both child development and parental workforce mobilization. A growing body of research has studied child care in various communities and among different populations (Kimmel, 2006; Meyers & Jordan, 2006; Morrissey, 2008; Reschke, Manoogian, Richards, Walker, & Seiling 2006). However, the impacts of child care on the agriculture sector and farming communities have been generally absent from the wider child care policy discussion. From an agricultural perspective, child care that accommodates the preferences and nontraditional work schedules of farmers and their families has been suggested as a necessity for child safety and parent-farmer productivity (Reschke, 2012), but child care is missing from nearly all discussions of agricultural success. This article contributes to the existing literature by bringing together two previously unconnected bodies of work: that of child care as a factor in community, economic, and workforce development, and that of agricultural development and farm families.

Federal policies and programs recognize the need to foster a young, vibrant farm economy in the face of an aging and “graying” farm sector (Gale, 1993), and have attempted to encourage existing farm families to remain on their farms, recruit new farmers, and create lasting agricultural economic opportunities through initiatives such as the “Beginning Farmer and Rancher Development Program.” These programs 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 life cycles of both the farm business and the farm family (Bennett, 1982; Inwood, 2013; Reinhardt & Barlett, 1989). While accessible land and capital are important factors in the sustainability of our agricultural system, child care is a factor in workforce and community economic development that is a critical but often overlooked household level issue that could contribute to strengthening the agricultural economy.

Understanding the ways child care impacts different populations of farmers is important to making informed recommendations and providing appropriate support. As part of a larger effort to support beginning farmers (Meyer et al., 2011) and acknowledge the long tradition of gendered division of labor on farms and the unique needs of women farmers (Sachs, 1996; Trauger, Sachs, Barbercheck, Brasier, & Kiernan, 2009), this study focuses specifically on two groupings of farmers: multi-generation (MG) and first generation (FG) farmers; and men and women farmers.

The intersection of child care and the farm business is particularly relevant at the rural-urban interface (RUI), the relatively rural and agriculturally dense space on the edge of urbanized areas (Audirac, 1999) that has been the focus of local and regional food system development (AFT, 2002). Agriculture at the RUI is affected not only by economic pressures such as land-use and development, but also by household level issues, such as child care, which could be made complicated by the location between rural and urban areas.

This study aims to fill the gap in the research by empirically evaluating child care in farm families and positioning the issue of child care in the farm community context. Using data from a national survey of farm families at the RUI, this study takes the first step towards understanding child care in farm families by examining the relationship between child care, the farm business, and the farm family. This research examines four questions: 1) Do farm families at the RUI perceive child care to be an issue influencing their farm business? 2) Do farm families experience child care problems? 3) What aspects of child care do farm families perceive to be a problem? 4) Does community influence the degree to which child care is an issue in farm families?

The following section includes a brief review of the literature that frames and supports this study: child care as a factor in community and economic development; agriculture and farmer values at the RUI; and farm families, work, and child care. The remainder of the article presents the methods used for data collection and analytic strategy, and shares the study findings and discussion.

## **4.2 Literature Review**

### **4.2.1 Child Care, Community and Economic Development**

Child care has dual functions: it supports workforce and economic development by allowing parents to work, and also promotes early childhood development (Kimmel, 2006; Warner, 2008). Workforce development is defined by Harrison and Weiss (1998) as the “constellation of activities from orientation to the work world, recruiting, placement, and mentoring to follow-up counseling and crisis intervention.” While wages, workers’ abilities, skills, and the structure of the labor market shape opportunities, institutional theories of labor markets and workforce development focus

on the importance of organizational support for workers, and the ways other community institutions, such as child care, affect the workforce (Green & Haines, 2015). Having a skilled workforce is a requirement for economic development; however, providing services to meet the needs of the workforce is imperative so that they can work to provide adequate services to the community and foster economic development (Green & Haines, 2015). Appropriate, affordable child care supports workforce development by allowing parents to obtain professional training, search for jobs, and maintain work schedules (Green & Haines, 2015). Child care is a service that supports employers, employees, and workforce development more generally (Green & Haines, 2015), and is common in the U.S.: nationally, more than 11 million children under age 5 are in some type of child care every week, with approximately one-quarter of these children in multiple child care arrangements to accommodate parents' working hours (NACCRRRA, 2014).

**4.2.1.1 Child Care in the U.S.** Despite efforts to create a coherent national child care program in the U.S., political divisions have made it difficult to compromise on even singular aspects of the all-encompassing public social support systems that are common in Western Europe (Morgan, 2006). Today's federal child care support comes in the form of subsidy and tax deductions: the Child Care and Development Block Grant (CCDBG) supports the purchase of private-market child care by subsidizing the costs for low-income parents and regulating approved care centers; the Child and Dependent Care Tax Credit is available to cover a portion of employment-related child care (IRS, 2013). Regardless of income and subsidy or tax deduction eligibility, most

American families must make child care arrangements through a market system of formal, informal, and family care (Stoney, Mitchell, & Warner, 2006). The average cost of center-based daycare in the United States varies by state, from \$5,496 to \$16,549 per year (NACCRRA, 2014). In 2011, working families with children under age 5 paid an average of \$9,300 per year for child care, or 10 percent of their income with only 5.3% of families receiving government assistance with child care (Laughlin, 2013). Despite public funds for child care, the longstanding issues of supply and quality continue to affect the choices of working welfare recipients and middle-income families, for whom the costs of child care continue to rise (NACCRRA, 2014).

**4.2.1.2 Child Care in Community and Economic Development.** National, state and local policy makers are increasingly recognizing the economic contribution of child care to not only parental labor force mobilization but also child development and regional economic development (Hoffer, 2002; Ribeiro & Warner, 2004; Warner, Ribeiro, & Smith, 2003). The availability of affordable, high-quality, reliable child care supports workforce development, early childhood development, and can benefit businesses and the greater community as a whole (Kimmel, 2006; Warner, Ribeiro, & Smith, 2003). Type and quality of care matter to economic development, and both market and non-market care must be considered when studying the impact of the child care sector (Pratt, 2009; Warner, 2007). This is particularly true in farm families, who may need to utilize non-market, informal care for an affordable option that accommodates non-traditional work schedules (Reschke, 2012), as parents who work nontraditional hours are more likely to utilize informal care (Kimmel & Powell, 2001; Presser, 2003).

Child care within a farming community is an economic issue for farmer-parents, their off-farm employers, and the surrounding communities that depend on their economic well-being (Reschke, 2012). While efforts to strengthen rural economies by supporting children and their families have been prioritized by USDA Rural Development and the White House Rural Council, and have included child care support, public agencies have thus far not considered whether family-based supports might be of value to farmers specifically. Despite efforts to promote workforce mobilization and economic development in the agriculture sector, the child care challenges of farmers and their potential relationship to farmer development and retention have been all but absent from the wider policy discussion regarding rural and agricultural development.

#### **4.2.2 Agriculture at the RUI**

As child care is an issue faced by families of varying locations and socioeconomic backgrounds (NACCRRRA, 2011), it is important to understand why child care in farm families at the RUI<sup>1</sup> is worthy of attention. Agricultural opportunities exist in this geographic space because of its proximity to dense urban markets (AFT, 2002; Heimlich & Barnard, 1997; Unger & Thompson, Jr., 2013), making farmers in RUI areas more likely to use direct marketing at farmer's markets, roadside stands, or local restaurants and stores, and produce more labor-intensive commodities including vegetables, nuts, and fruits (Jackson-Smith & Sharp, 2008). Agriculture at the RUI is both resilient (Inwood et al., 2013; Inwood & Sharp, 2012) and significant, as RUI

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<sup>1</sup> For full definition of the RUI, see Jackson-Smith and Sharp, 2008.

counties accounted for 55 percent of all farm sales in the U.S. in 2002, while only occupying 40 percent of the country's farmland (Jackson-Smith & Sharp, 2008). The long-term viability of agriculture at the RUI relies on successful establishment of new farm enterprises, growth of existing farms, and the persistence of farm enterprises across generations.

**4.2.2.1 The Diversity of Farm Values.** Despite potentially low returns from farm sales, common for both women farmers (Hoppe & Korb, 2013) and beginning farmers (Ahearn, 2013), and potentially lucrative gains from real estate sales for development, farm families continue to persist in RUI areas (Beauchesne & Bryant, 1999; Bryant & Johnston 1992; Heimlich & Barnard, 1997). Household-level motivations, social fulfillment, cultural values and social values have a primary influence on farm business structure and persistence (Bennett, 1982; Coleman & Elbert, 1984; Gasson & Errington, 1993; Lobley & Potter, 2004; Salamon, 1992). To achieve social fulfillment and sustain farming lifestyle goals, farm families balance household needs, such as child care, and farm enterprise needs, including land, capital, labor, sometimes sacrificing household needs for farm business success, and vice versa (Inwood et al., 2013; Reinhardt & Barlett, 1989). Social values of farm families influence the structure of their farm businesses (Bennett, 1982; Inwood et al., 2013), while these nuances in family farm business structures contribute to the resiliency and growth of agriculture at the RUI (Inwood & Sharp, 2012). Despite the importance of accessible land and capital, social issues, such as the cost of child care, influence farm household economics that directly impact farm businesses at the RUI. Because farmers are not a homogeneous population, and differences in social and cultural factors can impact

current and future farm structure and land management decisions, understanding these differences is crucial to providing appropriate support.

MG and FG farmers (farmers who do not come from a farm family, distinct from “Beginning Farmer,” defined by the USDA as one who has operated his or her farm for less than 10 consecutive years) are two subgroups of farmers that embody these differences in social values and farming motivations: MG farmers are focused on farm production, farm succession, and their children’s interest in the farm, while FG farmers place greater emphasis on transcendental interests such as environmentalism and spirituality and focus less on how children influence their business structure and decisions (Inwood et al., 2013). Young and beginning farmers in particular are drawn to agriculture because of non-economic factors: health, environmental sustainability, and independence (Rafferty, 2011; Reuteman, 2011).

Male and female farmers also exhibit differing values and motivations for farming, and these gendered values have an impact on farm structure and land management decisions (Inwood, 2013). For example, women emphasize the environmental and economic benefits of sustainable agriculture, and are also more likely to connect their work in agriculture to community sustainability and well-being. These values have been correlated with use of low-input production, cooperative farm markets, direct marketing, and value-adding (Chiappe & Flora, 1998; Trauger et al., 2008). Despite their growing role in agriculture and the continued burden of gendered domestic work (Sachs, 1996), women farmers’ needs are not often met by agricultural education and technical assistance. For example, because of long held social constructions of farm women as farm wives rather than farmers, educational

programming neglects women's physical abilities as farmers and often pushes women farmers to adopt production methods that don't play to physical strengths, rather than providing strategies and tools to use their bodies differently than male farmers (Trauger et al., 2008). When considering women and agricultural education, Liepens and Schick (1998) use the concept of seriality, categories of identity shifting over time and space, to suggest a more flexible approach when working with women in agriculture, whose identity may prioritize 'woman,' 'farmer,' 'mother,' or 'off-farm worker' at different times. Women farmers need adequate and appropriate education and support that recognizes their shifting identities (Trauger et al., 2008). While Smithers & Johnson (2004) found that farm business and farm family life cycles often overlap in periods of growth (both farm business and children), women in particular have been found to be more involved in field work, marketing, bookkeeping, and the farm decision-making during child-bearing and child-rearing years, with decreased involvement in later years possibly due to age and ability (Jones & Rosenfeld, 1981).

Because of this link between social values, farm structure, and resiliency of agriculture at the RUI, and because of the agricultural importance of RUI counties to our country's food system, it is important to understand the ways social and domestic factors, like child care, influence farm businesses for different farm populations.

**4.2.2.2 Child Care at the RUI.** Child care is a household level issue in RUI farm families that may be made complicated by the location in the urban fringe as there are discrepancies in child care availability, affordability, and government support among rural and urban areas. Rural families access child care subsidies less frequently and for shorter periods of time than urban families (Davis, Grobe, & Weber, 2010), which

could be attributed to lack of access to formal care, complicated nontraditional work schedules and resulting inflexibility of providers in rural areas, as child care choices are made based on need and availability of options (Meyers & Jordan, 2006; Reschke, 2012; Walker & Reschke, 2004). Relative care is an attractive option for rural families because of flexibility of schedule and affordability (Reschke et al., 2006; Reschke & Walker, 2005); however, young and beginning farmers 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 nor community networks to provide assistance with care.

Child care is deeply embedded in social structures and community networks, where parents get most of their information about the location, supply, and quality of care options (Meyers & Jordan, 2006). The location of the RUI between the rural areas, where relative care is preferred and subsidy use is low, and the urban areas, with higher subsidy use and more care centers, may create unique challenges for farm families in accessing community support. Understanding the community networks of farmers at the RUI, and the ways these communities, or lack thereof, influence child care challenges, is important to supporting a young and active agricultural population in this important region.

#### **4.2.3 Farm Families, Work and Child Care**

Farmers typically run their own businesses and have nontraditional hours, and subsequently may have trouble accessing the current system of child care support subsidies available only to low-income families and tax credits available to employed parents using employer-sponsored care options. Caring for children has a negative

effect on the duration of self-employment in parents (Williams, 2004), and so self-employed farmers with children must be able to access care in order to thrive in their farm business. The American Farmland Trust report on “Growing Cities, Preserving Farmland” recommends fostering agricultural development at the RUI by encouraging a favorable agricultural business climate (Unger & Thompson, Jr., 2013). Because farm families are dynamic entities (Inwood et al., 2013) that manage the farm enterprise within the context of the family and business life-cycles (Coleman & Elbert, 1984), understanding the farm family and related child care challenges is essential to providing appropriate child care options and subsequently, a healthy workforce and business climate.

The farm business life-cycle stage of growth and development is more likely to occur early in the family life-cycle, during the formation of the farm foundation and the arrival of children (Smithers & Johnson, 2004). 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 (Hildebrand & Williams, 2003), child care accommodations of some kind are necessary to ensure safety and to allow for productive time for farm business responsibilities, like fieldwork, marketing, selling, and bookkeeping. However, the high cost of center-based care and low returns from farming, especially on small and medium farms, may make it difficult for farm families to afford off-farm care. Without qualifying for federal or state subsidies, child care credits or public programs, farm families can be challenged to find available, affordable, high quality care.

Because child care is essential to workforce and community economic development, and is necessary to ensure farm safety and farm business productivity, understanding child care in farm families can contribute to the conversation on creating and encouraging a favorable agricultural business climate. This study aims to empirically understand the child care challenges of the farm population and how they differ amongst farmer groups in order to strengthen the agricultural economy and more specifically, agriculture at the RUI, by supporting the household level needs of farm families.

### **4.3 Methods**

To answer our research questions, we utilized a cross-sectional survey approach that allows for the determination of relationships between variables at the time of study within populations too large to observe directly (Babbie, 1973; Babbie, 2010), such as the national farm population. This approach allowed for a preliminary investigation of the relationship between child care, the farm family, and community at the RUI.

Questions were developed for a national survey as part of a larger Ohio State University and University of Vermont project titled “Small and Medium Scale Farm Growth, Reproduction and Persistence at the Rural-Urban Interface: Balancing Family, Goals, Opportunities and Risks” which was funded by the Agriculture and Food Research Initiative of the National Institute of Food and Agriculture (USDA Grant # 2011-67023-30139).

