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INFLUENCES OF FARMING BACKGROUND ON FARM WOMEN'S  
EMPLOYMENT MOTIVATIONS

by

Alexis Swendener

A THESIS

Presented to the Faculty of  
The Graduate College at the University of Nebraska  
In Partial Fulfillment of Requirements  
For the Degree of Master of Arts

Major: Sociology  
Under the Supervision of Professor Jolene Smyth

Lincoln, Nebraska

May, 2012

# INFLUENCES OF FARMING BACKGROUND ON FARM WOMEN'S EMPLOYMENT MOTIVATIONS

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University of Nebraska, 2012

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Many changes have taken place in society since the upsurge in attention to rural studies during the farming crisis of the 1980s, and there is a need to re-examine the lives and experiences of women who live on family farms and ranches in the twenty-first century. An important change in the dynamics of family farming is the financial difficulties they have encountered and the resulting solution of sending a family member to earn a wage in off-farm employment. This study utilizes survey data from Washington family farm women to explore how they navigate their unique social context concerning the decision and reasons they choose to work off-farm. In particular, I examine whether women who grew upon a farm or have spent a large percentage of their lives on farms are more or less likely to work off-farm. An identity theory approach is utilized to hypothesize that the influence of farming/agrarian ideology in those with a farming background will lead to differential levels of employment and differing reasons in the decisions to either seek off-farm employment or remain on-farm. This study found that while being raised on-farm was not found to be associated with off-farm employment, increased percentage of life spent on-farm was associated with being less likely to have ever worked off-farm. This study also found that, of those who have worked off-farm, those raised on-farm and with increased percentage of life spent on-farm were less likely to indicate that they work off-farm to gain personal income. In addition, those raised on-

farm were less likely to work off-farm in order to gain independence or for the challenge. This study also found that, of those who have not worked off-farm, being raised on-farm had no significant association with listing being needed on-farm or at home as reasons for not working off-farm. However, increase in percentage of a woman's life spent on-farm was associated with indicating being both needed on the farm/ranch and needed at home as reasons for not working off-farm.

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## INTRODUCTION

Women within the United States have experienced a change in their expected roles both within and outside of the family and now balance multiple roles in their lives (Rosenfeld 1985; Sachs 1983). Many farm women now have experiences similar to their urban counterparts in participating in paid employment outside of the home (Bokemeier, Sachs, and Keith 1983; Godwin and Marlowe 1990; Kelly and Shortall 2002). Yet the structure of family farms combine the spheres of work, home, and family life—which is a much different system than those in regular waged labor. Farming is unique as it occurs specifically within rural spaces, and farming enterprises are largely family-owned and operated compared to other industries (Molnar and Wu 1989). In addition, because such a small percentage of the population lives on family farms, this segment of the population is often overlooked by the general populace and by social scientists. Less than one percent of the population claims farming as an occupation, and only around two percent actually live on farms (U.S. Environmental Protection Agency 2009). Overall, 91 percent of all farms are classified by the United States Department of Agriculture as a small farm or a family farm—those which sell less than \$250,000 in agricultural products annually (U.S. Department of Agriculture 2010a). Agriculture is often viewed as an archaic sector of society as advancements in industrialization and the technological sectors continue. But the farming and agricultural industry contain many elements of the foundation of American nationalistic cultural identity (Molnar and Wu 1989).

A majority of farm families include a husband and a wife, and in many instances women are either regularly or at least occasionally involved in most aspects of agricultural production (Sachs 1983). But since farming is most commonly identified as



something being done by men, women's experiences often go less noticed (Rosenfeld 1985). Attention to rural studies in general and a specific focus on gender increased during the farming crisis of the 1980s but has since leveled off (Brandth 2006; Little 2006; Little and Panelli 2003). However, many changes have taken place in society since the surge in popularity of rural studies in the 1980s, and there is a need to re-examine the lives and experiences of women who live on family farms and ranches in the twenty-first century. An important change in the dynamics of family farming is the financial difficulties they have encountered, and the resulting solution of sending a family member to earn a wage in off-farm employment (Bokemeier, Sachs, and Keith 1983; Dimitri, Effland, and Conklin 2005).

Agriculture has been restructured in the last quarter century around modernized processes that reduced the need for on-farm labor and increased the importance of capital (Oldrup 1999). In modern farming, more cash is needed to support family farms due to more machinery being used on farms and the demographic trend towards smaller family sizes, leading to fewer free laborers (Ollenburger, Grana, and Moore 1989). It has become difficult for farm families to financially support themselves with only the farm income, and one common solution to maintain the family farm and provide financial security is for one adult to become a part of the waged labor force off-farm (Bjorkhaug and Blekesaune 2007; Bokemeier, Sachs, and Keith 1983; Perry and Ahearn 1994; Kelly and Shortall 2002). Thus, an increasing number of farm women are seeking employment off-farm (Naples 1994; Perry and Ahearn 1994; Pfeffer and Gilbert 1991). In Naples' (1994) study, "One woman explained that she works for pay in order 'to support my husband's farming habit' since the farm does not earn any income for the family" (p.

123). Wozniak and Scholl found that a majority of both farm men and women who worked off-farm listed economic reasons for doing so (1990).

The purpose of this research is to explore how farm women navigate their unique social context specifically concerning the decision and reason(s) farm women choose to work off-farm. One area of women's experiences that has had very little exploration is the effect of women's farm identity on their decisions to work off-farm or stay on-farm. In particular, I examine whether women who grew upon a farm or have spent a large percentage of their lives on farms are more or less likely to work off-farm. This study will help to expand the literature in gender sociology, within the context of rural sociology as well, by examining the effect of a current farm woman's farming background upon motivations for or against off-farm employment. An identity theory approach will be utilized to hypothesize that the influence of farming/agrarian ideology in those with a farming background will lead to differential levels of employment and differing reasons in the decisions to either seek off-farm employment or remain on-farm.

In the past, research did not explore the ways in which farm women have historically and continue to help sustain the family farming enterprise (Naples 1994). Most social research on farming focused exclusively on the farmer, long considered to be the male of the household, while women's contributions went mostly unnoticed and unexamined. Over time, and with the expansion of feminist research, studies came to include women (or at the very least inquire about their inputs) and found that women make multiple important contributions to the family farm (Naples 1994; Rosenfeld 1986). The work of farm women is essential to the enterprise's success (Ghorayshi 1989), and they hold a multitude of roles that are important to the survival and maintenance of the

family farm (Perry and Ahearn 1994; Rosenfeld 1985; Smyth 2007). However, with respect to off-farm employment, much of this research has largely focused on the structural pushes and pulls that women face (Ollenburger et al. 1989). This study expands previous research to include non-economic and more social reasons using the framework of identity theory and examining farming background in addition to economic, structural, and human capital factors in determining whether and why farm women do or do not decide to work off-farm.