#### **4.3.1 Site selection**

The population for the survey included 2000 randomly selected farmers from five national case study sites: Lewiston, ME; Burlington, VT; Columbus, OH;

Honolulu, HI; Miami, FL. These sites were selected because of their location in the RUI, based on the following criteria: regional and production variation, with at least one site in each of the four main USDA regions (Northeast, South, Midwest and West); estimated positive population growth between 2000 and 2010 indicating their location at the RUI; an active agricultural base, within the top three-quarters of U.S. agricultural sales; 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 a higher than regional average presence of farmer diversity measured by women, minority, and beginning farmers.

#### **4.3.2 Survey development and implementation**

Several questions targeting child care were included in the self-administered questionnaire, gauging the importance of child care to farm business decisions, the pervasiveness of the challenges associated with child care, and the types of community networks farmers have. Closed-ended questions were used to provide uniformity of response and ease of analysis (Babbie, 2010). The final instrument was reviewed and approved by the Institutional Review Board.

The mail survey was distributed in 2014 utilizing a modified Tailored Design Method (Dillman, 2009). It included multiple contacts with each respondent, including a pre-notification postcard explaining the purpose of the study, an initial survey letter, a reminder letter, and subsequent mailings of replacement surveys (Dillman, 2009). An incentive of \$1 was included in each survey packet mailing. Farm operators who received the survey were encouraged to complete the survey with as many family

members as possible, particularly those that are involved in farm operations and household decision-making.

### **4.3.3 Survey participants**

Data were collected from 782 farm households, of which 186 were identified as parents of children under age 18 that made up the sample for analysis. The survey sample and sample for analysis are comparable to the national farm population (Table 5). In this sample, the average age of the farmer respondents is 54.7, paralleling the national average, which for principal operators is 58.3. The average age for the survey sample with kids under 18 is 45.0, with no comparable national data but understandably slightly younger than the average age of the aging farm population. We use ‘young’ and ‘old’ in this study “to account for the different perspectives, priorities, and economic needs” (Inwood et al., 2013) of farm families in various stages of both family and enterprise life cycles, dividing farmers using the median age of our sample, 44. Farmers who are 44 years of age and younger were categorized as young and farmers 45 years old or more were categorized as old. The sample for analysis, farmers with children under 18, has significantly higher percentages of young farmers (51.1), beginning farmers (43.6), and women farmers (43.2) than the total sample of respondents and the national farm population, where applicable. Similar percentages of the survey population and survey population with kids under 18 are MG and FG farmers. Using USDA classification, farms with sales less than \$250,000 per year were identified as ‘Small/Medium’ and farms with sales greater than \$250,000 per year were identified as ‘Large.’ However, the US Census of Agriculture only reports percentages of farms with sales between \$100,000 and \$499,999. Farm type includes product type

as well as figures on direct sales and value-added products, to show that participants in this study, and at the RUI more generally, are more likely to participate in more labor-intensive production methods (fruits and vegetables, value-added) and sell direct to consumers. While race was not a demographic variable used in this study's analysis, it is worth noting that survey respondents are comparable to the national population of farmers, with white as the predominant race in survey respondents (84.1), survey respondents with children under 18 (85.1), and the national farm population (95.4).

Table 5: Summary Descriptive Statistics for Survey Respondents, Survey Respondents with Children Under 18, and the National Farm Population

Characteristic	National Farm Population ( <i>n</i> = 2,109,303)	Survey Sample ( <i>n</i> = 782)	Survey Sample with Children Under 18 ( <i>n</i> = 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	50.0	56.8
Female	14.0	34.6	43.2
Value of Sales (%)			
Less than \$10,000	56.6	21.0	24.6
\$10,000 to \$24,999	11.6	15.5	15.3
\$25,000 to \$99,999	13.4	24.1	18.6
\$100,000 to \$249,999	11.0	15.6	15.3
\$250,000 to \$499,999		10.4	11.5
\$500,000+	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

Source: 2012 National Ag Census.

#### 4.3.4 Analytic Strategy & Farmer Demographics

Though farmers are often treated as a homogenous group, it is important to recognize distinctions among farmer groups that contribute to nuanced family farm

enterprises and household level decisions, such as child care. In order to understand the ways child care issues play out across farmer groups, respondents were classified into two separate groupings for analysis: first generation (FG) farmer or multi-generation (MG) farmer; men or women farmers.

**4.3.4.1 Multi-Generation and First Generation.** Understanding the differences between MG and FG 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 has aged dramatically (NASS, 2012). FG farmers are an important population to understand because they 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). These differences may affect the ways these groups of farmers experience child care as it relates to the farm business, potentially creating a need for different types of support for these farmer groups.

**4.3.4.2 Male and Female.** Distinctions between male and female farmers are also important to consider when exploring child care in farm families. More women than ever are choosing to farm as their primary work: the 2012 Census of Agriculture reported 288,264 women principal operators and 969,672 women farm operators (NASS, 2012). 14 percent of farms had a woman principal operator, a 30 percent increase from 2002, the year the USDA began differentiating principal operators based on sex (NASS, 2012). Even more applicable to this study is that 31 percent of farms at the Rural-Urban Interface (RUI) have a woman principal operator (NASS, 2007). Of

the farms with women principal operators, 90 percent make less than \$50,000 per year in gross profit and government payments (NASS, 2012).

#### **4.3.5 Survey Analysis**

Survey questions were designed to ascertain a basic picture of the relationship between child care and the farm enterprise, to gain a preliminary understanding of the child care challenges faced by different types of farm families, and the affect community has on these challenges. The survey included questions on the importance of both child care and also balancing farm and household needs when making farm decisions; factors and conditions that pose problems when making child care decisions; and family and friend networks in the nearby community. In addition to farmer demographics such as MG/FG, sex, beginning/non-beginning, age, we also asked about basic demographics of the firm, such as size (classified by sales), to determine factors that play a role in the child care challenges reported by farm families.

Survey questions addressed several aspects of child care. Farmers were asked to describe how important several factors are when making decisions about the farm, including ‘finding child care for my children’ and ‘time is takes to balance the farm and household needs.’ Farmers were also asked to describe characteristics of child care that were identified by Reschke (2012) as desired by farm families in alternative-to-parental care: affordability, availability, quality, and philosophy. Farmers who reported any level of problem with any of these child care characteristics were ultimately categorized as ‘child care problems.’

The literature shows that community development both contributes to and benefits from a healthy child care system. As such, it is important to examine, at the

most basic level, the child care challenges faced by the farm community at the RUI and the connection between respondents' community network and child care problems. Within these farmer groups, we examine the role child care plays in farm decisions, the varying child care problems faced by farm families, the demographic qualities of farmers who feel the burden of child care the most, and the relationship between community and child care.

SPSS Software was used to run bivariate analyses to compare the demographics, child care challenges, and community connection of FG/MG farmers and men/women farmers. We report significant results at the  $p = 0.05$  significance level, but also note near significant results at  $0.05 < p < 0.10$ .

Table 6 shows the characteristics of MG and FG farmer groups. FG farmers are younger than MG farmers and are significantly more likely to be beginning farmers (significant at  $P\text{-value} = .000$ ) and have smaller farms (significant at  $P\text{-value} = .027$ ). Women make up 44.8 percent of FG farmers and 42.9 percent of MG farmers.

Table 6: Descriptive Statistics of MG and FG Farmer Groups

Characteristic	MG ( <i>n</i> =84)	FG ( <i>n</i> =96)	<i>P</i> -Value
Age			
Young	47.6%	53.6%	0.458
Old	52.4%	46.4%	
Experience			
Beginning	28.9%	56.3%	.000*
Non-beginning	71.1%	43.8%	
Farm Size			
Small/Med	65.9%	81.1%	.027*
Large	34.1%	18.9%	
Sex			
Men	57.1%	55.2%	.881
Women	42.9%	44.8%	

Note. \*Pearson chi-square significant at the  $P\text{-Value} = .05$  level; \*\* Pearson chi-square significant at the  $0.05 < P < 0.10$  level.

Table 7 shows the demographic characteristics of men and women farmers. Women farmers are more likely than men to be young (significant at  $P$ -value = .017), while high percentages of women farmers report also being beginning farmers, and having small or medium farms. Nearly equal percentages of men and women are also FG farmers.

Table 7: Descriptive Statistics of Men and Women Farmer Groups

Characteristic	Men ( $n=101$ )	Women ( $n=79$ )	$P$ -Value
Age			
Young	43.3%	62.0%	.017*
Old	56.7%	38.0%	
Experience			
Beginning	41.0%	48.7%	.359
Non-beginning	59.0%	51.2%	
Farm Size			
Small/Med	68.6%	79.5%	.126
Large	31.4%	20.5%	
Family History			
MG	47.5%	45.6%	.881
FG	52.5%	54.4%	

Note. \*Pearson chi-square significant at the  $P$ -Value = .05 level; \*\* Pearson chi-square significant at the  $0.05 < P < 0.10$  level.

The above tables support our focus on understanding the needs of FG and women farmers, as these groups also include significant populations of beginning, young, and small/medium-scale farmers who may face household level challenges as they work to establish their farm enterprises.

#### 4.4 Results

In the following sections, we present the results of the survey of farm families. At a broad level, the majority of farmers with children under 18 (60.8 percent of total

survey sample, n=186) report experiencing child care problems of some kind (Table 8). Over two-thirds of FG farmers experience child care problems, while just over half of MG farmers report problems with child care. Men and women farmers with children under 18 are almost equally as likely to report experiencing child care problems.

Table 8: Prevalence of Child Care Problems in Survey Population

	MG (n=86)	FG (n=97)	<i>p</i> - Value	Men (n=104)	Women (n=79)	<i>p</i> - Value
Experiences Child Care Problems	52.3%	67.0%	0.050*	62.5%	60.8%	0.878

\*Pearson chi-square significant at the *P*-Value = .05 level; \*\* Pearson chi-square significant at the 0.05<*P*<0.10 level.

#### 4.4.1 First Generation and Multi-Generation Farmers

The quantitative data reveals several significant differences between FG and MG farmers. While the importance of child care 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 child care (Table 9).

Table 9: Child Care Challenges of FG and MG Farmers

	MG (n=86)	FG (n=97)	<i>P</i> -Value
Child Care is Important Factor in Farm Decisions	28.4%	32.5%	.717
Balancing Farm & Household is Important Factor in Farm Decisions	81.4%	74.7%	.370
Child Care Problems			
Affordability	37.8%	46.7%	.283
Availability	34.1%	46.2%	.122
Quality	39.5%	52.7%	.093**
Philosophy	31.3%	49.4%	.019*

Note. \*Pearson chi-square significant at the *P*-Value = .05 level; \*\* Pearson chi-square significant at the 0.05<*P*<0.10 level.

In order to understand the characteristics of both FG and MG farmers who reported child care problems, we further categorized the sample for analysis into ‘MG with Child Care Problems’ and ‘FG with Child Care Problems’ (Table 10). FG farmers with child care problems are more likely to also be beginning farmers (59.4 percent) than MG farmers with child care problems (41.9 percent). FG farmers with child care problems are also more likely to have Small or Medium-size farms (82.8 percent), reporting lower farm sales compared to MG farmers who reported child care problems. Production and sales are also significant: all MG farmers with child care problems and 86 percent of FG farmers with child care problems reach consumers through direct sales (significant at *P-value* = .047).

Table 10: Demographic characteristics of MG and FG Farmers with Child Care Problems.

Characteristic	MG with Child Care Problems ( <i>n</i> =45)	FG with Child Care Problems ( <i>n</i> =65)	<i>P</i> -Value
Age			
Young	57.8%	58.5%	1.000
Old	42.4%	41.5%	
Experience			
Beginning	41.9%	59.4%	.081**
Non-beginning	58.1%	40.6%	
Farm Size			
Small/Med	65.9%	82.8%	.066**
Large	34.1%	17.2%	
Production Type			
Direct	100.0%	86.0%	.047*
Not Direct	0.0%	14.0%	
Sex			
Men	62.2%	52.3%	.333
Women	37.8%	47.7%	

Note. \*Pearson chi-square significant at the *P*-Value = .05 level; \*\* Pearson chi-square significant at the  $0.05 < P < 0.10$  level.

**4.4.1.1 Community and Care.** There are significant differences between the family and friend networks of FG and MG farmers: FG farmers are significantly more likely to live in an area with no relatives than MG farmers (Table 11).

Table 11: Family and Friend Networks of MG and FG Farmers

	MG (n=86)	FG (n=97)	P-Value
No Nearby			
Friends	10.7%	16.0%	.381
Relatives	<b>21.4%</b>	<b>44.7%</b>	<b>.001</b>
Nearby			
Friends	89.3%	84.0%	.381
Relatives	<b>78.6%</b>	<b>55.3%</b>	<b>.001</b>

\*Pearson chi-square significant at the P-Value = .05 level; \*\* Pearson chi-square significant at the 0.05<P<0.10 level.

Further analysis revealed significant differences in family and friend networks across MG and FG farmers with child care problems (Table 12). Though similar percentages of MG and FG farmers with child care problems have no friends nearby, FG farmers with child care problems are much more likely to live without family nearby: 42.2 percent of FG farmers with child care problems have no relatives nearby, while only 14.0 percent of MG farmers with child care problems have no relatives nearby (significant at *P-value* = .003). Additionally, all subpopulations of FG farmers with child care problems report higher percentages of ‘no relatives nearby’ than their counterpart MG farmers with child care problems, with several statistically significant relationships: 39.5 percent of FG young farmers with child care problems have no relatives nearby, compared to 7.7 percent of MG young farmers with child care problems (significant at *P-value* =0.008); 46.2 percent of FG Small/Medium farmers with child care problems have no relatives nearby, compared to 17.9 percent of MG

Small/Medium farmers with child care problems (significant at  $P$ -value =0.015); and both FG Women and Men are more likely to have no relatives nearby than their MG counterparts (significant at  $P$ -value =0.036 and  $P$ -value =0.032, respectively). FG Beginning farmers with child care problems are more than twice as likely (36.8 percent) to report having no relatives nearby than MG Beginning farmers with child care problems (16.7 percent).

Table 12: Family and Friend Networks of MG/FG Farmers with Child Care Problems

	n	Friends Nearby	No Friends Nearby	$P$ - Value	Relatives Nearby	No Relatives Nearby	$P$ - Value
MG with Child Care Problems	44	84.1%	15.9%	.229	86.0%	14.0%	.003*
MG Young	26	80.8%	19.2%	.073**	92.3%	7.7%	.008*
MG Old	18	88.9%	11.1%	1.000	76.5%	23.5%	.199
MG Beginning	18	77.8%	22.2%	.454	83.3%	16.7%	.213
MG Non-Beginning	24	87.5%	12.5%	.110	91.3%	8.7%	.004*
MG Small/Medium	28	82.1%	17.9%	.481	82.1%	17.9%	.015*
MG Large	15	86.7%	13.3%	.492	92.9%	7.1%	.288
MG Women	16	81.3%	18.8%	.330	93.8%	6.3%	.036*
MG Men	27	85.7%	14.3%	.693	81.5%	18.5%	.032*
FG with Child Care Problems	62	91.9%	8.1%	.229	57.8%	42.2%	.003*
FG Young	37	97.3%	2.7%	.073**	60.5%	39.5%	.008*
FG Old	25	84.0%	16.0%	1.000	53.8%	46.2%	.199
FG Beginning	37	86.5%	13.5%	.454	63.2%	36.8%	.213
FG Non-Beginning	25	100.0%	0.0%	.110	52.0%	48.0%	.004*
FG Small/Medium	50	90.0%	10.0%	.481	53.8%	46.2%	.015*
FG Large	11	100.0%	0.0%	.492	72.7%	27.3%	.288
FG Women	29	93.1%	6.9%	.330	61.3%	38.7%	.036*
FG Men	33	90.9%	9.1%	.693	54.5%	45.5%	.032*

Note. \*Pearson chi-square significant at the  $P$ -Value = .05 level; \*\* Pearson chi-square significant at the  $0.05 < P < 0.10$  level.

#### 4.4.2 Gender

The analysis revealed significant differences between men and women farmers (Table 13): women farmers are almost twice as likely to report that child care is an important factor in farm decisions (significant at  $P$ -value = .017); balancing farm and family is more likely to be a factor in farm decision making for women farmers (87.0 percent) compared to men (71.2 percent) (significant at  $P$ -value = .012); and women are more likely to report problems with all aspects of child care than men.

Table 13: Child Care Challenges of Men and Women Farmers

	Men ( $n=104$ )	Women ( $n=79$ )	$P$ -Value
Child Care is Important Factor in Farm Decisions	23.9%	43.9%	.017*
Balancing Farm & Household is Important Factor in Farm Decisions	71.2%	87.0%	.012*
Child Care Problems			
Affordability	40.4%	48.7%	.286
Availability	39.4%	42.7%	.756
Quality	44.3%	51.3%	.443
Philosophy	37.5%	47.3%	.213

Note. \*Pearson chi-square significant at the  $P$ -Value = .05 level; \*\* Pearson chi-square significant at the  $0.05 < P < 0.10$  level.

When comparing ‘Men with Child Care Problems’ and ‘Women with Child Care Problems’ (Table 14), women farmers with child care problems are more likely to also be young farmers (70.8 percent) than men farmers with child care problems (significant at  $P$ -value = .033). High percentages of women (97.7 percent) and men (84.1 percent) with child care problems are also involved in more labor-intensive direct sales. Additionally, though not statistically significant, women farmers with child care problems are also more likely to have small or medium-size farms (81.3 percent) than men (71.4 percent), indicating women with child care problems have lower farm sales.

Table 14: Demographic characteristics of Men and Women Farmers with Child Care Problems

Characteristic	Men with Child Care Problems ( <i>n</i> =65)	Women with Child Care Problems ( <i>n</i> =48)	<i>P</i> -Value
Age			
Young	49.2%	70.8%	.033*
Old	50.8%	29.2%	
Experience			
Beginning	50.8%	54.3%	.845
Non-beginning	49.2%	45.7%	
Farm Size			
Small/Med	71.4%	81.3%	.270
Large	28.6%	18.8%	
Production Type			
Direct	84.1%	97.7%	.058**
Not Direct	15.9%	2.3%	
Family History			
MG	45.2%	35.4%	.333
FG	54.8%	64.6%	

Note. \*Pearson chi-square significant at the *P*-Value = .05 level; \*\* Pearson chi-square significant at the 0.05<*P*<0.10 level.

Unlike MG and FG farmers, men and women farmers similarly report having friends and family nearby (Table 15). Additionally, nearly equal percentages of men and women farmers with child care problems report having friends/no friends and relatives/no relatives nearby (Table 16).

Table 15: Family and Friend Networks of Men and Women Farmers

	Men ( <i>n</i> =104)	Women ( <i>n</i> =79)	<i>P</i> -Value
No Nearby			
Friends	13.6%	12.0%	.824
Relatives	31.7%	34.6%	
Nearby			
Friends	86.4%	88.0%	.824
Relatives	68.3%	65.4%	

\*Pearson chi-square significant at the *P*-Value = .05 level; \*\* Pearson chi-square significant at the 0.05<*P*<0.10 level.

Table 16: Family and Friend Networks of Men/Women Farmers with Child Care Problems

	n	Friends Nearby	No Friends Nearby	P-Value	Relatives Nearby	No Relatives Nearby	P-Value
Women with Child Care Problems	45	88.9%	11.1%	1.000	72.3%	27.7%	.541
Women Young	33	90.9%	9.1%	1.000	76.5%	23.5%	.781
Women Old	12	83.3%	16.7%	.658	61.5%	38.5%	1.000
Women Beginning	24	83.3%	16.7%	1.000	76.0%	24.0%	.395
Women Non-Beginning	20	95.0%	5.0%	1.000	70.0%	30.0%	1.000
Women Small/Medium	36	88.9%	11.1%	1.000	71.7%	28.9%	.251
Women Large	9	88.9%	11.1%	1.000	77.8%	22.2%	.591
Women FG	29	93.1%	6.9%	1.000	61.3%	38.7%	.621
Women MG	16	81.3%	18.8%	.692	93.8%	6.3%	.386
Men with Child Care Problems	64	89.1%	10.9%	1.000	66.7%	33.3%	.541
Men Young	32	90.6%	9.4%	1.000	71.9%	28.1%	.781
Men Old	32	87.5%	12.5%	.658	61.3%	38.7%	1.000
Men Beginning	31	83.9%	16.1%	1.000	64.5%	35.5%	.395
Men Non-Beginning	29	93.1%	6.9%	1.000	71.4%	28.6%	1.000
Men Small/Medium	44	86.4%	13.6%	1.000	56.8%	43.2%	.251
Men Large	18	94.4%	5.6%	1.000	88.2%	11.8%	.591
Men FG	33	90.9%	9.1%	1.000	54.5%	45.5%	.621
Men MG	28	85.7%	14.3%	.692	81.5%	18.5%	.386

Note. \*Pearson chi-square significant at the  $P$ -Value = .05 level; \*\* Pearson chi-square significant at the  $0.05 < P < 0.10$  level.

#### 4.5 Discussion

Our study aimed to empirically assess the relationship between child care, farm families, and farm businesses, and to understand how this relationship plays out across different farmer types.

This study finds that farm families do perceive child care to be an issue influencing their farm business, and that the child care challenges reported by different

farmers groups (MG/FG, Men/Women) are notable and significant. While over half of all farmers analyzed report facing child care challenges, we find important differences between these groups that may shape the way they experience child care. Child care plays a role in the farm business decisions of women, men, FG, and MG farmers, but women and FG farmers emerged as groups who may need extra support.

Women farmers are more likely than men to consider child care as a factor in farm business decisions, and are also more likely to report child care challenges with affordability, availability, quality, and in finding caregivers that match their philosophy of raising a child. Women farmers need adequate and appropriate support that recognizes their shifting identities of primary child caregiver, wage-earner through off-farm employment, and farmer (Trauger et al., 2008). Without reliable, affordable, high-quality child care options, the demands of child-rearing for this growing group of farmers may limit time for farm business and household activities, affecting potential growth of the farm enterprise.

Although previous research found that MG farmers are influenced by their children's interest in the farm while FG farmers are less focused on how children influence their business structure and decisions (Inwood et al., 2013), this study finds that FG farmers are actually slightly more likely to view child care as a factor influencing farm business decisions. So, the presence of children in a MG farming household may influence business decisions such as succession planning, but child care itself is not an issue for their business, possibly because of nearby relatives who help with care and historically set expectations for the care of children on the farm. The opposite is true for FG farmers: children do not necessarily influence succession

planning because FG farmers did not inherit their land or equipment from previous generations and may not have expectations for their children, but child care may influence business planning because of lack of family and community resources and support.

FG farmers are more likely than MG farmers to report child care challenges with affordability, availability, quality, and in finding caregivers that match their philosophy of raising a child. Parental child care choices are influenced by many factors including social values (Meyers & Jordan, 2006; Walker & Reschke, 2004), and the unique child care challenges faced by FG farmers reflect the different values of these two groups (Inwood et al., 2013). The strong desire of MG farmers to pass on the farm to another generation and the resulting socialization process has historically benefited agriculture, particularly at the RUI where farmers face development pressure (Inwood et al., 2013). Though FG farmers are able to structure their farm business free from historical legacies by avoiding the socialization process of MG farm families (Inwood et al, 2013), they may face more difficulty in child care as a result of lack of family support and community connection that is common for MG farmers. Without clear expectations for children on the farm, historical precedent on which to base child care decisions, or nearby family to care for children that may be available to MG farmers, FG farmers may struggle to find care that is affordable, available, high quality, and matches their philosophy. These differences among MG and FG farmers that affect their child care challenges are crucial to understand when tailoring policies and programs to appropriately meet their needs.

Both FG and women farmer groups with child care problems are predominantly young and beginning farmers in this sample, and more likely to be so than their respective MG and male counterparts. The importance of child care to farm business decisions for women and FG farmers could therefore be attributed to the previously discussed life cycle overlap, in which the farm business life-cycle stage of growth and development occurs early in the family life-cycle, during the formation of the farm foundation and the arrival of children (Smithers & Johnson, 2004). Women in particular have been found to be more involved in the farm business tasks and decision-making during child-bearing and child-rearing years, with decreased involvement in later years (Jones & Rosenfeld, 1981). The reporting of child care as an important factor in farm decisions among the population of FG and women farmers could reflect the fact that they are beginning and growing their farm businesses and at the same time, growing their families.

FG and women farmers are also more likely to have smaller farms, which means lower farm sales. Lower farm sales are common for both women farmers (Hoppe & Korb, 2013) and beginning farmers (Ahearn, 2013), which may contribute to the difficulty reported in affording child care. Particularly on small farms, it is now common for one spouse to work as the principal farmer while the other works off the farm to supplement low returns from farming (Hoppe, MacDonald, & Korb, 2010) and to secure benefits such as health insurance (Brown & Weber 2013), making affordable child care a necessary arrangement. Thus, child care is important to the changing farm family employment structure and to farmer workforce development. This is true especially for FG and women farmers, who almost wholly report selling directly to

consumers, a more time-consuming and labor-intensive sales method that could create a need for non-parental child care to allow for farmers to access direct sales markets. Because child care choices are also made based on need and availability of options (Meyers & Jordan, 2006; Walker & Reschke, 2004), if appropriate, affordable, accessible options are not available to farm families at the RUI, they may choose to keep children on the farm which could limit time for farm business responsibilities and result in familial role conflict and stress (Berkowitz & Perkins, 1984; Hedlund & Berkowitz, 1979).

In attempting to understand the differences in child care challenges among farmer groups, the proximity of family and friends is clearly a factor. The child care challenges reported by FG farmers may also be explained by their lower reported rates of friends and family in their area. Child care is deeply embedded in social structures and community networks, where parents get most of their information about the location, supply, and quality of care options (Meyers & Jordan, 2006), but without strong community networks, farmers may lack these resources that help in identifying and finding a provider. Because 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), it makes sense that they are also more likely to live near family and less likely to face child care challenges than FG farmers. Relative care is an attractive option for rural families because of flexibility of schedule and affordability (Reschke et al., 2006; Reschke & Walker, 2005). However, without family nearby, FG farmers do not have this option and may face difficulty in finding affordable, accessible,

appropriate care as a result. Despite the relationship between a lack of nearby family network and child care problems for FG farmers, it is worth noting that MG farmers with child care problems, for the most part, do have family nearby. This implies that having family nearby isn't a solution for all child care problems, although it does seem to make it easier for the surveyed population.

Men and women farmers with child care problems are not affected differently by community networks of family and friends. It is understandable that these community networks do not seem to have a relationship with child care challenges as predominantly in men and women farmers as it does in MG and FG farmers, as the categorization itself of multi-generation versus first generation is based on one's family history of farming and resulting connection to the farming community. One sex is not inherently more connected to community networks than the other, and so an equal relationship between community and child care challenges was expected for men and women.

It is evident from the findings that child care is an important factor in farm business decisions for the majority of farmers surveyed, and that some populations of farmers struggle with child care challenges more than others. As both child care and the agriculture sector are embedded in communities, understanding the intersection of community and child care challenges faced by farm families at the RUI is crucial to providing appropriate support for farmer groups of interest that will contribute to a young, vibrant farm economy. The following section provides conclusions to this study, recommendations for applying these findings to policies and programs directly

targeted at making child care in farm families less of a challenge, and suggestions for future research that could enrich and inform efforts.

#### **4.6 Conclusions/Recommendations**

This article seeks to contribute to the larger national policy movement to support young and beginning farmers in light of the dramatic aging of the U.S. farm population by considering the relationship between child care and the health and vitality of the agricultural community. This contribution furthers the conversation in both child care and agricultural scholarship, by illuminating the connection between child care as a factor workforce development and the existing concern of farmer retention and persistence in agriculture.

The American Farmland Trust report on “Growing Cities, Preserving Farmland” recommends fostering agricultural development at the RUI by encouraging a favorable agricultural business climate (Unger & Thompson, Jr., 2013). Because child care is essential to workforce and community economic development, and is necessary to ensure farm safety and farm business productivity, understanding child care in farm families can contribute to the conversation on creating and encouraging a favorable agricultural business climate. However, child care is a difficult and nuanced issue, affecting different types of farm families in different ways. In order to foster a young, vibrant farm economy, policies and programs must address the needs of burgeoning farmer groups: FG farmers and women farmers. Though all farmer groups analyzed in this study report that child care influences farm business decisions, and that they face challenges with child care, particular attention must be paid to young, beginning, and FG farmers who need support in all aspects of their farm business and may not be

receiving the same passing of traditions, knowledge, and community networks as MG farmers. As a growing group of farmers that needs support unique to their changing roles, women farmers also need extra attention. This study highlights just some of the differences in these populations and builds on the work of Inwood et al. (2013) by continuing to disentangle the social differences between MG and FG farmers, while also addressing the needs of women farmers, a growing population of farmers for whom child care is of primary concern.

This study shows child care is less challenging with family and friends nearby, and more difficult when those networks don't exist. Family & informal care is preferable for farm families because of affordability and farmers' nontraditional work schedules (Reschke, 2012), but farmers without families nearby or solid community networks may experience trouble accessing the care they prefer. Farm communities need the tools and resources to develop their own child care models. Creating networks for communication and resource sharing among employers and employees is recommended as a tool to promote workforce development (Green & Haines, 2015); however, self-employed farmers may benefit from these types of networks, too, focused specifically on child care options and affordability. Simply providing child care resources for farmer parents, via county or state-wide online listservs or local in-person parent networking nights, could help ease the child care challenges of FG and women farmers by offering a network through which information on both formal and informal care options can be shared. These formal child care networks could be created through the collaboration and use of already-existing networks of agricultural organizations: Extension, food policy councils, producer groups. Additionally, state level departments

of family and youth services, local child care organizations, and community development corporations could participate by tailoring their resources specifically to farm families and collaborating with the aforementioned agricultural organizations. Although child care is often thought of as only benefitting parents and providers, Warner, Ribeiro and Smith (2003) found that framing child care as an issue of economic development provides the tools and language to enable child care resources and economic development agencies to work together to increase public and private support for childcare and wellbeing of the community as a whole. Agricultural, child care, and community and economic development organizations could even work with mobile software developers to create applications that can help parents in rural, agricultural communities connect with each other and with appropriate care providers.

Targeted child care subsidies specifically for FG or women farmers, despite income so as not to exclude farmers with off-farm income, would ease the problem of affordability and encourage FG and beginning farmers to persist and grow their farm business during the first few years, which typically bring in low returns (Ahearn, 2013) and can overlap with the raising of children (Smithers & Johnson, 2004). There is recent precedent for creating benefits specifically for farmers. The National Young Farmers Coalition (NYFC) has launched a campaign to add agriculture to the list of professions that qualify for the Public Service Loan Forgiveness Program and New York state has already adopted the policy as an incentive for recent college graduates to pursue farming. Removing additional financial burden from new, young, and beginning farmers, who often experience low returns in the early years (Lusher Shute, 2011), makes sense for a profession so vital to our nation's well-being. Providing

appropriate and affordable child care options for farm families could further remove burden from parent-farmers, and is another way to support growth and workforce development in the agriculture sector.