#### INCREASES IN OFF-FARM LABOR

An increasing number of farm families have had at least one adult employed in the off-farm wage labor market. In 1945, only 27 percent of farmers worked off-farm, but by 1970 54 percent worked off-farm (Dimitri et al. 2005). By 2000, almost all farms (93 percent) earned off-farm income (Dimitri et al. 2005). Most often, it is farm women who have moved into off-farm labor, and this increase in employment is part of an increase in rural women's employment overall (Naples 2003; Pfeffer and Gilbert 1991). During the farming crisis of the 1980s, almost one-third of women on family farms increased their participation in off-farm employment compared to only one-fourth of men (Pfeffer and Gilbert 1991). In their multi-state survey of farm families, Wozniak and Scholl (1990) found that 42 percent of the women and 29 percent of the men were employed off the farm. A similar trend emerged on family farms in Western Europe as farm men stay on-farm full-time while farm women work in off-farm employment (Blanc and MacKinnon 1990).

This trend of increased off-farm waged labor by farm women makes it an

important component of modern farm family life. The farm woman's role becomes more ambiguous as it involves varying combinations of waged worker, farmer, and housewife. Some women must construct their farm woman identity with the inclusion of their labor off-farm. Oldrup (1999) notes that there are varying ways of being a farm woman and various farm woman identities, with examples such as housewife, professional farmer, or off-farm worker. It is important to investigate how these groups construct their identities and how their identities shape their behaviors. To those with a farming background, family farm/agrarian values remain a powerful influence in contemporary agriculture (Brandth 2002). Family farm/agrarian values are rooted in the history of agriculture and traditional American cultural values (Brandth 2002) and have an influence on how women on family farms continue to form and reconstruct their identities.

## THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Identity theory provides the framework for this research. In this section, I review the theoretical underpinnings of identity theory and discuss the existence and influence of an agrarian/farming identity upon employment motivations. The concept of identity has become widely used and discussed throughout the social and behavioral sciences. A focus on identity has also become well established within gender analyses (Panelli 2006). In the formation of identity theory, the meaning of the term identity grows out of Stryker's structural symbolic interactionism perspective (1980). Identity refers to our internalized, stable sense of self, including roles, social categories, and personal characteristics. These internalized meanings vary between people yet still center on a commonly agreed upon set of core meanings and expectations derived from the general

culture (Stryker 1980). These self-meanings inform one what to expect of oneself as well as how to respond to oneself, but due to being shared by others they also inform others how to respond to oneself (Burke 2003). In this way, this concept of identity balances the view of identity as being a social category and the view of identity as being a unique individual.

Identity also references a self comprised of the meanings that persons attach to the multiple roles they play in increasingly complex modern societies (Stryker and Burke 2000). This idea of identity can be tied to Mead and the underpinnings of symbolic interactionism in general. Very simply, Mead's framework asserted that "Society shapes self shapes social behavior" (Stryker and Burke 2000:285). Identity theory specifies and operationalizes the concepts of "society" and "self" in a way that could be tested with empirical research. In addition, people are seen as living through roles that support their participation in relatively small and specialized networks of social relationships (Stryker and Burke 2000).

Identity theory is a very influential social psychological theory of the self and social action. It examines the ways in which society shapes how we view ourselves and how those views (or identities) affect our behavior. One of the first basic principles of identity theory is that behavior is based on an already defined and classified world (Burke 2003; Stryker 1980). This principle explains that terms that we attach to physical and social aspects of our environment have meaning based upon shared behavioral expectations that come from social interaction. Burke explains that while this is a basic symbolic interactionist idea, it is not always symbolic; there are "objects" that one encounters and learns to respond to, and these responses give meaning to the objects

(2003). A second principle states that positions in society are among the things classified in the world and carry the shared expectations for behavior that are usually referred to as 'roles' (Stryker 1980). Roles are not just a product of interactions and negotiations between people, but exist in a way in which they can be seen, reacted to, and labeled within larger society (Burke 2003). The roles of farm women, specifically work roles on- or off-farm, are the focus of this research.

Additional principles focus on the social construction of the self and identities. The third principle states that people develop their identities based on their positions in society. The fourth principle explains the reverse effect, meaning we incorporate our social positions into our sense of identity and that our positions become an internalized part of our sense of self (Stryker 1980). Those with a farming background share a position and their experiences on-farm may be part of their internalized sense of self. A final principle states that social behavior is created from the shaping and modification processes of the expectations of our positions through interaction (Stryker 1980). This means that each person's identities are unique and shaped by the person's interactions and experiences with others (Burke 2003).

Stryker also explains that the self is comprised of multiple identities, reflecting the multiple positions a person can hold in society (1980). People have as many identities as they have networks of relationships in which they have positions and play roles (Stryker and Burke 2000). Stryker suggested that these multiple identities are organized within the self into a salience hierarchy that reflects the likelihood that an identity will be invoked across a variety of situations (Burke 2003; Stryker and Burke 2000). This salience hierarchy of identities is unique to each individual. Stryker also explained how

the concept of commitment shapes the salience of an identity and affects how an individual will behave (1980). Commitment represents both the extensiveness (via the number of those to whom one is connected to) and intensiveness (the strength or depth of the connection to those others) of the connections one has to others because one has a particular identity (Burke 2003). Commitment is measurable by the costs of losing meaningful relations to others, should the identity be lost. Identity theorists therefore have hypothesized that the higher the salience of an identity (compared to other self-identities) the greater the probability is that one will behave in accordance with the expectations attached to that identity (Stryker and Burke 2000). Those with a farming background thus may share a farming identity that they may hold as being more salient in their hierarchy of identities having established the extensiveness and intensiveness of their connections over the course of their entire lives compared to their counterparts who entered farming as an adult, through marriage. Alternatively, those with a non-farming background may find their identity related to their background to be more salient in their identity hierarchy than their more recent farming identity.

Accordingly, Stryker and Burke assert that identity theory has specified Mead's formula in that "commitment shapes identity salience shapes role choice behavior" (2000:286). We assess our identities against others, making sure that they correspond to our sense of self and make adjustments accordingly to our behavior to maintain our identity (Burke 2003). Identity theory generally posits that identity standards tend to remain fairly stable over time and across different situations. This stability is due to the tendency of people to create and maintain interaction settings or "opportunity structures" where identities are supported and self-verification occurs (Burke and Cast 1997).