Arguments for addressing child care needs in a more universal approach, instead of through piecemeal programs designed to fix specific problems, would alleviate child care pressures on all families, including farm families. Other industrialized Western countries, such as France and Sweden, offer benefits of free or subsidized child care in addition to paid maternity or paternity leave for all employed parents, including those who are self-employed, and provide a model for the US.

In Sweden, generous and comprehensive child care policy allows for a combination of maternal labor force participation and child-rearing, giving mothers and fathers paid parental leave, access to quality group child care, and the “short hours” option in which they only work thirty hours per week (Michel, 1999; Morgan, 2006). These benefits are accessible to all parents, encouraging maternal employment (Nyberg, 2004) and the pursuit of self-employed professions (Arenius & Kovalainen, 2006), like agriculture. The presence of very young children actually increases a mother’s likelihood of pursuing self-employment in Sweden (Joona, 2014). France offers a comprehensive family policy that includes state sponsored child care options in traditional day care centers and in family home providers who belong to networks that provide regulation and supervision (Morgan, 2006; Michel, 1999). Though not free of political criticism, these systems in Sweden and France provide a quality child care system that is meant to be accessible and affordable to all citizens, regardless of socio-economic and occupational status (Morgan, 2006). The ability to access government

sponsored informal in-home care, as is available in France, would be particularly applicable to the needs of farm families, who often don't have access to formal care centers and work nontraditional hours.

This article brings together two previously unconnected bodies of work on child care as a contributor to workforce vitality and on agriculture, and establishes that child care is an issue that influences farm business decisions for certain populations of farmers, that FG and women farmers are farming populations that are more likely to have challenges with child care, and that family networks are an influencing factor in child care problems for MG and FG farmers. Though this study was an introductory analysis placing child care in the farm context and so examined all farmer respondents with children under age 18, future research should focus on farm families with younger children for whom child care is a pertinent issue. Future research should also continue to examine the issue of child care in farm families by exploring the role ethnicity and culture play in farm family child care decisions, surveying preferred methods of child care in farm families, and understanding what type of support would be most helpful for farmers facing child care challenges. Expanding the spatial component of study to non-RUI areas and surveying farm workers as well as principal operators would provide a wider understanding of the effects of child care on the agriculture sector.

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**CHAPTER 5: ‘DOES EVERYBODY ELSE THINK THAT IT’S A ROSY FUN  
TIME WITH KIDS ON A FARM?’: SUPPORTING A GROWING  
AGRICULTURAL ECONOMY BY UNDERSTANDING CHILD CARE IN  
FARM FAMILIES IN THE NORTHEAST**

**5.1 Introduction**

This article argues for the consideration of child care accessibility and costs as one factor in the success and wellbeing of farmers in the Northeastern United States. There is a long tradition in rural studies of recognizing that farms are not just economic enterprises but are family-based social enterprises as well, with household level issues and family roles that are both acknowledged and contested (Bennett, 1982; Coleman and Elbert, 1984; Gasson & Errington, 1993; Lobley & Potter, 2004; Salamon, 1992). However, we find child care missing from virtually all scholarly and public discussions of agricultural success – even more so than other social services and family supports. And we find the agricultural sector, considered as a portion of U.S. businesses and as a focus of U.S. family life, missing from most discussions of child care services. Our study seeks to inform scholarship and public policy in both of these areas.

The United States Department of Agriculture (USDA) has recognized the need for support of first-generation and beginning farmers. In fact, USDA and other public agencies provide support to farmers in the form of capital and market access via programs such as the “Beginning Farmer and Rancher Program.” In New York state, these farmers can apply for student loan forgiveness (NYS HESC, n.d.), a policy that has been proposed at the Federal level by the National Young Farmers Coalition

(Simpson, 2015). In light of the support these programs offer new and beginning farmers, the absence of child care from scholarship and public policy concerning the agricultural workforce is especially notable. Child care has been proven to play an important role in parental workforce development (Warner et al., 2004), and while many acknowledge the importance of agricultural workforce mobilization in light of an aging farm population, child care has been absent from these types of policy and program supports for farmers. While efforts to strengthen rural economies by supporting children and their families have been prioritized by USDA Rural Development and the White House Rural Council, public agencies have thus far not considered whether family-based supports might be of equal, or even greater, value to starting or struggling farmers as these other market- and loan-oriented efforts. Child care, a form of social support that reveals the interdependence of family and economic wellbeing, is particularly important to consider in light of the increasing numbers of principal farm operators who are women (NASS, 2012) and may also be primary caregivers for their children. Placing child care in the agricultural context is an especially significant case study in that farm families negotiate production and work as part of the farm enterprise within the context of the family life-cycle, and the growth and rearing of children often overlaps with the growth and development of a farm business (Bennett, 1982; Coleman & Elbert, 1984; Smithers & Johnson, 2004).

Child care experts have rarely considered farms as loci of child care needs. Scholars and policymakers have historically addressed child care as an issue of general family wellbeing and have asserted the need for public assistance with child care challenges that American families face (Michel, 1999; U.S. Congress House Select

Committee on Children, Youth, and Families, 1992). Access to affordable, high-quality care is a challenge for families of varying socioeconomic backgrounds, geographic locations, and professions (Forry, 2006; Morrissey, 2008; Walker & Reschke, 2004), and so the agriculture sector offers a window onto these child care-related challenges and provides an alternative context in which to examine and understand this greater social issue influencing economic development and public policy (Lobao & Meyer, 2001). However, child care is an issue unique to the agriculture sector because of the alignment of several complicating factors – commonly nontraditional work hours, potentially isolating rural locations, low returns in the early years, historically gendered expectations of roles and responsibilities, and high level of integration between household and business – and is important to understand when considering ways to encourage and support a new farming generation.

Using interviews and focus groups with farmers in the Northeastern United States, a geographic region chosen for its high concentration of female farmers (NASS, 2012), this study seeks to understand child care in farm families by examining patterns in farmers' experiences with child care and how child care affects both the farm family and the farm business. The sample of forty-three participants is made up of thirty-three women and ten men, a reflection both of women's increasing role in agriculture and the fact that women remain as primary caregivers for children. Of the 3.2 million farmers in the U.S. in 2012, 30 percent were women, and 61 percent were working off-farm jobs (NASS, 2012). At a time of increasingly diverse work hours and less conventional gender roles for parents in the U.S., a study of the agricultural sector illuminates child

care needs in the context of the nontraditional hours worked by farming parents and the increasing numbers of women farmers.

This study builds on the work of Reschke (2012) that reviews two previously separate bodies of research on child care and agriculture and asserts the need to understand and address child care in farm families as a matter of “community economic well-being as well as child and family well-being.” Child care that meets the desired standards of affordability, availability, quality, and matching philosophy of farmers and their families is suggested as a necessity for child safety and parent-farmer productivity (Reschke, 2012) but has not been studied empirically. This is a new area of research, virtually unstudied except by Reschke (2012), and so this study also aims to develop methods of analysis and to offer these as guides to future research.

In order to gain a broad understanding of child care in farm families, to place the greater discussion of child care in the farm context, this study sought to answer three research questions: 1) How does child care affect farm businesses and farm families? 2) What child care arrangements are farm families making? 3) What strategies do farm families identify as solutions to child care challenges? Examining farmers’ experiences with these guiding questions allows us to understand what is both typical and atypical about child care specifically in farm families, and to further the conversation on the importance of child care in the U.S. to economic development and the general wellbeing of families.

What follows is a review of the literature on child care for all working families, and more specifically, child care in farm families. We follow with discussion of the

methods used for data collection and analysis, and end with a review of our study findings and discussion.

## **5.2 Literature Review**

### **5.2.1 Child Care for Working Families**

Child care allows parents to work, thereby supporting workforce development, defined by Harrison and Weiss (1998) as the “constellation of activities from orientation to the work world, recruiting, placement, and mentoring to follow-up counseling and crisis intervention.” While wages, workers’ abilities, skills, and the structure of the labor market shape opportunities, institutional theories of labor markets and workforce development focus on organizational support for workers, and the ways other community institutions, such as child care, affect the workforce (Green & Haines, 2015). Child care is a service that supports employers, employees, and workforce development more generally (Green & Haines, 2015), and is common in the U.S.: nationally, more than 11 million children under age 5 are in some type of child care every week, with approximately one-quarter of these children in multiple child care arrangements to accommodate parents’ working hours (NACCRRA, 2014).

There have been many efforts to create a coherent national child care program in the U.S., including day care for low-income mothers, mothers’ and widows’ pensions, and a child care tax deduction (Michel, 1999). Despite these attempts to address the child care needs of working mothers and families, political divisions in the U.S. have made it difficult to compromise on the all-encompassing public social support systems that are common in Western Europe (Morgan, 2006), which offer comprehensive child care and family policies with generous parental leave and

subsidized formal and informal care available to all parents. The Comprehensive Child Development Act (CCDA), or Mondale-Brademas bill, of 1971 came closer to creating such a universal, publicly supported program of child care provision than did any other major initiative. The CCDA, which would have granted low-income families access to free child care, and made services available to other families on a sliding fee scale, passed both Houses of Congress but was vetoed by President Nixon on the grounds that it would create a program that interfered with families' own parenting responsibilities. The Democratically controlled U.S. House and Senate failed to override the President's veto, and the proposal failed (Berry, 1993; Dinner, 2010; Evans, 1997; Michel, 1999; Rosen, 2000).

In the early twenty-first century, federal support for child care comes in the form of subsidies and tax deductions. The Child Care and Development Block Grant (CCDBG), created in 1990 as the Child Care Development Fund and reauthorized by President Obama in 2014, subsidizes the purchase of private-market child care for low-income parents via a finite number of vouchers issued to families at the state level. Head Start programs, administered by the U.S. Health and Human Services Administration for Children and Families through local agencies, promote school readiness of children from low-income families and in some cases provide full subsidized, comprehensive child care. As an alternative, the Child and Dependent Care Tax Credit is available to all families to cover a portion of employment-related child care (IRS, 2013). However, regulations for all licensed child care programs and centers are established at the state level, mandating child-staff ratios, affecting the price in different child care settings, and the amount of funds spent on child care, leaving the

supply and quality of child care varying widely from state to state (Davis & Connelly, 2005; Davis & Li, 2009; Sonenstein, Gates, Schmidt & Bolshun, 2002). Regardless of subsidy eligibility or tax credit claim, most American families make child care arrangements through a market system of formal, informal, and family care (Stoney, Mitchell, & Warner, 2006) and despite public funds for child care, longstanding issues of supply and quality continue to affect the choices of all families seeking child care.

Although its provision relies overwhelmingly upon the private sector, child care is deeply embedded in social structures and community networks, where parents get most of their information about the location, supply, and quality of care options (Meyers & Jordan, 2006). Child care is recognized as an essential social service that contributes to economic development because it is made up of many small businesses and it enables parents to work (Hoffer, 2002; Ribeiro & Warner, 2004; Warner, 2008; Warner, Ribeiro and Smith, 2003). However, both paid institutionalized care work and family care work are poorly valued and largely feminized, limiting the formal contribution of child care to economic development. While previous scholarship has argued for the inclusion of non-market, parental care in economic analysis of child care, it remains that public policy treats non-market family child care as of little or no value (Pratt, 2009). Although more women are entering the workforce and even taking on the role of breadwinner, this shift was not mirrored by an increase of spousal support at home and forces women to take on the burden of the second shift, the domestic work shift after the work day (Hochschild & Machung, 1989). Stress can arise from unequal gender roles, but also from the discrepancy between expectations of family roles and reality; on the other hand, families that share child care between spouses are happier

(Cowan & Cowan, 1992; Hochschild & Machung, 1989). Fraser (2013) encourages the valuing of care through the breakdown of traditionally gendered roles of breadwinning and caregiving with equal value placed on both. A universal caregiver model, in which responsibilities that are traditionally and currently part of women's life patterns are the norm for both men and women, would promote gender justice and equal parental workforce mobilization (Fraser, 2013).

In addition to an undervaluation of care work, working parents of children who need care face issues of balancing work and family time. The demands of family work coupled with the demands of a job create serious time conflicts within family systems and added stress for parents juggling both – mostly women (Hochschild, 1997; Hochschild & Machung, 1989). In a case study of health professionals, Clawson and Gerstel (2014) examine the complicated balancing act of work and family, in which the needs of families and children often influence work schedules. Work time has been studied through the usual categories of full-time, part-time and even nonstandard or nontraditional hours (Clawson & Gerstel, 2014); however, as these categories become blurred and work hours are less predictable in the workforce in general, examining this issue of child care in the agriculture sector provides a window onto these greater social issues: the ways public support for child care does or does not accommodate the evolving needs of working families, management of work and family time, and the systematic undervaluation of care perpetuates gendered roles of breadwinning and caregiving. Child care exacerbates tensions within families, specifically those related to gendered roles and balancing work and family, which may prove even more complicated in farm sector because work and family are so closely intertwined.

These issues of gendered work and time have been ignored in many sectors, including on the farm. As work becomes a greater part of people's personal lives, examining agriculture, a sector dominated by family businesses, provides an opportunity to examine the tension of these roles of breadwinning and caregiving and consider the ways public support can ease the burdens of working families.

### **5.2.2 Child Care for Farm Families**

While agriculture presents a fitting case study for examining the greater social issues related to child care and balancing one's work and family, it is an industry that faces unique challenges related to child care because of several factors: values and motivations for farming related to family, a highly integrated work-family life that comes from both living and working on the farm, the commonality of nontraditional hours, typically low returns in the early years when children are often young, and potentially isolating locations far from care sources.

Child care choices are made based not only on need, availability, and cost, but also on values and social norms (Meyers & Jordan, 2006). Because farmers are a diverse group with differing values and motivations, it is important to recognize the ways these differences may contribute to both farm business and household level decisions, like child care. Despite development pressures and low economic rewards from farming, particularly in the early years of a farm business (Ahearn, 2013), farmers continue to persist, citing social fulfillment, connection to the earth, and creating a good life for one's family as primary motivations (Liffmann, Huntsinger, & Forero, 2000). To achieve social fulfillment and sustain farming lifestyle goals, farm families balance household needs, such as child care, and farm enterprise needs, including land,

capital, labor, sometimes sacrificing household needs for farm business success, and vice versa (Inwood, Clark, & Bean, 2013). Social values of farm families influence the structure of their farm businesses (Inwood et al., 2013; Bennett, 1982), while these nuances in family farm business structures contribute to the resiliency and growth of agricultural enterprises (Inwood & Sharp, 2012).

Multi-generation (MG) and first generation (FG) farmers (farmers who do not come from a farm family, distinct from “Beginning Farmer,” defined by the USDA as one who has operated his or her farm for less than 10 consecutive years) are two subgroups of farmers that embody these differences in social values and farming motivations. Though MG and FG farmers demonstrate similar economic motivations for achieving and maintaining a livelihood (Inwood & Sharp, 2012), these groups differ in prioritization of social reproduction of the farm, or passing the farm to an heir. MG farmers are focused on farm production, farm succession, and their children’s interest in the farm, while FG farmers place greater emphasis on transcendental interests (environmentalism and spirituality) and focus less on how children influence their business structure and decisions (Inwood, Clark, & Bean, 2013).