Continuity between our self-perceived identity and the information we receive from others about ourselves can have an effect on self-esteem and depression. Thus current farm women may behave in ways to maintain their sense of self and desire roles in which their identities are supported. Oldrup (1999) suggests a theoretical perspective on farm women's identity inspired by theories of everyday life and identity. How one decides who they are and how they should live are answered in everyday life and interpreted in relation to identity construction. Identity is cumulative process and is reconstructed over time for farm women; it is the result of reconstructing her earlier social identities within her present social identities (Oldrup 1999). A woman's experiences from across her lifespan combine with her present situation in her identity formation process (Oldrup 1999). The presence or absence of a farming or agrarian background will influence current farm women's decisions regarding participation in off-farm labor. An explanation of the existence of an agrarian identity will inform how being exposed to ideologies relating to rurality differ from a more urban experience.

#### AGRARIANISM: THE EXISTENCE OF A DISTINCT FARM IDENTITY

A majority of people in industrialized countries identify with the idea of a distinct rural environment, as separate from an urban environment (Marini and Mooney 2006). The existence and study of the differences between the rural and the urban are well-established. Rural studies has long used typologies that define a difference between rural and urban places and people. When such differences are not directly discussed, they are often implied by the use of dichotomies such as folk and urban, traditional and modern, or *Gemeinschaft* and *Gesellschaft* (Marini and Mooney 2006). The differences found



between places that are rural and those that are not rural logically relates to the formation of a rural or farm identity separate than that of a city or urban identity.

There are a multitude of meanings of rurality, but there are definitive components of the concept of rurality that are sustained throughout time and location, with few changes. A common perception of rurality includes the view that rural society is more close-knit, friendly, and supportive than its urban counterpart. Importantly, perceptions of the rural ideology and agrarian identity influence patterns of behavior, value sets, and relationships, which reflects the power of such notions (Little and Austin 1996). Therefore, those raised in or exposed to an environment with a rural ideology over their life will likely show this influence within the construction of their own current identity and corresponding behavior.

#### *What is agrarianism?*

Several components of what comprises a farming/agrarian/rural ideology have been agreed upon in previous literature. Agrarian ideology emphasizes the small, independent farm producer who has autonomy and is achieving self-fulfillment (Cummins 2005; Dalecki and Coughenour 1992; Naples 1994). People are personally responsible for their outcomes, and this sense of rugged individualism stems historically from traditional American values (Blanc and MacKinnon 1990; Naples 1994). Contradictions within agrarian ideology exist as well since it encompasses ideas of community and neighborliness: being more friendly, close-knit, and helping out one's neighbors in times of need (Little and Austin 1996; Naples 1994). Naples (1994) also mentions that the romanticized notion of *gemeinschaft* and loyal ties to the community continues to be an important value to those from small towns and rural areas. Another

component is the value of property holdings, and family identification with it throughout generations is held in high regard, as is the freedom of self-employment versus the dependence upon a salaried wage (Blanc and MacKinnon 1990). One with a farming ideology also believes in the goodness of farm life as being a peaceful and desired respite from urbanity (Cummins 2005; Dalecki and Coughenour 1992).

A major component of a farming ideology is belief in more traditional values and attitudes about family and gender roles, including a traditional division of labor and heteronormative household form (Naples 1994; Wozniak and Scholl 1990). Much of the research on women in farming has been within ‘the discourse of the family farm’, or the traditional ideologies surrounding family farming (Brandth 2002). Farming is seen as a male occupation, and the woman is the ‘farmer’s wife’ who enters the farm via marriage (Cummins 2005). Family farming is based on labor from members of the family and tasks are typically gendered. Task allocation is viewed as a ‘natural’ distribution of work on the basis of gender attributes, with women performing the private sphere, unpaid labor of child care, and household labor (Brandth 2002). Agrarian ideology includes very traditional ideas of gender relations where women’s place is at the center of the family and the community, and their primary role is being a wife and a mother (Cummins 2005; Little and Austin 1996; Naples 1994). Yet women also perform various types of labor on the farm, but are often considered to be in a ‘helper’ role (Brandth 2002; Sachs 1983). Women tend to downplay their own work contributions in off-farm and on-farm tasks (Naples 1994; Kelly and Shorthall 2002) as well as viewing tasks such as household chores and being a “go-fer” as different work than their husbands’ and of lesser importance (Cummins 2005; Ghorayshi 1989). In congruence with the strong family ties

to the farm, agrarian ideology asserts that the main interest of all family members is the survival of the family farm (Brandth 2002; Kelly and Shorthall 2002).

*Addressing the critique of the existence of a rural/urban difference or conceptualizing rurality*

It should be noted that some scholars are hesitant to cite the existence of a rural/urban difference or the idea that rurality can be conceptualized. Cloke (2006) is one such scholar who believes generalizations of one type of rurality are problematic for several reasons. He explains that cultural changes in the last thirty years (i.e. the pervasiveness of internet and other worldwide media) and changes to the rural population have led to decline of the idea of rurality as an isolated cultural and value system. Cloke also posits that rurality cannot be a singular concept due to how it differs by nation and even within geographic area in nations (2006). He posits that "...while the geographic spaces of the city and the countryside have become blurred it is in the social distinction of rurality that significant differences between the rural and the urban remain" (Cloke 2006:19), meaning that assuming a concept of rurality reproduces an overly simplistic rural/urban dichotomy in seeing rural areas as functionally different than urban areas. In addition, Cloke believes that the focus on cultural aspects of rurality distracted rural studies from the "fundamental core of concern for socio-economic change in rural space" (2006:22).

Cloke offers an alternative theoretical framing of rurality: one focusing on the social construction of rurality utilizing more postmodern and poststructural frameworks that do not necessarily allow for one over-arching idea of rurality to exist (2006). Yet

Brandth posits that while life is varied and complicated, we should not let this prevent us from studying it and trying to interpret its complexities. This study agrees with Brandth in that a shared farming or agrarian identity does exist among those raised on or spending much of their lives on family farms within the U.S. This is supported by the large body of research in the previous section highlighting the existence of an agrarian ideology.

#### *Farming background and agrarian identity*

Agrarianism is still strongly held among farmers in the U.S. Agrarian beliefs persist among all classes of farmers and suggest this to be a stable part of the farming identity (Dalecki and Coughenour 1992). Those living in a rural area or on a farm/ranch have the strongest agrarian attitudes while those from urban and nonfarm areas have the weakest agrarian attitudes (Dalecki and Coughenour 1992). Specifically, Dalecki and Coughenour (1992) found concepts related to agrarianism—autonomy, working at one’s own pace, and independence—were especially valued among those who grew up in a rural environment. Identifying positively with farming as a way of life was a factor Schroeder, Fliegel, and van Es (1983) examined in whether farming background had an influence on small-scale farmers’ orientation to farming. They found that those who grew up on farms were more likely to identify themselves as farmers (Schroeder et al. 1983). In addition, farmers raised off-farm were less likely to have agrarian values, with agrarianism conceptualized very similarly to the previous section including valuing the goodness of farming as a way of life, the ideal of the independent farmer, and belief that farming is the basis for American values (Schroeder et. al 1983).