Male and female farmers also exhibit differing values and motivations for farming; gendered values have an impact on farm structure and land management decisions (Inwood, 2013). For example, women emphasize the environmental and economic benefits of sustainable agriculture, and are also more likely to connect their work in agriculture to community sustainability and wellbeing (Chiappe & Flora, 1998; Trauger, Sachs, Barbercheck, Brasier, & Kiernan, 2009). These values have been

correlated with use of low-input production, cooperative farm markets, direct marketing, and value-adding (Inwood, 2013).

But what do these differing values mean for valuation of care on the farm, the role of children, and who cares for them?

Gendered divisions of labor on farms mimic the greater labor force in the U.S.: as more women join the workforce and demands of families increase, there is often little change in the traditional division of domestic labor wherein women care for the household and adapt to their husbands' job demands (Gerstel & Clawson, 2014; Hochschild & Machung, 1989). Farm women experience stress associated with role conflicts between farm and household responsibilities (Berkowitz & Perkins, 1984; Hedlund & Berkowitz, 1979). Gendered roles on farms, which can be exacerbated by child care responsibilities, are sources of tension for men and women and cause stress on spousal relationships (Jellison, 1993). The 'back to the land' motivations that are a recurring impulse in our country's history were spurred by fantasies of improved family life, autonomy, and self-sufficiency for both men and women; however, these values caused spousal tension when the reality meant women assumed the drudgery of housework and care, while the men worked the fields (Brown, 2011). Skilled and autonomous work, like farming, has long been associated with masculinity (Brown, 2011), and poses a barrier for the growing numbers of women in agriculture today.

Despite their growing role in agriculture and the continued burden of gendered domestic work (Sachs, 1996), women farmers' needs are not often met by agricultural education and technical assistance (Trauger et al., 2008). More specifically, child care is not included in farm business planning educational efforts, despite many farmers

citing the desire to live and work on a farm with their children (Johnson, Bowlan, McGonigal, Ruhf, & Sheils, 2001). Liepens and Schick (1998) use the concept of seriality, categories of identity shifting over time and space, to suggest a more flexible approach when working with women in agriculture, whose identity may prioritize various categories, such as ‘woman,’ ‘farmer,’ ‘mother,’ and ‘off-farm worker’ at different times. Women farmers need adequate and appropriate education and support that recognizes these shifting identities (Trauger et al., 2008).

Women often pursue self-owned small businesses, such as farms, for noneconomic reasons, such as job flexibility and access to work, especially in rural areas where child care and employment options are more limited (Tigges & Green, 1994), but, not surprisingly, caring for children has a negative effect on the duration of self-employment in parents (Williams, 2004). While Smithers & Johnson (2004) found that farm business and farm family life cycles often overlap in periods of growth (both farm business and children), women have been found to be less involved in farm business tasks and decision-making when young children are present (Jones & Rosenfeld, 1981). “Flexible” employment, often characterized by nonstandard work hours and instability of salary, two common qualities of agricultural work, can disrupt traditional ways of caring for children and cause stress for working parents who struggle to balance business and family needs (Pugh, 2015).

A survey of new farmers in the Northeast found that quality of life, which includes raising children on a farm, is a primary motivation for farming (Johnson, et al., 2001). However, farms are recognized by some as potentially hazardous for children. Approximately 16,100 children and adolescents were injured on farms in 2009, with

only 3,400 of these injuries directly related to farm work (CDC, 2014), making child care accommodations of some kind necessary to ensure safety and to allow for productive time for farm business responsibilities, like planting, harvesting, marketing, selling, and bookkeeping. However, the average cost of center-based daycare in the United States ranges from \$5,496 to \$16,549 per year (NACCRRRA, 2014). Low and fluctuating returns from farming may make it difficult for farm families to afford off-farm care, particularly for farmers of small farms (categorized by the USDA as less than \$250,000 in sales per year) that are common in both the Northeast (NASS, 2012) and the sample in this study. Beginning and women farmers are more likely to operate small farms (Ahearn, 2013; Hoppe & Korb, 2013), which are likely to have a negative net income in their first year and to have off-farm income, which could both necessitate and complicate child care and related expenses (Hoppe, MacDonald, & Korb, 2012).

Without qualifying for federal or state subsidies, child care tax credits or public programs, farm families can be challenged to find available, affordable, high quality care (either in a center or home setting). The current system of child care subsidies and employment-based tax credits may not be appropriate to farm families who prefer informal care or family caregivers, have nontraditional hours or off-farm jobs, and run their own businesses. Non-market care is particularly relevant for farm families, who may need to utilize non-market, informal care for an affordable option that accommodates non-traditional work schedules (Reschke, 2012), as parents who work nontraditional hours are more likely to utilize informal care (Kimmel & Powell, 2001; Presser, 2003). Additionally, parents with nonstandard work schedules are also more likely to use multiple child care providers, an arrangement that is more prone to

instability and unreliability and can lead to added stress for working parents (Presser, 2003).

Clawson and Gerstel (2014) find that children are the single most important factor in work scheduling conflicts, which can put parents in a position of risking or losing their job. Agriculture is unique in that it is a typically self-employed profession and choosing children and family over work results directly in loss to the business/bottom line, rather a threat to the job itself. Child care is particularly important to the changing farm family employment structure as it is now common in farm families for one spouse to work as the principal farmer while the other works off the farm to secure benefits such as health insurance (Brown & Weber, 2013).

Child care is a household level issue in farm families that may be complicated by geography. There are discrepancies in child care availability, affordability, and government support among rural and urban areas. While the use of formal and informal caregivers is similar for rural and urban families, rural families access child care subsidies less frequently and for shorter periods of time than do urban families, despite higher poverty and unemployment rates (Davis, Grobe, & Weber, 2010). Reschke (2012) has suggested that such discrepancies may be attributed to lack of access to formal care, to complicated nontraditional work schedules and resulting inflexibility of providers in rural areas, as child care choices are made based on need and availability of options. Studies have consistently found relative care is an attractive option for rural families because of flexibility of schedule and affordability (Reschke, Manoogian, Richards, Walker, & Seiling, 2006; Reschke & Walker, 2005); however, young and

beginning farmers who start farm businesses in locations without relatives nearby may not have relative care as an option.

The literature reviewed here implicates child care as a factor in farm family and farm business dynamics related to issues of time, gendered division of labor, and the undervaluation of care. By examining this issue in the farming context, we can expand on these established issues in the greater labor force, and consider the ways child care-related support may improve the persistence of the agriculture sector.

### **5.3 Methods**

This study was designed as an exploratory inquiry to understand the use of child care by the farming population in the Northeast, the ways child care influences the farm business, and in turn, the wellbeing of the farm business and farm family. A purposive sample of farmers with children were invited via agricultural organizations' listservs, newsletters, social media and direct contact by the researchers, to participate in focus groups in nine Northeastern states: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. However, interested farmers who were unable to attend focus groups, ironically often for reasons related to child care despite on-site child care accommodations provided during focus groups, were invited to participate in either in-person or phone interviews. Additionally, when critical mass of three participants (Krueger & Casey, 2009) was not reached for a focus group, interviews were conducted instead with interested participants. Phone interviews lasted approximately thirty minutes and the focus groups, ninety minutes.

Forty-three participants are included in the analysis: twenty-five participated in interviews (a mix of in-person and phone) and the other eighteen attended one of four focus groups, with a total of three to six participants at each. Demographic information of the participants is provided in Table 17. The sample includes thirty-three females and ten males. Thirty-four are first generation (FG) farmers and nine are multi-generation (MG) farmers. Nearly three-quarters of the sample is under 40 years old. The majority (76.7 percent) of farmers sampled have small farms (defined by the USDA as making less than \$250,000 in annual farm sales), seven have large farms (greater than \$250,000 in annual farm sales), and three participants are future farmers in the process of establishing their own farms. These three farmers are also currently childless but planning for children, and provide the perspective of both future farmer and future parent. Most participants have either one or two children. Though not noted in the table, one participant has custody of grandchildren and one cares for foster children but currently does not have any in custody. The four participants without children, three who are planning for children in the near future and one who cares for foster children but currently does not have any in her custody, are included under 'Number of Kids' as "0".

Table 17: Participants in the Study

	Male <i>n=10</i>		Females <i>n=33</i>		Total <i>N=43</i>	
	Cases	%	Cases	%	Cases	%
Family History						
Multi-Generation	0	0.0	9	27.3	9	20.9
First Generation	10	100.0	24	72.7	34	79.1
Age						
21-30	1	10.0	3	9.1	4	9.3
31-40	6	60.0	21	63.6	27	62.8
41-50	2	20.0	7	21.2	9	20.9
51-60	1	10.0	2	6.1	3	7.0
No. of Children						
0	1	10.0	3	9.1	4	9.3
1	5	50.0	11	33.3	16	37.2
2	3	30.0	13	39.4	16	37.2
3	1	10.0	4	9.1	5	11.6
4	0	0.0	2	6.1	2	4.7
Farm Size/Type						
Small/Medium	10	90.0	23	69.7	33	76.7
Large	0	0.0	7	21.2	7	16.3
Future Farmer	1	10.0	2	6.1	3	7.0

Note. 43 parents including 3 couples, representing 40 families

The interview protocol was based on a review of literature on farm families in the United States and child care as a factor in workforce mobilization, community and economic development, and family dynamics. Questions sought to gather data on child care methods used, factors contributing to child care decisions, the effects of child care on the farm business and the farm family, and potential solutions to child care related challenges. All interactions were recorded and transcribed.

### 5.3.1 Analysis

Interviews and focus groups were coded and analyzed with Nvivo software, used to identify themes and map patterns in qualitative data (Bazeley & Jackson, 2013).

Themes were constructed and reviewed using Braun and Clarke's (2006) six phases of thematic analysis: familiarization with data, generating initial codes based on data, searching for themes, reviewing themes, defining and naming themes, and producing the report. As this is an exploratory study on the subject of child care in farm families, codes were developed through inductive thematic analysis (Braun & Clarke, 2006) and strongly linked to the data themselves (Patton, 1990). The resulting patterns and representative quotations reflect participating farmers' experiences with child care.

In the following section, we report on the ways farm families experience child care, and the effects of child care on the wellbeing of both farm business and farm family, and provide background on the participating farm families' child care arrangements. Additionally, the framework for the coding scheme is outlined for use as a guide for future research on this topic.

## **5.4 Findings**

### **5.4.1 Economic and Social Effects of Child Care on the Farm**

Participants were asked to discuss the ways their chosen child care methods, parental care for nearly all and other types of care for some, affect the farm business and family enterprises. Responses fell within two categories: economic effects, which included business decisions, productivity, farm growth, and financial stability and were discussed by 97.7 percent of participants; and social effects, described by 93.0 percent of participants as changing gender roles and resulting stress, relationships between spouses, and quality of life. The future farmer/future parent participants discussed anticipated effects of child care on their farm business planning.

**5.4.1.1 Economic Effects.** Child care affects farm business decisions for many, including what to grow and how to grow it, who to hire, how many hours to work, and how to allocate financial resources. A female participant who is transitioning her family's farm to a growing schedule more conducive to spending time with the children in the summer highlighted the significant influence that children and their child care needs can have on a farm business: "*[they are] shaping the farm business in pretty significant ways – what I'm planning to grow and how to sell it.*"

Child care, either parental or otherwise, can influence farm labor decisions. While some participants reported that their children's presence on the farm and connection to the farm employees makes them "mindful of who we hire," others reported a quandary when deciding between hiring more labor so they could be with their children or spending the money on child care so they themselves could be more productive on the farm. A male participant reports that he and his wife keep their children on their farm because of personal values but see non-parental child care as a potentially more efficient use of financial resources:

... the cumulative effort of my wife and I minus a child would be a better worker than the money we'd be putting aside to pay that person with. It would be better to spend the money on child care than to spend the money on an employee.

Although participants commonly recognize child care as a financial investment that would allow them to be more productive on the farm, low returns often make it an unrealistic option, as one MG female farmer explains the tradeoff:

Babysitters in our area charge approximately \$15 an hour and that's more than a wage ... you're almost paying to work. That's hard to justify.

Child care directly influences the most basic business decisions about when to work, as one female participant explained that her daughter “*determines the hours I can actually work on the farm.*” Another participant went so far as to say, “*Raising our kids... is included in my labor plan*” despite the reality that “*we could accomplish more without having to watch them all the time.*”

A FG male participant, who farms with his wife, described planning the physical infrastructure of the farm to make on-farm parental child care more convenient:

We’ve structured the farm in a way [that] we’ve got a near field and a back field so my wife can kind of work the near field and be close to the house... and be in and out of the house.

More generally, for those parents who want it, finding appropriate and affordable child care affects participants’ ability to devote ample time to developing the farm business, as one male participant who was not satisfied with his child’s care situation describes child care as being “*one of the things that’s sort of kept us from going more full engine, looking for a different daycare sort of scenario.*”

Several participants acknowledged child care as an economic issue for all working parents; however, as agriculture is an industry in which it is common to be self-employed and work nontraditional hours, many participants highlighted the ways child care issues are unique to farm families. A female participant discussed the nontraditional work hours of farming and the overlap of the farm business and farm family life cycles:

When you farm, it’s not 9 to 5. And if anything, I probably put in more hours then, when they were younger.

Child care subsidies, available to low-income working parents meant to make formal care more affordable, were appealing to some participants who qualified, but because of a rigid and complicated system, they were unable to access the voucher. The application system proved too complicated for one self-employed female farmer to navigate:

Even though I was working full time at the farm, I didn't fit the qualifications [for a subsidy] because I was getting a stipend instead of hourly wage, and I'm not sure how it would work now if I'm self-employed. It just felt complicated.

A female farmer explaining that her family lost their child care subsidy because her partner and children's father was living and working on the farm with her, but she couldn't afford to pay him a wage. Because he wasn't making a wage, he appeared to be unemployed and disqualified them for the subsidy they were receiving, available only to working parents. This has resulted in her four young children remaining on the farm with them, limiting productivity and subsequent sales:

I have great big visions and goals and my children are number one, so those have to be shelved, and it's really sad because ... We have the potential to be a great community resource and now it's a waiting game.... We can walk all the kids up to the fields. This is what we've been doing this fall. Dig a bucket of potatoes, leave the bucket in the field, and then come back and pick it up with the car. So that's like how much farming I can get done.

Even participants who are able to afford and access formal care express the way it doesn't suit nontraditional work hours and influences business decisions. One direct marketer described how her daughter's school schedule and transportation to and from school would interrupt her workday and "*took away from my ability to be as involved with the fieldwork as I wanted to be.*" This effect was echoed by another female participant who reported her daughter's care center drop-off and pick-up times

*“conflicted with the market we were going to do so we ended up having to drop that market this year as a kind of a family decision, which was a shame.”*

Another common scheduling conflict occurs because the busy summer farming season conflicts with the school year, when farm families need the most help. Intense farming efforts in the summer and a lighter work schedule in the winter can make finding appropriate care challenging, as expressed by one female farmer who farms with her husband:

... we don't actually want to be sending [my son] off to daycare in January or February because I want to hang out with him and I have more time with him. So – and then like in June and July when we totally need as much childcare as possible, everyone's like no, we're closed because everyone goes away... our schedule that makes me feel like I work nights or something in relation to the universe.