There is an understanding of a farm woman identity different from an urban woman’s identity based upon where one was raised as well. Having a farming

background is an important component in the development of farm women's self-identities, as those raised off-farm have to adjust to a farming identity (Cummins 2005). Farm women's identity involves participating in many different activities and roles in everyday life. Those raised outside of agriculture have a different background of experiences of family life and gender when they enter the family farm life (Oldrup 1999). Women raised off-farm have to transition to a different lifestyle where home and farm---family and enterprise---exist in the same location. These women's relationship to their home on the farm can be complicated and play a role in identity construction. Oldrup (1999) found that many women experience ambivalence in regard to the family farm being home since most often it was the husband's family's farm and was frequently located in a different region than where they were from. Women with a nonfarm background sometimes feel confusion in their process of identity construction due to difficulties in reconciling expectations and practices they experience in their different roles and from their own earlier history (Oldrup 1999). Through their process of identity construction, these women are incorporating values typically associated with an urban identity into the family farm (Oldrup 1999). Urban identity often includes valuing ideals of and being more familiar with the waged labor economies of urban areas (Marini and Mooney 2006). Farming background may influence a woman's orientation to farming and whether she has a farming identity, and may affect willingness and type of involvement in on or off-farm labor.

#### *On-farm or off-farm labor participation by farming background*

The way in which a woman experiences her role as a farm woman may differ by way of her own personal background prior to becoming a farm woman. Concerning the

concept of farm task involvement, women who have more experience in farming are more involved in on-farm work tasks (Bokemeier and Garkovich 1987; Rosenfeld 1986). Farming background and personal human capital are related to women's ability and willingness to become involved in farming activities (Bokemeier and Garkovich 1987). Women not raised on a farm had fewer farm-related skills, preventing their full involvement (and willingness to be involved) in other farm production tasks, while the opposite was true for women with farming backgrounds (Blanc and MacKinnon 1990; Bokemeier and Garkovich 1987). Oldrup (1999) also found that some women who were raised off-farm indicated that the division of labor on the farm is one of necessity due to lack of farming knowledge. One woman noted that "I cannot do the work outside, I would have to learn it—what the pigs eat and why. But then I think—really there is no need, as it is him who wants the animals" (Oldrup 1999:351). Also, women raised on a farm were more likely to discuss farm-production related decisions with their spouse and perceived themselves as having greater influence in farming decision-making processes (Rosenfeld 1986; Bokemeier and Garkovich 1987).

Concerning participation in off-farm employment, farm women are most likely to be employed off-farm if they were raised off-farm (Blanc and MacKinnon 1990). Current farm women with a nonfarm background lack identification with a farming identity since it is centered around household work and what is perceived in agrarian ideology as a farm 'helper' role, but they identify more with paid employment being an important part of their identity and thus readily participate in it (Oldrup 1999).

Our identities are closely linked to our behaviors within interactions. Growing up on a farm/ranch setting or living most of one's life on-farm may contribute to one having

a farm (or farm-family) identity that makes it both easier to identify with and be able to work on-farm and also discourages working off-farm. Those who grew up off-farm and those who have spent less time on-farm in general may not have this identity may be more likely to work off-farm.

#### *Reasons for not working off-farm*

Motivations for working off-farm or not working off-farm are important to understand as being influenced by farming background as well. As previously mentioned, women with a farming background may find it easier to adapt to farm life where years of family history and experience socialized them into a farming role (Cummins 2005). They may be more likely to indicate that they are needed in a work role on-farm and thus choose not to work off-farm for this reason. In addition, being needed at home, especially to care for children, is a reason that farm women do not seek off-farm employment (Wozniak and Scholl 1990). Wozniak and Scholl (1990) found that some women cited family responsibilities for not working off-farm, yet none of the men listed this reason. They posit that family roles and work roles have different boundaries for men and women. In this way, it is viewed as acceptable for the wife's family role to interfere with her work role, but this is not acceptable for the husband. In this way, "The wife's family role is allowed to interfere with her work role, but the husband's family role must not intrude on his work role. Conversely, the wife's work role must not intrude on her family role, but the husband's work role is expected to do so" (Wozniak and Scholl 1990:339). This relates directly to the concept of traditional family roles being present and valued in agrarianism, and those raised on-farm or spending more of their life on-farm would be more likely to value these roles. Many women who are employed part-time or full-time

off-farm struggle with deviating from traditional gender roles as a farm wife and mother (Naples 1994). One respondent in Naples' study (1994) explained that she "has not been able to resolve the competing pressures to perform her duties as a farm wife and earn a salary" (p. 126).

#### *Reasons for working off-farm*

Many farm women do find some satisfaction in off-farm labor through increased social encounters off-farm, making a personal income (for their own use and unrelated to the family income), increased independence, filling spare time, maintaining career skills, and/or personal fulfillment (Naples 1994; Smyth 2007; Wozniak and Scholl 1990). Many women felt social gains from employment including the opportunity to be around more people, make new friends, and develop relationships with co-workers. Most women liked the change from the relative isolation of the farming enterprise to interacting with others at work (Naples 1994). Wozniak and Scholl also found that women were more likely than men to list working for enjoyment or working due to being dissatisfied with staying on-farm. Many of these social/non-economic motivations for working off-farm could be identified as a part of a more urban, waged labor identity and valued more by those without or less of a farming background. While the motivations above expanded upon the noneconomic, farming identity-related reasons for entering or not entering off-farm labor, the need to include reasons of structural or financial need will be examined as well.

#### *Non-identity related motivations for employment*

Many studies have highlighted that farm women's motivations for employment are influenced by non-identity factors: both those related to financial need as well as for



noneconomic reasons (Wozniak and Scholl 1990). Non-economic reasons include both structural and individual factors. These include fluctuations in rural job availability and the types of jobs available. In addition, the ability of women to work due to physical or retirement reasons (Ollenburger et al. 1989) and age can affect the on-farm task load and ability to work off-farm as well (Rosenfeld 1986). With time, women raised off-farm may adjust to their farm life and reconstruct their identity to include aspects of a farming/agrarian identity (Cummins 2005). However, Wozniak and Scholl (1990) did not find age to be a factor that distinguished between reasons for working off the farm nor did it distinguish between reasons for not working off-farm. Presence of children and marital status have had varied effects on off-farm employment rates. There has been an increase in married women and women with preschool aged children in the paid labor force, but more single women than married women have been found to be working in the paid labor force (Ollenburger et al. 1989). Wozniak and Scholl (1990) found no effect for youngest child's age upon employment motivations. As the participation rate for farm women in off-farm employment increases, the effects of human capital factors decrease (Ollenburger et al. 1989).

But it is still important to examine human capital factors, as most research indicates that they have some influence upon work decisions. Previous research has indicated that these characteristics are theoretically and empirically tied to the off-farm participation rates of farm women (Godwin and Marlowe 1990). Specifically, both women's family income and level of education have large effects upon waged labor participation rates and motivations for seeking off-farm labor (Bokemeier, Sachs, and Keith 1983).

### *Income*

One significant human capital predictor of farm women's off-farm labor force participation is family income. The basis for this individual factor is that lower family income forces the necessity of working in the waged labor force in order to maintain the family farming enterprise (Godwin and Marlowe 1990; Ollenburger et al. 1989). In the U.S., a majority of farms are too small to fully employ more than one person with the farming income (Bjorkhaugh and Blekesaune 2007; Perry and Ahearn 1994). In our modern consumer-driven economy, more cash is needed to support family farms due to more machinery being used as well as the unstable nature of farming income (Perry and Ahearn 1994). For example, Godwin et al. (1991) found that the families where farm women are employed off-farm had a significantly higher debt to asset ratio compared to families with farm women who were not employed. Bokemeier, Sachs, and Keith (1983) found lower gross sales to be associated with women's employment off-farm, yet found family income to be positively associated with employment. They suggested this is a buttressing effect for the inconsistent farming sales income. Financial security is provided by having someone, usually the farm woman, employed off-farm. Women may make the best economic contribution to the household by being employed off-farm (Perry and Ahearn 1994).

### *Education*

Another important human capital predictor of farm women's off-farm labor force participation is level of education. Becker states that "education and training are the most important investments in human capital" (1993:17). The basis for this individual factor is

that the more education a woman has obtained, the more likely she will be to utilize it by joining the waged labor force off-farm (Ollenburger et al. 1989). In addition, more employment opportunities will be available to women as their level of education increases (Rosenfeld 1986). Ollenburger et al. (1989) found that farm women who had more than a high school degree were more likely to be in the paid labor force, all things being equal. Studies consistently find that increases in education explain the largest proportion of variance in the increase of women's off-farm employment both in the U.S. (Bokemeier et al. 1981; McCarthy, Salant, and Saupe 1988) and Europe (Haugen and Blekesaune 2005).

Economists and policy makers often assume farm men and women are rational individuals working off-farm solely for economic reasons (Wozniak and Scholl 1990). The purpose of this study is to examine the motivations for either working off-farm or staying on-farm by current farm women. So although it is important to include the economic, structural, and human capital factors in determining why farm women do or do not decide to work off-farm, this study expands previous work to include social and non-economic reasons using the framework of identity theory and farming background. With this goal in mind, this study will expand the literature on farm women and employment motivations and help inform policy makers about this important demographic of women. As emphasized by Wozniak and Scholl (1990), "Because agricultural and employment policies are based upon rational economic decision-making, such policies may be ineffective if off-farm employment decisions are affected by social or other noneconomic reasons" (p. 323).

## HYPOTHESES

The current study will utilize data from a survey of women on family farms to examine the effect of farm/ranch background as a proxy for identity upon off-farm employment and motivations for off-farm employment. Farm/ranch background is conceptualized in two separate ways: being raised on-farm and the percentage of a woman's life she has spent on-farm. Different motivations for working off-farm or staying on-farm will be examined. The structural motivations—money/benefits reasons for working off-farm and being unable to work off-farm as reason for staying on-farm—will be examined similarly to past research but are not hypothesized to differ by farming background identity. The following hypotheses were developed from a foundation of identity theory and based on past research on agrarian identity and farm women:

1. Farm women with a farm/ranch background will be less likely to work off-farm than those without a farming background.
2. Of those who have worked off-farm, farm women with no farm/ranch background will be more likely to give social/non-economic reasons for working off-farm than those with a farming background.
3. Of those who have not worked off-farm, farm women with a farm/ranch background will be more likely to indicate they stayed on-farm because they were needed there than those without a farming background.

## DATA AND METHODS

### *Survey*

This study will utilize the cross-sectional data collected from a mail survey sent to women on wheat and cattle operations across the state of Washington in 2006 by Dr. Jolene Smyth (Smyth 2007). The statewide sample was obtained using systematic random sampling from the USDA/National Agricultural Statistics Service (NASS) list of farms and ranches in the state of Washington. After sorting by county, a systematic sample of operations was selected in which 1,080 operations were sampled from the wheat stratum and 1,160 operations from the cattle stratum for a total of 2,240 operations which were then further refined to yield the sample (Smyth 2007).

The sampling frame of these strata were based on operations with sales equal or greater than \$1,000 and excluded Washington State University educational farms, Indian reservations, Washington Department of Fish and Wildlife operations, and cooperative agreements (Smyth 2007). For the wheat stratum, the primary type of farming was coded as grain farming and the farm must have reported positive wheat acreage, while for the cattle stratum the primary farm type was coded as cattle and calves, and the farm must have reported positive head of cattle but less than five head of milk cows. The final sample size was 1,475 family farms with 732 from the wheat stratum and 743 from the cattle sample (Smyth 2007). The survey envelopes were addressed to the primary farm operator with instructions in the cover letter that the survey was intended for the primary adult woman (age 18+) in the household to complete and return.

A total of 491 of the 1,475 surveys were returned completed, and of these 21 were deemed ineligible for the study due to some being mistakenly answered by men and

others mistakenly filled out by women whose family farm/ranch had been sold, yielding a final sample of 470 (Smyth 2007).

## MEASURES/VARIABLES

### *Independent variables*

*Farm/Ranch background.* The focal independent variable is farming/ranching background and is measured in two ways. First, being raised on-farm is measured by the question “While growing up did you live mostly on a farm/ranch or mostly elsewhere?” and is coded such that those raised on-farm have a value of 1 and those raised off-farm have a value of 0. The other variable, percentage of life spent on-farm, measures one’s farming background over her whole life to date. It was measured in the question “Over your entire life, how many years have you lived or worked on a farm/ranch?” and this was divided by the respondent’s age in order to create the percentage of a woman’s total life she has spent on-farm.

### *Dependent variables*

*Off-farm employment.* The dependent variable of off-farm employment was captured in the question “Since coming to this farm/ranch, which of the following best describes your and/or your spouse/partner’s employment in off-farm jobs? Please consider both full and part time jobs.” Respondents were given separate answer spaces for themselves and their spouse/partner. The response choices included: currently employed off-farm, employed off-farm in the past year, employed off-farm in the past 5 years, employed off-farm over 5 years ago, and never been employed off-farm. If the respondent indicated she and/or her partner had been employed off-farm, she was

directed to continue on to questions delving into the reasons for doing so. Otherwise, respondents that indicated that neither they nor their partner had been employed off-farm in the past five years (i.e. having selected either “employed off-farm over 5 years ago” or “never been employed off-farm”) were directed to a question about the reasons for that decision.