Offering a different perspective, the three participants without children discuss expectations for future child care and desired methods, revealing that even before children are part of the farm family, child care is an issue that influences farm business planning. One male participant explains:

Finding the child care so that you can do some of the things that you're not going to realistically be able to do with your kids running around, like having some space and time for your business accounting and then just tasks that are not safe enough – you can't be watching them at the same time as you're operating machinery and things like that. ... we have no extra money in our budget now and we're thinking of starting a business that's going to be losing money. How would we find money for the child care in the early years before they start school?

**5.4.1.2 Social Effects.** Issues of family gender roles and work time emerged as critical issues related to child care in participating farmers' families. Interestingly, gendered divisions of labor, and the resulting identity issues and accompanying stress, were issues expressed only by women. The social effects described by male

participants were related to difficulties in balancing work and family and stress from the financial outlay of child care, but none mentioned struggles of personal identity, deterioration of relationships, or feelings of isolation.

Participants who discussed the changing of roles on the farm taking place after their children are born were mothers who assumed gendered roles of caring for children and decreasing time spent doing manual labor. One participant told the story of her family's farm beginning as a joint venture between she and her husband, with both contributing equally to all facets of the business. Echoing a shift in division of labor common among participants after children enter the farm family, she reports "*our roles in the farm have shifted dramatically*" as her husband now manages the farm production and she manages the administrative side of the business. While she reports finding fulfillment and satisfaction from working in the fields, the time she spent away from physical labor while caring for small children has had lasting effects that created a barrier:

It's very hard for me to kind of jump into working with the crew... I'm not in the farming shape that I used to be... It became harder for me to feel like I could just jump in because I felt so far behind the crew. Because I wasn't out in the field, I didn't always know where things were.

Other female participants echo this change in farm roles and the gendered division of labor as a result of caring for children. Female farmers struggle with their changing roles on the farm and report resulting stress from trying to negotiate the divergence of historical expectations of women on the farm and the reality of women's farm roles today, as explained by one female farmer who found herself surprised by the gendered roles she and her husband assumed once they had children:

There's always been kind of the farm wife who cooks and cleans and takes care of the kids while the farmer goes out and works in the fields. That is shifting. There's a lot more women farmers. But they're still responsible for the child care and the cooking and the cleaning and they don't have a farm wife to take care of that. They're a wife and farmer and it's really challenging, kind of this new structure.

A female participant, who is farming on her own while her husband works off the farm, finds difficulty in maintaining her identify as both mother and farmer:

I love being with her, I love being a mom but I also love being a farmer. I feel like I've had to give some of that up, and I don't want to lose that.

Experiences of female farmers illuminate the undervaluation of care that takes place in farm households. With her husband working off the farm, one female participant explains that the gendered divisions of labor reflect the value of off-farm income and the traditional expectations of the spouse responsible for caregiving:

[My husband] sometimes thinks I should just quit farming and – or get a job that's going to actually pay more and pay for the child care. I'm in this situation where the farm isn't actually making an income yet, isn't covering the costs. But it's like I have to put in the time to make it get to the point where it can (07)

Children, managing their care, and the resulting gender divisions of labor on the farm affects working relationships between spouses, as one female farmer who works with her husband describes *“he just does everything so much faster than me now... we've grown at a different pace.”*

Conflict caused by gendered divisions of labor can lead to bigger issues, like separation or divorce, as evident in the experience of a female farmer who formerly farmed with her then-husband:

Not having [child care] makes it very difficult because we just can't – we can't do everything that we want to do. I have to run my business... as far as getting to the farm, it causes a lot of conflict. That's probably why we're not together

any more. It's just like you can't be dedicated to the business and the family and the partnership, all of that. It gets extremely overwhelming.

Though changes in gender roles and parental relationships are clear and explicitly discussed by many participants, there is also a sense that these farmer-parents are experiencing child care differently than they expected. A female farmer reported a commonly expressed dissonance between expectation of the division of labor and the reality:

There's often a division of labor, sort of a stereotypical male/female division of labor, which is not at all how we intended for our lives to go. I envisioned that we would be able to work more with our children and as it's worked out, my husband has taken on sort of more of the outside work and I've taken on more of the customer service and paperwork because I can do it with children.

Some participants discussed the challenges of caring for children on the farm. However, for others who need off-farm care, challenges arise when appropriate care isn't available. Despite the expressed desire of participants to receive child care assistance from their surrounding communities, geographic location and a changing rural and agricultural landscape make child care difficult and negatively affect quality of life, as one female farmer described her isolated location as a barrier to accessing child care:

You get a farm, especially if you're young, where you can afford it. And where you can afford a farm is not going to be a place where there's a lot of resources. So my dilemma was not so much that we couldn't afford maybe daycare; it was that the time and the effort and the options were so limited. Because in our rural area, it's a half an hour to any place, and it's more of a time drain than a money drain.

For one FG female participant, a lack of family and friends and necessary financial resources makes child care an isolating experience:

I'm completely by myself most days and it's really hard to juggle. And so just the way our society is structured in a way. There isn't that kind of strong support network of aunts and grandparents and sisters. And so it's all – you have to supplement that with money. And it's like farming just doesn't bring in a lot. Farmers make low minimum wage a lot of times, but - the farmers themselves – but then they have to pay above minimum wage [for child care].

Quality of life is sacrificed by many participants who struggle to balance work and family. A female farmer, who is doing mostly parental care, emphasized the need to work longer or later hours and the added stress brought about by having a child with them while farming:

It definitely is stressful – hugely stressful. I think I'm constantly having to compromise with the attention that I want to give her or to the farm. And then I'm doing things that are kind of off the wall, like going and working in the dark when my husband gets home [from his off-farm job].

A female participant, who farms with her husband and keeps their children on the farm with her, reports a hectic and unpredictable work schedule:

I would work during her nap, but he would also take her little bits and pieces here and there so I could get stuff done. And it was very fly-by-the-minute. We could never schedule anything because everything with the weather and we never knew how things were going to shape up. So I had to take whatever time I could get. And also I would do a lot of stuff at night after everyone goes to bed. Like especially this summer, I was staying up until like 1 o'clock in the morning most of the summer to get stuff done. So I've done a lot of that, just trying to – off hours.

### **5.4.3 Child Care Arrangements**

In this section, we present the child care arrangements used by participating farm families, the values and motivations behind these child care decisions, and the positives and negatives for each. Participants were asked “what do your children do while you are farming, marketing, recordkeeping, or other farm-related tasks?” Responses were categorized into six groups based on the child care typologies

identified by Warner (2007): off farm formal, which includes formal daycare centers; off farm informal, including home care or care by a neighbor or friend off farm; on farm informal, with a babysitter or other caregiver on the farm; parental care, which includes children at home or on the farm with farming parents; family care, or care by a grandparent or other relative; and nontraditional care, which includes nanny sharing and co-operative style child care.

Table 18: Child Care Methods Used by Participants

	Total <i>n=40</i>	
	Cases	%
Off Farm Formal	21	52.5
Off Farm Informal	6	15.0
On Farm Informal	10	25.0
Parental Care	37	92.5
Family Care	19	47.5
Nontraditional Care	8	20.0

Note. 3 participants without children not included in table. Foster parent responded with previous foster children in mind.

Participants with children are piecing child care together with many forms of care, as all reported using at least two different types of care. Nearly all, 37 out of 40, participants use parental care as one of those methods (Table 18). A few interesting demographic distinctions emerged. The majority of women (87.9 percent) report engaging in parental care, all of whom report being the primary caregiver. Although 8 out of 10 men similarly report parental care as a method used for their children, 5 out of those men report being the primary caregiver, while the other 3 report that their wives are the primary caregivers. FG farmers (91.2 percent) report greater use of parental care than MG farmers (66.7 percent).

Many participants cited children as a motivation for farming, and so on-farm (at least part-time) parental care is an obvious choice for them. Some cited keeping their children on the farm with them a lifestyle choice, while others, like this female farmer, described caring for kids on the farm as “*good because it does make us a family farm.*”

Despite its popularity among participants either for its alignment with their values or for lack of other options, parental care can disrupt productivity on the farm. One FG male participant, whose wife works off the farm, had hoped for his young son “to be my little sidekick and ... do everything I did.” The reality has been much different:

I didn't think about a baby not being able to be out in the sun all day like I am... If I bring him along with me, ... it's either we're going outside to play or I have to go outside by myself and get some work done. And I'm still trying to figure out how to be able to focus and have him and it's proving to be very difficult.

Off farm formal care is also a popular method among participants with over half reporting it as a form of care used, though all report it as a part-time component of their overall child care plan. Seven participants have accessed child care subsidies for this type of care, either through reimbursed care or state sponsored Head Start programs. Again, demographic nuances emerged. Approximately half of female (51.5 percent), FG (52.9), and small/medium (53.1) farmer participants have children in off farm formal care, while lower counts of male (40.0 percent), MG (33.3 percent), and large (42.9 percent) farmer participants engage in this type of care.

Participants report reasons of productivity but also off-farm socialization as factors that influence choosing off farm formal care, as explained by a FG female participant:

We try to balance it as much as we can. We don't want her there [in formal daycare] all the time, but least a couple of days. [It's] helpful and beneficial for her. We don't want our kids to be isolated.

The potential for increased productivity with children in off farm formal care can be negated by inflexibility of the caregiver. Another female participant reports that, although her family uses off farm formal care, there is limited flexibility in this arrangement, often affecting her work time:

It's really difficult to find alternative care on those days when she is scheduled to be at daycare but cannot due to the fact that she had a fever the day before. It usually ends up cutting into my time involved with the business because my husband works too far away for it to be practical for him to come home to pick her up and care for her.

Many participants who do not use off farm formal care feel strongly about their decision, citing specific concerns regarding quality, compatibility of schedules, financial outlay, and values of formal caregiver.

Family care is the third most frequently reported type of care used, with 19 of 39 participants reporting care by a family member. This includes care by grandparents or other relatives and can be on or off the farm, and was seemingly the most desired care arrangement among all participants, as those with no family nearby lamented this fact. MG farmers and participants with large farms report using this type more than any other, often chosen because of financial reasons and quality of care, as explained by one MG female farmer who relies on her in-laws, and former proprietors of the farm business, to watch her children while she farms:

They're happy to have the time to spend with the girls and it's not an additional outlay. So one factor is money. I think we trust a family member above all else.

Convenience, flexibility, and reliability are other reasons participants report choosing family care, as family members don't have set drop-off and pick-up times that interfere with productivity and nontraditional work hours.

Although the future farmer participants without children were not asked this question and therefore not included in these tables, they did discuss expectations for child care and desired methods, revealing both romantic notions of caring for children on a farm and a more realistic view of parental care. One of these participants, a FG male farmer, linked his farming motivations to expectations for choosing child care methods:

One of the reasons that farming is so attractive is that you get to be independent and you get to work for yourself and you can potentially have your kids work and be with you so you can... be weeding and my kids can be playing at the same time and they'll be with me and it'll be great. I know the reality of that will be much, much different, but I think it's possible and I think I really want my kids to have the kind of upbringing I did where they're wild, running around on a farm. So I really want to be able to have them with me as much as possible... that's part of the dream of having your kids with you while you work.

The child care arrangements made by participants reflect tensions between expectations and reality, and are influenced by family values, farm productivity, cost of care, and location near care centers and relatives.

#### **5.4.2 Solutions to Child Care Challenges**

Nearly half of the participants, 16 out of 39, desire a change in their current child care situation. Overall, 15 participants feel that informal care is ideal, 17 ideally would have children on the farm, and 10 reported that part-time care is ideal for them. When asked what kind of support they might need to achieve their ideal child care coverage, participants suggestions were categorized into two different types of support:

community-based, discussed by nearly half of the participants, and policy solutions, from a quarter of participants.

**5.4.3.1 Community-Based Recommendations.** Nearly half of all study participants are interested in community-based solutions to ease child care related challenges. These community-based solutions include informal sharing of child care resources among farmers, but they also include more formally-organized suggestions, such as a farmer-parent networking night that would allow for connections to be made and experiences to be shared. One FG male participant who farms with his wife described the value of community networks, and suggested that hearing other farmer's child care experiences would provide both resources and reassuring support:

I think it's just helpful to hear about people's experience, to make you feel like you're not the only one dealing with these sets of issues. And it's, in a way, even though we're all kind of struggling to keep our heads above water, it's sort of empowering at the same time to know that you're not the only person doing it and you can share the experience with. Maybe it would be good to have kind of like a quasi-regular kind of therapy session where we all get together to talk about how hard it is to farm with kids. A support group.

They want to be connected, to share experiences with other farmer parents, and to possibly collaborate on nontraditional care with farm families that share the same values. Many farmers are simply curious about the ways other farmers experience and handle child care, and if they are portraying their experiences in similar ways, as evidenced by one FG female's question: "*Do other people say the same things or does everybody else think that it's like rosy, fun time with kids on a farm?*"

Despite this expressed desire to connect with other farmers on the issue of child care, it seems to be an issue that is often overlooked in farmer education and support

and results in unrealistic expectations. One female participant, who admittedly had unrealistic romantic notions of what life would be like caring for a child on a farm, described feeling “foolish” looking back on her expectations and questioning if “everybody else can do it and I can’t,” referring to the balance of child care and farm business. She points out that when producer or agricultural organizations “*give a workshop or something, child care never comes up. And maybe it should once in awhile.*”

One of the three future farmer, future parent participants anticipated that working with farming mentors, not just on farm business issues but also on issues of parental on farm child care, would be necessary:

Trying to figure out a way to incorporate kids into the work that we’re already doing is, I assume, just going to take trial, error and asking people who’ve done it before how they’ve done it. So working with mentors and things like that. And I don’t know whether foolishly or not, but we sort of assume that this is a problem we’ll just sort out as we go along.

In addition to connecting with other farmers with children and mentors, tangible suggestions were made for nontraditional community-based child care models. One suggested model had worked well in another community, wherein “*they basically formed a co-op among their CSA members and they actually had the child care happening right on the farm.*” This type of care, involving a co-operative style model with barter or trade for payment, was a popular ideal among participants as it would satisfy the desire to keep kids on a/the farm, to have a caregiver with shared values, and to allow for socialization with other children.

**5.4.3.2 Policy Recommendations.** Policy-based solutions to child care challenges proposed by participants are recommendations that would require some level of national, state, or local governmental programmatic or policy support, including child care subsidy or a universal approach to care. While some participants were not even aware of the potential to receive federal or state subsidy for child care, others were interested in accessing a subsidy because of their financial need, but envisioned support that was tailored to fit the unique needs of farming families: nontraditional hours, and the desire to keep their kids on the farm. For example, one female farmer highlighted both of these desires by suggesting “*some kind of in-home daycare subsidy or . . . because farming, it’s not like you work 9 to 5.*” Another female participant, who mainly watches her child on the farm with limited productivity, expressed concerns over paying for care and sending her daughter off the farm:

A subsidy would be huge. That’s one thing I’ve been trying to figure out. I just want someone to watch her on the farm for a short period of time. I’d prefer to have her on the farm.

One participant went further to recommend that child care subsidy evaluations be conducted by Extension’s farm viability specialists who could “establish your need for service” more appropriately because they understand the farm business life cycle and can allow for subsidy guidelines to “*be expanded to become a little more flexible for folks outside the box*”. Another suggestion for tailoring policy was made by a female participant advocating for subsidy support and governmental regulation of quality care options close to work, in order to breastfeed and spend time with children during the workday:

...some sort of policy that just made it easier for women, especially in that first two years. To be close. You know, to not just have child care, but to have it close by, if not on site where you work. I mean it just increases your production at work.