### *Reasons Have Worked Off-farm*

Those who had worked off-farm were asked to “Please indicate whether or not each of the following describes why you and/or your spouse/partner currently work or have worked off the farm/ranch in the past 5 years.” Response options included family needed the money, to be around other people, to get away from the farm/ranch, to earn personal income (for her own use separate from family income), to gain independence, for the challenge, to get health insurance, and for retirement benefits. From these options, scales were created to gain a better understanding of why some farm women have chosen to work off-farm. Examining the questions, face validity pointed to two distinct scales: a Money/Benefits scale and a Social/Non-economic scale. Factor analysis confirmed this with the identification of two latent factors. The Money/Benefits factor had an eigenvalue of 1.27 and  $\alpha = 0.71$ . The resulting scale was comprised of the means between the response options: family needed the money, to get health insurance, and for retirement benefits. The Social/Non-economic factor had an eigenvalue of 1.73 and  $\alpha = 0.73$ . The resulting scale contained the means across the items: to be around other people, to get away from the farm/ranch, to earn personal income, to gain independence, and for the challenge.

### *Reasons Have Not Worked Off-farm*

Respondents who had not worked off-farm within the last five years were directed to “please indicate whether or not each of the following reasons describes why.” Response choices were: needed on the farm/ranch, needed at home, wasn’t satisfied with the job, was laid off or fired, don’t need the money, cannot find a job, retired, and disabled or otherwise unable to work. Scales were created to gain a better understanding of why some farm women have never worked off-farm. Examining the questions, face validity pointed to two distinct factors: items related to being “needed elsewhere” and items related to being “unable to work”. Factor analysis confirmed this with the identification of two latent factors. The needed elsewhere factor had an eigenvalue of 1.37 and  $\alpha = 0.78$ . The resulting scale consisted of the means of two response options: needed on the farm/ranch and needed at home. The unable to work factor included the items: cannot find a job, retired, and disabled or otherwise unable to work. It does not make sense conceptually to scale these items together since a woman would most likely only fall into one of these categories, so they will be examined separately.

### *Control Variables*

As previously mentioned, research has indicated that human capital characteristics are theoretically and empirically tied to the off-farm participation rates of farm women (Godwin and Marlowe 1990). Thus, six control variables were included in the analysis: age, education, income, marital status, whether a woman has children or not, and a variable to include those who had missing data on the income item. Age was calculated by taking the interview year minus the year given in the question “What is your birth



date?” Education was measured in the question “What is your highest level of education?” and response choices included 8th grade or less; 9-11th grade; high school or equivalent; some college (no degree); vocational or technical school graduate; associates degree (A.A.); college graduate (B.S., B.A); and post-graduate training. This was recoded into three categories: high school or less, some college/two year degree, and four year degree or more. Income was measured in the question “In 2005, what was your total (i.e., after farm/ranch expenses) family income from all sources, before taxes?” and response choices included six categories that increased in increments of 20,000 dollars each ranging from “Less than \$19,999” to “\$100,000 or more.” This was recoded into three categories: \$39,999 and below, \$40,000 to \$79,999, and \$80,000 or more. An income missing variable was created so that the 55 women who did not respond to the income variable were coded 1 while those who did were coded 0. It is commonly the case that there is missing data on an income variable, so I include this dummy missing variable to avoid dropping these cases from the analyses. Marital status was recorded in the response to the question “What is your current marital status?” with response choices of married, living together unmarried, separated, divorced, widowed, and never married. This was recoded such that those who are married or cohabiting have a value of 1 and all others have a value of 0. Whether a woman had children or not was measured in the question “Please tell us the sex and age of each of your children...” and a variable was created in which 0 indicates that the respondent has no children and 1 indicates that the respondent has children.

## ANALYTIC STRATEGY

Bivariate analyses are examined for the association between the focal variables. Next, multivariate models are used to test the same associations, but controlling for a number of factors that might be associated with both the independent and dependent variables. Logistic regression models are used when the dependent variable is dichotomous, and ordinary least squares regression is used when the dependent variable is continuous. List-wise deletion was utilized in the regression analyses to handle missing item data, with the exception of missing data on the income variable, as previously explained.

## RESULTS

Table 1 shows the descriptive statistics for the sample. The average age of the respondents was 56 years. Most of the women were married/cohabiting (94 percent) and had at least one child (89 percent). Sixty-eight percent had attended at least some college including those receiving two- and four- year degrees, and 71 percent reported an income of \$79,999 or below. Eighty-six percent of the sample has been employed off-farm at some point. Scales were created for the motivations for working off-farm or remaining on-farm, and the mean of these scales is the average proportion of scale items that the respondent indicated as reasons for working off-farm or staying on-farm. Of those who have worked off-farm in the past five years, the mean score of the money or benefits-related reasons scale was 77 percent and the mean score of the social or non-economic reasons scale was 51 percent. Of those who said they have not worked off-farm in the past five years, the mean score for being needed elsewhere was 78 percent. In

addition, of those who said they have not worked off-farm in the past five years, 0.02 percent could not find a job, 32 percent were retired, and 0.07 percent were disabled or physically unable to work. A slight majority of women were raised off-farm (55 percent) and the average percent of life spent on-farm was 61 percent.

### *Bivariate analyses*

Table 2 shows the results of bivariate analyses examining the relationship between whether one was raised on- or off-farm and off-farm employment. Overall, this relationship is statistically significant  $\chi^2(4, N=451) = 17.28; p < .01$ . Looking at the individual categories, women who were raised on-farm were less likely to be currently employed (40 percent compared to 59 percent;  $t=3.98, p < .001$ ). Interestingly, those raised on-farm were significantly more likely than those raised off-farm to have been employed more than five years ago, which is opposite of what was expected (31 percent compared to 18 percent  $t=-3.16, p=0.99$ ). Overall, looking across all the categories, 88 percent of women raised off-farm have worked off-farm at some point (i.e., “Ever”) compared to 83 percent of those raised on-farm ( $t=1.53, p=0.06$ ), a finding that is consistent with Hypothesis 1.