Several participants discussed a universal approach. Additionally, comparisons were made to European countries with more comprehensive government-supported child care programs that allow for family leave or universal child care stipends. Because of its location on the Canadian border, the Vermont focus group included a female farmer from Montreal, who suggested that the other participants:

...should try to get your government to do it, because we pay \$7 a day to have our kids taken care of. Everybody can afford that. And they're inspected by the government. They're fed lunch.

Farmer recommendations suggest that they do want some form of support with child care, but it is important that this support is appropriate for the nontraditional schedules and values of farm families.

## **5.5 Discussion**

As farmers were widely invited to participate voluntarily, the high numbers of women, FG, young, and small/medium size farmers in this sample reflect the population for which child care is a concern. However, there is also representation from the counterpart groups, most notably men. Despite historical emphasis on child care as a women's issue, and women remaining as the predominant primary child caregiver, the voluntary presence of men and other 'nontraditional' caregivers (grandparent and foster parent) in this study reflects the greater trend of the changing expectations of what constitutes a traditional family unit in the United States. As agriculture provides an alternative context in which to examine and understand greater

social issues influencing economic development and public policy (Lobao & Meyer, 2001), the demographic composition of this sample reflects not only traditional gender divisions of labor with regards to care but also the evolving less conventional gender roles for parents in the U.S. Additionally, at a time of increasingly diverse work hours and more women in the workforce, this study of the agricultural sector parallels the greater conversation on child care policy as it illuminates child care needs in the context of the nontraditional hours worked by farming parents and the increasing numbers of women farmers.

Examining this farming population, to understand both the greater social issue of child care in working families and to provide appropriate support for the agriculture sector, allows us to consider in what ways their experiences with child care are typical or atypical to farming. Nationally, more than 11 million children under age 5 are in some type of child care arrangement every week, with approximately one-quarter of these children in multiple child care arrangements to accommodate parents' traditional and non-traditional working hours (NACCRRA, 2014). Participating farm families are no exception; they piece child care together with many forms of care, as all reported using at least two arrangements. Child care choices are made based not only on need, availability, and cost, but also on values and social norms (Meyers & Jordan, 2006). The child care methods used and the contributing factors to child care decisions reflect heterogeneity of values, as found in previous research (Inwood, et al., 2013), and a disadvantage for some demographic groups.

Parental care is common among all participants, and while similar ratios of men and women discussed parental care as a method used, higher numbers of women are

acting as the primary caregiver, while several male participants' wives are doing so. This gendered division of care labor reflects the unique challenge child care presents to the farming population in light of increasing numbers of women farmers (NASS, 2012), their still-present role as primary caregiver (Kimmel, 2006), and the potential barrier to business development this could create for this growing group of farmers. Participants who run farms in partnership with a spouse describe a division of labor after children, wherein the woman, despite strengths and responsibilities before children, assumes care of the children and the "indoor" responsibilities while men take over physical labor. While Smithers & Johnson (2004) found that farm business and farm family life cycles often overlap in periods of growth (both farm business and children), women have been found to be less involved in farm business tasks and decision-making when young children are present (Jones & Rosenfeld, 1981). For women who run their own farm and have a spouse working off-farm or no spouse, they often assume responsibility for the children at the cost of farm productivity. With low returns from farming, particularly in early years of the business when children are likely to need the most care and attention, participants faced with this decision chose to scale back on farm production as the farm likely could not cover the cost of child care. These decisions and gendered divisions of labor in farm households are necessitated by the systematic undervaluation and feminization of care work in both public policy and social norms (Fraser, 2013). Within the farm family, with both spouses working towards the goal of keeping the farm in business, the male partner often took over the 'breadwinning' and masculine role of autonomous work in the fields, while the women cared for the children and limited their involvement in the physical work of the farm. Hochschild and

Machung (1989) assert that women's failure to perform ideally in the labor force, and in this case on the farm, is attributed to their spouse's lack of help with the family work at home. As affirmed by several participants who struggle to find viable care options or choose to keep children on the farm with them and have to subsequently make decisions negatively affecting the farm business, persistence in farming depends just as much on household level dynamics as it does on business acumen and strategy (Jackson-Smith, 1999; Gillespie & Johnson, 2010). Caring for children has a negative effect on the duration of self-employment in parents (Williams, 2004), and so self-employed farmers with children must be able to access care in order to allow for productive time for farm business responsibilities.

This affect of child care on both the persistence of farm businesses and the identity of women farmers as both farmer and mother is significant. Female farmers struggle with their changing roles on the farm and report resulting stress from trying to negotiate the divergence of historical expectations of women on the farm and the reality of women's farm roles today. Farm women have historically reported stress associated with role conflicts between farm and household responsibilities (Berkowitz & Perkins, 1984; Hedlund & Berkowitz, 1979). Gendered roles on farms, which can be exacerbated by child care responsibilities, are sources of tension for men and women and cause stress on spousal relationships (Jellison, 1993), as was reported by many participating female farmers. The 'back to the land' motivations that are a recurring impulse in our country's history were spurred by fantasies of improved family life, autonomy, and self-sufficiency for both men and women; however, these values caused spousal tension when the reality meant women assumed the drudgery of housework and

care, while the men worked the fields (Brown, 2011). The demands of family work coupled with the demands of a job creates serious time conflicts within family systems and added stress for parents juggling both – mostly women (Hochschild, 1997; Hochschild & Machung, 1989). Stress can arise from unequal gender roles, but also from the discrepancy between expectations of family roles and reality (Hochschild & Machung, 1989). Child care exacerbates tensions within families, specifically those related to gendered roles and balancing work and family (Clawson & Gerstel, 2014), which proved even more complicated in the farm sector because they are often one in the same.

Women participants report difficulty in maintaining their identity as both farmer and mother, in contrast to male participants who never mentioned this as a struggle. Women have long been struggling to retain their identity on the farm. In the first half of the 20<sup>th</sup> century, technology was meant to ease women's workloads, but farm women chose to retain roles in agricultural production with their male counterparts and therefore maintain greater authority within the farm family (Jellison, 1993; Brown, 2011). Though idealistic, this proved unrealistic for female participants, who reported an inability to work at a high physical level after children and hesitation about letting others care for their children. Despite women in farming increasing in number, they are still bringing in relatively low returns and still responsible for the domestic work of child care. Just as Hochschild and Machung (1989) noticed in the greater workforce, these participants describe that their increased involvement in farming did not increase spousal support at home and because of the low returns, they simply cannot afford outside help. The shifting gender roles in farm families as a result of child care, and the

discomfort some female participants expressed with this identity change, supports the idea that women farmers need adequate and appropriate support that recognizes their shifting identities (Trauger et al., 2008) of ‘woman,’ ‘farmer,’ ‘mother,’ and ‘off-farm worker’ (Liepens & Schick, 1998). Women farmers’ needs are not often met by agricultural education and technical assistance (Trauger et al., 2008), which do not currently offer support of any kind related to child care, despite their growing role in agriculture and the continued burden of gendered domestic work (Sachs, 1996).

The effects of child care are also worrisome to the future-farmer, future-parent participants, who anticipate having children around the same time as they are growing their own farm business, a time often categorized by low returns (Ahearn, 2013). This concern is validated by previous research that found the farm business life-cycle stage of growth and development to be more likely to occur early in the family life-cycle, during the formation of the farm foundation and the arrival of children (Smithers & Johnson, 2004). While farmers often express a desire to live and work on a farm with their children (Johnson et al., 2001) and may even choose a self-employed profession, like agriculture, for perceived flexibility of hours and location (Hildebrand & Williams, 2003), participants expressed tensions related to balancing work and family. Clawson and Gerstel (2014) found families and children often influence work schedules, and this study finds parallels: farmers report that their children were the reason they were farming, but that raising their children on the farm actually caused consequences like less attention paid to the business, or changed gender roles. “Flexible” employment, often characterized by nonstandard work hours and instability of salary, two common qualities of agricultural work, can disrupt traditional ways of caring for children and

cause stress for working parents who struggle to balance business and family needs (Pugh, 2015).

Child care influences business planning and the use of resources on the farm, including hiring of employees, hours worked by farming parents, and production and sales of product. Low returns, particularly in the early years of a farm business (Ahearn, 2013; Lusher Shute, 2011), can make it difficult to pay for care. However, even those farmers who are able to pay for care report structural issues that render their care options inappropriate or cause them to compromise on the farm business to accommodate the available care options. Formal care centers don't accommodate the nontraditional hours of farmers (Reschke, 2012), and subsidies for these facilities are widely unknown or reportedly difficult to access by the study participants. Additionally, a common child care scheduling conflict occurs because the busy summer farming season conflicts with the school year.

The frequently reported use of off farm formal child care among participants was unexpected, because of the commonly discussed desire to keep kids on the farm and the potentially isolating rural locations of farm families. While Reschke (2012) suggests that farm families may need to utilize non-market, informal care for an affordable option that accommodates non-traditional work schedules, as parents who work nontraditional hours are more likely to utilize informal care (Presser, 2003; Kimmel & Powell, 2001), over half of the surveyed sample uses off farm formal care. Participants cite this method as allowing business productivity for parents and off-farm socialization for kids, while those who do not use off farm formal care express the anticipated concerns regarding quality and compatibility of schedules. The use of off

farm formal care by women farmers is also noteworthy because of its potential to be a financial limitation to the farm business, as lower farm sales are common for women farmers (Hoppe & Korb, 2013).

Relative care is an attractive option for rural families because of flexibility of schedule and affordability (Reschke, et al. 2006; Reschke & Walker, 2005), and is another commonly used method of child care in the surveyed farm families. Most frequently reported by MG farmers and participants with large farms, they cite affordability, quality of care, flexibility, and reliability as reasons for choosing family care. This is consistent with previous research that finds MG farmers more likely to receive familial support in the form of inherited farmland, knowledge of agricultural production, business practices, and community connections than FG farmers (Meyer et al., 2011; Sureshwaran & Ritchie, 2011), and are influenced by their children's interest in the farm and eventual succession (Inwood et al., 2013). Parents get information about child care from their surrounding community (Meyers & Jordan, 2006), and without familial support or community connections, FG farmers opt to keep children on the farm in parental care, limiting time for farm business activities and potentially stunting farm growth.

Child care, both as a deliberate choice and one made out of necessity or lack of alternative options, affects the farm business and farm family and impacts the livelihood and quality of life of participants in this study. The effects of this household level issue on farm families, organized into categories of economic and social, are both typical and atypical of all working families. Typical of all working families is the struggle to balance work and family, the undervaluation of care in both family systems

and public policy, and gendered family roles and the resulting stress and relationship strain. Specific to the agriculture sector, child care influences decisions about labor, farm business growth, and financial resources, and presents unique challenges related to the integration of work and family on the farm, the commonality of nontraditional hours, and typically low returns that make paying for outside help challenging.

## **5.6 Conclusion**

This article has argued that child care in farm families in the Northeast is an issue with economic and social implications. The data speak powerfully to issues of family structure and gender in farming and provide a case study of gender relations in an arena scholars of gender and family under-research dramatically but that is noteworthy in light of the growing numbers of female farmers. The contributions of this study further the conversation in both child care and agricultural scholarship, by illuminating the connection between child care as an issue of gendered work and workforce development, and the existing concern of farm persistence in agriculture.

Beyond the fact that child care generally is not considered in agricultural literature, and the needs of farm families are not addressed in child care literature, this study positions this household-level issue as both influential to and influenced by the motivations of the rising (and precarious) generation of farmers that the Northeast and the entire U.S. need if the innovative agricultural sector is going to survive. Providing appropriate child care options and additional resources for farmers and their families would likely provide these working parents with better quality of life and a greater capacity to focus on the growth of the farm business, in turn contributing to a strong agricultural economy.

Efforts to strengthen rural economies by supporting children and their families have been prioritized by USDA Rural Development and the White House Rural Council. However, a more directed approach targeting farm families in rural areas is important in encouraging a healthy farm economy, because, as one participant stated, ‘With a healthy family, you have a healthy economy’. The American Farmland Trust report on “Growing Cities, Preserving Farmland” recommends fostering agricultural development by encouraging a favorable agricultural business climate (Unger & Thompson, Jr., 2013). Because child care is an essential service that supports workforce and community economic development, and is necessary to ensure farm safety and farm business productivity, providing direct support for child care in farm families can create and encourage a favorable agricultural business climate. The following recommendations would support a favorable agricultural business climate by providing appropriate and informed support for child care in farm families.

Farmers need appropriate tools and resources to be able to navigate the overlap of the farm business and farm family life cycles and persist. The findings of this study point to the need for educational efforts to support women farmers that include programming related to all facets of female farm identity. More generally, discussing child care as part of farm business planning would allow new and beginning farmers, and even experienced farmers who are planning for children, an opportunity to consider the ways children and chosen care methods will influence the farm business before entering into either the farm business or childrearing. Child care is deeply embedded in social structures and community networks, where parents get most of their information about the location, supply, and quality of care options (Meyers & Jordan, 2006).

Creating networks for communication and resource sharing among employers and employees is recommended as a tool to promote workforce development (Green & Haines, 2015); however, self-employed farmers may benefit from these types of networks, too, focused specifically on child care options. Farmer-parent networking nights would allow for like-minded support, realistic peer advice, experience sharing, and network building. The creation of these child care networks and expanded educational programming could allow for collaboration and use of already-existing networks of agricultural organizations: Extension, food policy councils, producer groups. Alternatively, state level departments of family and youth services and local child care organizations could tailor their resources specifically to farm families. Such organizations could work with mobile software developers to create applications that can help parents in rural, agricultural communities connect with each other and with appropriate care providers.

When considering policy solutions to farm families' child care challenges, it is important to note that the current system of public support for child care in the US benefits low income families and those with traditional work schedules (Michel, 1999). However, farmers who do not work traditional hours, and those with additional income from off-farm work may need child care to match their nontraditional hours that supports their farming and off-farm efforts, but cannot access subsidies because they are seemingly making too much money. Large farms with higher incomes may struggle with child care affordability just like their small farm, lower-income counterparts, as cash can be tied up in land and equipment, and not available to cover such services. Just as advocates argue that knowledge of a particular workforce and the

child care challenges they face is critical in making recommendations for appropriate care (Kimmel, 2006), one participant recommended child care subsidy evaluation for farm families be conducted by farm viability experts at Extension, who are familiar with the financials and practices of a farm business. Allowing subsidies to cover informal and relative care, or providing more appropriate methods of subsidy-eligibility assessment for farm families, would provide options appropriate to the values, income and work schedules of farmers and would satisfy Reschke's (2012) recommendations to provide financial resources for informal caregivers that would alleviate child care pressures faced by farm families.

Addressing child care needs in a more universal approach, instead of through piecemeal programs designed to fix specific problems, would alleviate child care pressures on all families, including farm families. The proposed Comprehensive Child Development Act (CDA) of 1971 was our country's closest attempt at universal child care, and proposed that low-income families would have access to free child care, while others would pay on a sliding scale. Though it has not come to fruition in the U.S., this idea of federally funded child care programs for non-poor families has worked successfully in other countries. France and Sweden, which offer benefits of free or subsidized child care in addition to paid maternity or paternity leave, provide a model for the US (Cooper, 1999; Michel, 1999).