**Table 1: Descriptive Statistics**

	Frequency	Mean/Percent	SD	Min	Max
<b>Control variables</b>					
Age	461	55.87	11.90	21	88.00
Missing	9				
Married/cohabiting	470	93.62			
Has Children	419	89.15			
No Children	51	10.85			
Education					
High School or Less	102	21.98			
Some College/2 Yr Degree	214	46.12			
4 Yr Degree+	148	32.00			
Missing	6				
Income					
\$39,999 and Below	184	39.15			
\$40,000 to \$79,999	148	31.49			
\$80,000+	83	17.66			
Income missing <sup>a</sup>	55	11.70			
<b>Dependent variables</b>					
Ever Employed Off-farm	393	86.00			
Never Employed Off-farm	64	14.00			
Missing	13				
<i>Off-farm Employment Motivations</i>					
Money/Benefits scale <sup>b</sup>	264	76.77	33.38	0	100.00
Social/Non-economic scale <sup>b</sup>	256	51.00	35.52	0	100.00
<i>Staying On-farm Motivations</i>					
Needed Elsewhere scale <sup>b</sup>	91	78.03	37.42	0	100.00
Can't find a job	4	0.02			
Retired	55	31.98			
Disabled/Physically Unable	12	0.07			
<b>Independent variables</b>					
Raised on-farm	208	44.83			
Raised off-farm	256	55.17			
Missing	6				
Percentage of life spent on-farm	457	60.64	26.92	1.43	100.00
Missing	13				

<sup>a</sup>Note: Income missing cases are included as a dummy variable in the regression models to retain those cases. All other variables are percentaged not including the missing values.

<sup>b</sup>Note: Motivations scales' means are average proportion of scale items respondent marked Yes  
Sample n=470

**Table 2: Percent of Farm Women Working Off-farm by Raised On- or Off-farm**

<i>Off-farm Employment</i>	Raised off-farm n=251	Raised on-farm n=200	t <sup>1</sup>	p
Currently n	58.57% 147	40.00% 80	3.98	0.001
In the past year n	3.19% 8	3.00% 6	0.11	0.45
In the past 5 years n	8.37% 21	9.50% 19	-0.42	0.66
Over 5 years ago n	17.93% 45	30.50% 61	-3.16	0.99
Never <sup>a</sup> n	11.95% 30	17.00% 34	-1.53	0.06
Ever <sup>a</sup> n	88.05% 221	83.00% 166	1.53	0.06

$\chi^2$  (4, N=451) = 17.28; p<.01

<sup>1</sup>One-sided t tests

<sup>a</sup>Constructed to compare those never employed off-farm to those ever employed off-farm (the combined categories of currently through over 5 years ago)

Table 3 shows the results of bivariate analyses examining the association between percent of life spent on-farm and off-farm employment. Overall, this relationship is statistically significant  $\chi^2$  (4, N=444) = 11.11; p<.05. As percentage of life spent on-farm increases, the percentage of women indicating they have never worked off-farm increases and the percentage of women indicating they have ever worked off-farm decreases, a finding that is consistent with Hypothesis 1.

**Table 3: Percent employed by percentage of life spent on-farm**

<i>Off-farm Employment</i>	Percent of life spent on-farm				
	0-20%	21-40%	41-60%	61-80%	81-100%
Never <sup>a</sup>	5.41%	8.96%	9.92%	18.75%	20.33%
n	2	6	12	18	25
Ever <sup>a</sup>	94.59%	91.04%	90.08%	81.25%	79.67%
n	35	61	109	78	98

$\chi^2 (4, N=444) = 11.11, p < .05$ , based on Fisher's exact

<sup>a</sup>Constructed to compare those never employed off-farm to those ever employed off-farm (the combined categories of currently through over 5 years ago)

As Table 4 shows, there were differences across those raised on- and off-farm in motivations for working off farm as well. Women raised on-farm had a slightly higher mean (0.80) than those raised off-farm (0.75) on the Money/Benefits scale, indicating that they were more likely to indicate a need for money or benefits as reasons for having worked off-farm, but the difference did not reach statistical significance ( $t = -1.26, p = 0.21$ ). However, women who were raised on-farm had a significantly lower mean (0.47) than those raised off-farm (0.53) on the Social/Non-economic scale, indicating they were less likely to cite non-economic and social reasons as their motivation for working off-farm, and this difference is marginally significant ( $t = 1.46, p = 0.07$ ). Taken together, these findings hint that women raised on-farm may be more likely to leave the farm to work for more structural or need-based reasons and less likely to do so for social and non-economic reasons than those raised off the farm. Likewise, these findings correspond with predictions that those raised off-farm would have an identity more closely related to wage-labor environment and skills and personal desires to be independent.

Those raised on- and off-farm who have not worked off-farm differ in their motivations for this as well as shown in Table 4. Women raised on-farm had a higher mean (0.83) than those raised off-farm (0.72) in the Needed Elsewhere (e.g. on farm or at home) scale. These findings were similar to expectations in that women with a farming background would be more likely to identify with being needed on-farm and having the skills and desire to work on-farm, but this difference is only moderately significant ( $t=1.38$ ,  $p=0.09$ ). The relationships between being raised on- or off-farm and not being able to find a job or being disabled or physically unable to work are not statistically significant. However, a higher proportion of women raised on-farm than off-farm indicated they did not work off-farm because they were retired ( $t=-2.93$ ,  $p<.01$ ). This may be due to an age effect, as those raised on-farm have a significantly higher average age than those raised off-farm (raised on-farm 58 years old versus raised off-farm 55 years old;  $t=-2.65$ ,  $p<.01$ ).

**Table 4: Reasons Farm Women Have and Have Not Worked Off-farm by Raised on- or off-farm**

<i>Reasons Farm Women Have Worked Off-farm</i>				
	Raised Off-farm	Raised On-farm	t	p
Money/Benefits scale <sup>2</sup>	0.75	0.80	-1.26	0.21
Social/Non-economic scale <sup>1</sup>	0.53	0.47	1.46	0.07
<i>Reasons Farm Women Have Not Worked Off-farm</i>				
Needed elsewhere scale <sup>1</sup>	0.72	0.83	-1.38	0.09
Cannot find a job <sup>2</sup>	0.04	0.09	-0.86	0.39
Retired <sup>2</sup>	0.41	0.72	-3.06	0.003
Disabled/Physically unable <sup>2</sup>	0.17	0.21	-0.39	0.69

<sup>1</sup>one-sided t tests

<sup>2</sup>two-sided t tests

Note: One-sided t tests were done for scales that were hypothesized in one direction, while two-sided tests were done for scales and items not hypothesized to differ by being raised on or off-farm.

Table 5 shows the results of bivariate analyses examining percentage of life spent on-farm and structural reasons for staying on-farm. None of these reasons were hypothesized to differ by farming background, and none of the items have statistically different means for percentage of life spent on-farm. No models are estimated with the “cannot find a job” or “disabled or physically unable” items due to them having few cases.