In Sweden, generous and comprehensive child care policy since the 1970s has supported a society of "universal breadwinners" in which radical changes in workplace organization and expectation place value on both breadwinning and caregiving (Fraser, 2013; Morgan, 2006). These policies allow for a combination of maternal labor force

participation and child-rearing, giving mothers paid parental leave, access to quality group child care, and the “short hours” option in which they only work thirty hours per week (Michel, 1999). These benefits are accessible to all parents, encouraging the pursuit of self-employed professions (Arenius & Kovalainen, 2006), like agriculture. The presence of very young children actually increases a mother’s likelihood of pursuing self-employment in Sweden (Joonas, 2014). France offers a comprehensive family policy that includes generous maternity leave and children’s allowances (Cooper, 1999; Michel, 1999; Morgan, 2006). State-sponsored child care options are offered both in traditional day care centers, and in family home providers who belong to networks that provide regulation and supervision (Cooper, 1999; Morgan, 2006; Michel, 1999). Although they have their critics in their own countries as well as in the U.S., the systems in Sweden and France provide good-quality child care that scholars find accessible and affordable to all (Cooper, 1999; Morgan, 2006), and support the universal breadwinner model that values the care work typical of women in the U.S. (Fraser, 2013). The ability to access government-sponsored informal in-home care, as is available in France, would be particularly applicable to the needs of farm families, who often do not have access to formal care centers and work nontraditional hours.

This article contributes to the existing literature on child care, agriculture, and the nascent conversation on the intersection of the two by capturing firsthand the child care experiences of farm families and the ways public support for child care does or does not accommodate the evolving needs of farm families. In addition to the contributions to the literature and tangible recommendations for increased support, this study has methodological implications. The use of qualitative interview data revealed

aspects of the farm families' stories that are otherwise quite hidden from view: factors behind child care decisions, child care as part of farm business planning, changing gender roles, stress, and quality of life issues. We learn more powerfully from the interviews than we could from any quantitative data about the significance of child care to agricultural livelihoods, how farm families manage the balance of work and family, and the ways gendered family roles hinder the growth of women farmers. Future research should expand the scope of study to the entire United States agriculture sector.

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## **CHAPTER 6: OVERALL CONCLUSIONS AND RECOMMENDATIONS**

This thesis has argued that child care is an issue that is challenging for farm families, affects farm businesses, and has economic and social implications. The data speak powerfully to issues of community, family, and gender in farming, and provide a case study in an arena scholars of agriculture, child care, and family under-research dramatically but that is noteworthy in light of the growing numbers of female farmers and the need for support of beginning farmers. The contributions of this thesis further the conversation in both child care and agricultural scholarship, by illuminating the connection between child care as a factor workforce development and the existing concern of farm persistence in agriculture.

Beyond the fact that child care generally is not considered in agricultural literature, and the needs of farm families are not addressed in child care literature, this study positions this household-level issue as both influential to and influenced by the motivations of the rising (and precarious) generation of farmers that the Northeast, the Rural-Urban Interface, and the entire U.S. need if the innovative agricultural sector is going to survive. Providing appropriate child care options and additional resources for farmers and their families would likely provide these working parents with better quality of life and a greater capacity to focus on the growth of the farm business, in turn contributing to a strong agricultural economy.

Efforts to strengthen rural economies by supporting children and their families have been prioritized by USDA Rural Development and the White House Rural Council. However, a more directed approach targeting farm families in rural areas (and areas within the rural-urban interface) is important in encouraging a healthy farm

economy, because, as one participant stated, ‘With a healthy family, you have a healthy economy’. The American Farmland Trust report on “Growing Cities, Preserving Farmland” recommends fostering agricultural development by encouraging a favorable agricultural business climate (Unger & Thompson, Jr., 2013). Because child care is an essential service that supports workforce and community economic development, and is necessary to ensure farm safety and farm business productivity, providing direct support for child care in farm families can create and encourage a favorable agricultural business climate. However, child care is a difficult and nuanced issue, affecting different types of farm families in different ways. In order to foster a young, vibrant farm economy, policies and programs must address the needs of burgeoning farmer groups: FG farmers and women farmers. Though all farmer groups analyzed in this thesis report that child care influences farm business decisions, and that they face challenges with child care, particular attention must be paid to young, beginning, and FG farmers who need support in all aspects of their farm business and may not be receiving the same passing of traditions, knowledge, and community networks as MG farmers. As a growing group of farmers that needs support unique to their changing roles, women farmers also need extra attention. This study highlights just some of the differences in these populations and builds on the work of Inwood et al. (2013) by continuing to disentangle the social differences between MG and FG farmers, while also addressing the needs of women farmers, a growing population of farmers for whom child care is of primary concern.

This thesis also shows that child care is less challenging with family and friends nearby, and more difficult when those networks don’t exist. Child care is deeply

embedded in social structures and community networks, where parents get most of their information about the location, supply, and quality of care options (Meyers & Jordan, 2006), but farmers without families nearby or solid community networks may experience trouble accessing information and the care they prefer. Farm families need appropriate tools and resources to be able to navigate the overlap of the farm business and farm family life cycles and persist. The findings of this study point to the need for educational efforts to support women farmers that include programming related to all facets of female farm identity. More generally, discussing child care as part of farm business planning would allow new and beginning farmers, and even experienced farmers who are planning for children, an opportunity to consider the ways children and chosen care methods will influence the farm business before entering into either the farm business or childrearing. Farmer-parent networking nights would allow for like-minded support, realistic peer advice, experience sharing, and network building. The creation of these child care networks and expanded educational programming could allow for collaboration and use of already-existing networks of agricultural organizations: Extension, food policy councils, producer groups. Alternatively, state level departments of family and youth services and local child care organizations could tailor their resources specifically to farm families. Although child care is often thought of as only benefitting parents and providers, Warner, Ribeiro and Smith (2003) found that framing child care as an issue of economic development provides the tools and language to enable child care resources and economic development agencies to work together to increase public and private support for childcare and wellbeing of the community as a whole. Agricultural, child care, and community development

organizations could even work with mobile software developers to create applications that can help parents in rural, agricultural communities connect with each other and with appropriate care providers.

When considering policy solutions to farm families' child care challenges, it is important to note that the current system of public support for child care in the US benefits low income families and those with traditional work schedules (Michel, 1999). However, farmers who do not work traditional hours and those with additional income from off-farm work may need child care to match their nontraditional hours that supports their farming and off-farm efforts, but cannot access subsidies because they are making too much money. Allowing subsidies to cover informal and relative care, or providing more appropriate methods of subsidy-eligibility assessment for farm families, would provide options appropriate to the values, income and work schedules of farmers and would satisfy Reschke's (2012) recommendations to provide financial resources for informal caregivers that would alleviate child care pressures faced by farm families.

There is recent precedent for creating benefits specifically for farmers. The National Young Farmers Coalition (NYFC) has launched a campaign to add agriculture to the list of professions that qualify for the Public Service Loan Forgiveness Program and New York state has already adopted the policy as an incentive for recent college graduates to pursue farming. Removing additional financial burden from new and beginning farmers, who often experience low returns in the early years (Lusher Shute, 2011), makes sense for a profession so vital to our nation's well-being. Providing appropriate and affordable child care options for farm families could further remove

burden from parent-farmers, and is another way to support growth and workforce development in the agriculture sector.

Addressing child care needs in a more universal approach, instead of through piecemeal programs designed to fix specific problems, would alleviate child care pressures on all families, including farm families. The proposed Comprehensive Child Development Act (CDA) of 1971 was our country's closest attempt at universal child care, and proposed that low-income families would have access to free child care, while others would pay on a sliding scale. Though it has not come to fruition in the U.S., this idea of federally funded child care programs for non-poor families has worked successfully in other countries. France and Sweden, which offer benefits of free or subsidized child care in addition to paid maternity or paternity leave, provide a model for the US (Cooper, 1999; Michel, 1999).

In Sweden, generous and comprehensive child care policy since the 1970s has supported a society of “universal breadwinners” in which all parents work (Morgan, 2006). These policies allow for a combination of maternal labor force participation and child-rearing, giving mothers paid parental leave, access to quality group child care, and the “short hours” option in which they only work thirty hours per week (Michel, 1999). These benefits are accessible to all parents, encouraging the pursuit of self-employed professions like agriculture. The presence of very young children actually increases a mother's likelihood of pursuing self-employment in Sweden (Andersson Joona, 2014). France offers a comprehensive family policy that includes generous maternity leave and children's allowances (Cooper, 1999; Michel, 1999; Morgan, 2006). State-sponsored child care options are offered both in traditional day care

centers, and in family home providers who belong to networks that provide regulation and supervision (Cooper, 1999; Morgan, 2006; Michel, 1999). Although they have their critics in their own countries as well as in the U.S., the systems in Sweden and France provide good-quality child care that scholars find accessible and affordable to all (Cooper, 1999; Morgan, 2006). The ability to access government-sponsored informal in-home care, as is available in France, would be particularly applicable to the needs of farm families, who often do not have access to formal care centers and work nontraditional hours. Targeted child care subsidies specifically for FG or women farmers, despite income so as not to exclude farmers with off-farm income, would also help the problem of affordability and encourage FG and beginning farmers to persist and grow their farm business during the first few years, which typically bring in low returns (Ahearn, 2013) and can overlap with the raising of children (Smithers & Johnson, 2004).

This thesis brings together two previously unconnected bodies of work on child care as a contributor to workforce vitality and on agriculture, and establishes child care as an issue that has economic and social implications for both farm families and farm businesses. Future research on the subject should continue to examine the issue of child care in farm families by exploring the role ethnicity and culture play in farm family child care decisions, and expanding the spatial component of study to non-RUI areas and regions other than the Northeast, and should also include farm workers as well as principal operators in order to provide a wider understanding of the effects of child care on the agriculture sector.

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## Appendix A: Survey Instrument

**C3. A number of household factors can influence how you manage your farm business. How important are the following factors when making decisions about your farm? (1=Not Important to 5=Extremely Important. Check N/A if this does not apply to your farm)**

<i>Factors affecting management decisions</i>	Not Important		Neutral	Extremely Important		N/A
a. Amount of time I have to spend with family	1	2	3	4	5	<input type="radio"/>
b. My families' need to keep an off-farm job(s) for <i>income</i>	1	2	3	4	5	<input type="radio"/>
c. My families' need to keep an off-farm job(s) for <i>benefits</i>	1	2	3	4	5	<input type="radio"/>
d. Finding child care for my children	1	2	3	4	5	<input type="radio"/>
e. Time it takes to balance the farm and household needs	1	2	3	4	5	<input type="radio"/>
f. Debt load	1	2	3	4	5	<input type="radio"/>

**D13. Households have to balance farm needs and family needs, including child care. There are many factors that can influence decisions about child care. To what degree do the following factors/conditions pose problems when making child care decisions? (1=Not a problem 5=Severe problem)**

	Not a Problem		Modest Problem		Severe Problem
a. Affordability of child care	1	2	3	4	5
b. Availability of child care	1	2	3	4	5
c. Quality of care (Educational stimulation, curriculum)	1	2	3	4	5
d. Finding caregivers who fit my philosophy of raising a child	1	2	3	4	5
e. Disagreements over child care within the household	1	2	3	4	5

**D14. There are a variety of options for child care. To what degree are you able to access the following child care options available to you? (1=Not a problem to 5=Severe problem. Check N/A if this does not apply to you)**

	Not a Problem		Modest Problem		Severe Problem	N/A
a. Formal child care setting off the farm (day care)	1	2	3	4	5	<input type="radio"/>
b. Grandparent or other family member	1	2	3	4	5	<input type="radio"/>
c. Neighbor or friend	1	2	3	4	5	<input type="radio"/>

**E2. What proportion of your family and close adult friends live in your community?** *(Please check one circle for close adult friends and one circle for adult relatives and in-laws)*

	a. Close Adult Friends	b. Adult relatives and in-laws
I have none	<input type="radio"/>	<input type="radio"/>
None of them live here	<input type="radio"/>	<input type="radio"/>
Less than half	<input type="radio"/>	<input type="radio"/>
About half	<input type="radio"/>	<input type="radio"/>
Most of them	<input type="radio"/>	<input type="radio"/>
All of them	<input type="radio"/>	<input type="radio"/>

## **Appendix B: Interview/Focus Group Protocol**

### Listening Session Script

#### ***Welcome***

Welcome everyone. Thanks for taking the time to join our discussion. My name is Emily and I am a graduate student research assistant in the department of Community Development and Applied Economics at the University of Vermont. This is [assistant's name]. He/she will be helping me record the discussion and take notes.

#### ***Overview of Topic***

These focus groups are part of a project funded by USDA-NIFA: "Linking the Cost of Health Insurance and Child Care to Future U.S. Agricultural Production." Our research group is interested in learning about the ways healthcare and child care affect farm businesses, and we want to collect firsthand information from farmers to provide informed recommendations to policymakers regarding future policies and programs that will better support farmers in their child care and healthcare needs. Today's discussion will be focused specifically on [child care/healthcare]. We will be conducting listening sessions with farm operators across in the Northeast over the next few months.

#### ***Ground Rules***

There are no right or wrong answers during our discussion. I expect that you will have differing points of view. Please feel free to share you point of view even if it differs from what others have said.

I am recording the session because I don't want to miss any of your comments. No names will be included in any reports. Your comments are confidential. Following the discussion today, we will ask you to complete a survey with questions about your farm type, employment status, etc. that can help us when thinking about the nature of the conversation today. These responses will also be kept confidential.

We have name tents here in front of us. They will help me remember names, but they can also help you. Don't feel like you have to respond to me all the time. If you want to follow up on something that someone has said, you want to agree, or disagree, or give an example, feel free to do that. Feel free to have a conversation with each other about these questions. I am here to ask questions, listen, and make sure everyone has a chance to share. We're interested in hearing from each of you. So, if you're talking a lot, I may ask you to give others a chance. And if you aren't saying much I may call on you. I just want to make sure all of you have a chance to share your experiences.

If you have a cell phone please put it on vibrate and if you absolutely must answer it please step outside to do so. Feel free to get up and get more refreshments if you would like.

1. Tell us your name, the name of your farm, briefly why you farm, how many children you have and how old they are.
2. Tell us how your farm is organized. Who makes decisions about the farm?
3. Where do you see your farm in five years?
  - a. Grow, stay the same, decrease?
4. What is the role of your children on the farm and how have roles evolved? Think mainly about younger kids – under 6?
5. What are your long-term goals for your children?
6. What do your children do while you are farming, marketing, record keeping?
  - a. What forms of child care do you utilize and why? Keep kids at home? Formal?
  - b. Probe for ideas about
    - i. socializing kids into agriculture,
    - ii. knowing community members,
    - iii. safety – on farm and in child care
    - iv. values for kids in child care
    - v. Quality of child care, philosophy
    - vi. Availability – ability to find childcare
7. How does child care affect the way you run your farm business?
8. How does child care affect your family?
  - a. Probe for stress, juggling time for family and business
9. How does your community play a role in your child care decisions?
  - a. Do you utilize members of your community for child care
  - b. Family members, friends with kids, friends with no kids
  - c. Other farm families
10. What would your ideal childcare situation look like?
11. What kind of support do you need to achieve this situation?
  - a. Probe community, local level, national level
  - b. Have you participated in the sliding scale or universal pre-k programs in that Vermont offers?

12. The purpose of this study is to understand the ways child care affects farm business success. Is there anything you think we should have talked about but didn't?

*Closing Remarks:* That concludes the focus group. Your comments are very useful and I appreciate your willingness to share.