**Table 5: Percent selecting each reason for not working off-farm by percent of life spent on-farm**

	Percent of life spent on-farm					$\chi^2$	p
	0-20%	21-40%	41-60%	61-80%	81-100%		
Cannot find a job	0.00%	20.00%	4.00%	10.00%	11.11%	2.600	0.63
n	0	2	1	2	2		
Retired	75.00%	60.00%	36.36%	60.87%	65.52%	5.38	0.25
n	3	6	8	14	19		
Disabled/Physically unable	25.00%	22.22%	20.69%	27.27%	11.11%	1.64	0.80
n	1	2	6	6	2		

Note: Based on Fisher's exact test for cells  
n < 5

### *Multivariate Analyses*

Concerning hypothesis 1, Table 6 shows the logistic regression analyses predicting ever being employed off-farm, with Model 1 having raised on-farm as the focal independent variable and Model 2 using percentage of life spent on-farm as the focal independent variable and with all the control variables included in the models. Unlike the bivariate analyses, being raised on-farm was not statistically significant for predicting ever being employed off-farm. However, controlling for age, marital status, education, income, having children, and those missing on income, each percentage point increase in percent of life spent on-farm decreased the estimated odds of ever being employed off-farm by 1.3 percent (OR=0.99, p<.05). Each year increase in age also decreased the odds of having ever worked off-farm by 5.3 percent and 5.1 percent respectively (OR=0.95, p<.001).

**Table 6: Logistic regression models predicting ever being employed off-farm**

	Model 1		Model 2	
	B	Odds Ratio	B	Odds Ratio
Raised on-farm	-0.24	0.78 [0.23]		
Percentage of life spent on-farm			-0.01	0.99 * [.01]
Age	-0.05	0.95 *** [0.01]	-0.05	0.95 *** [0.01]
Married/cohabiting	0.32	1.38 [0.70]	0.28	1.32 [0.68]
Some College/2 Yr Degree	0.33	1.40 [0.50]	0.28	1.32 [0.47]
4 Yr Degree+	0.32	1.37 [0.55]	0.25	1.28 [0.51]
Income \$40,000 to \$79,999	0.68	1.96 + [0.76]	0.62	1.87 [0.72]
Income \$80,000+	0.34	1.40 [0.63]	0.30	1.36 [0.62]
Has Children	0.43	1.54 [0.71]	0.55	1.73 [0.81]
Income missing	-0.29	0.75 [0.32]	-0.32	0.73 [0.32]
McFadden's R <sup>2</sup>		0.11		0.12
		LR $\chi^2(9)=37.90$ , p<.001		LR $\chi^2(9)=11.47$ , p<.001

Note: \*\*\*p ≤ .001; \*\*p ≤ .01; \*p ≤ .05; +p < .10

n=436

*Reasons Have Worked Off-farm.* Next, I examine the reasons those who have worked off-farm in the last five years have done so. Unrelated to farming background and identity, money/benefits related reasons may influence a woman's motivations for working off-farm. Table 7 shows that being raised on-farm is not a significant predictor of money/benefits reasons for working off-farm (Model 1), while percentage of life spent

on-farm is a marginally significant predictor of indicating money/benefits reasons in Model 2. Increases in the percentage points of a woman's life that she's spent on-farm lead to increases in selecting money/benefits items as reasons for seeking off-farm employment ( $B=0.001$ ,  $p<.10$ ). It may be that those with a farming identity developed over time on the farm are more likely to work off-farm when it is necessary for financial reasons. In both models, those who attended some college or have a two year degree and those who have a four year degree or more have significantly higher scores on the money/benefits scale, indicating they selected more money/benefits items than their counterparts.<sup>1</sup>

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<sup>1</sup> In Table A.1, Appendix A, logistic regression analyses examined predictors for each of the money/benefits related reasons for working off-farm individually. Being raised on-farm versus off-farm did not significantly predict any of the three items. But each percentage point increase in life spent on-farm increased the odds of indicating the family needed the money by 2 percent and the odds of indicating they work to get health insurance by 1 percent.

**Table 7: OLS regression models predicting Money/Benefits reasons for working off-farm**

	Model 1	Model 2
	B [robust se]	B [robust se]
Raised on-farm	0.05 [0.05]	
Percentage of life spent on-farm		0.001 + [0.008]
Age	0.00 [0.00]	0.001 [0.002]
Married/cohabiting	-0.05 [0.10]	-0.06 [0.10]
Some College/2 Yr Degree	0.14 * [0.07]	0.15 * [0.07]
4 Yr Degree+	0.18 * [0.07]	0.18 ** [0.07]
Income \$40,000 to \$79,999	0.06 [0.05]	0.06 [0.05]
Income \$80,000+	0.03 [0.06]	0.04 [0.06]
Has children	-0.01 [0.08]	-0.03 [0.07]
Income missing	-0.01 [0.08]	0.000 [0.09]
	R <sup>2</sup> 0.05	0.06
	F(9, 244) = 1.60, p<.05	F(9, 244) = 1.60, p<.05

Note: \*\*\*p ≤ .001; \*\*p ≤ .01; \*p ≤ .05; +p < .10  
n=254

Farming background and identity are expected to be predictors of social/non-economic motivations for working off-farm in hypothesis 2. In Table 8, a scale consisting of all of the social/non-economic reasons for working off-farm was examined for

associations using separate models by each focal independent variable as well. In Model 1, women raised on-farm had a lower mean number of social/non-economic reasons for working off-farm compared to women raised off-farm net of the effects of the other variables, but this association is only approaches significance ( $B=-0.09$ ,  $p<.10$ ). In Model 2, percentage of life spent on-farm was not a significant predictor of social/non-economic reasons for working off-farm. In both models, women who were married had marginally lower scores on the social/non-economic reasons scale for working off-farm (Model 1:  $B=-0.24$ , Model 2:  $B=-0.21$ ;  $p<.10$ ), while those with the highest incomes scored marginally higher on the social/non-economic motivations scale compared to their counterparts with the lowest income (Model 1 and 2:  $0.11$ ,  $p<.10$ ).<sup>2</sup>

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<sup>22</sup> The individual items for social/non-economic motivations are examined in Tables A.2 and A.3 in Appendix A. Those raised on-farm had 58 percent lower odds of indicating they work off-farm to gain personal income, holding other variables constant ( $OR=0.42$ ,  $p<.01$ ). Those raised on-farm also had significantly lower odds of indicating they worked off-farm to gain independence ( $OR=0.52$ ,  $p<.05$ ) or for the challenge ( $OR=0.48$ ,  $p<.05$ ) compared to those raised off-farm. Each percent increase in percentage of life spent on-farm is associated with 1 percent lower estimated odds of working off-farm to earn personal income, after accounting for other variables ( $OR=0.99$ ,  $p<.05$ ).

**Table 8: OLS regression models predicting Social/Non-economic reasons for working off-farm**

	Model 1		Model 2	
	B [robust se]		B [robust se]	
Raised on-farm	-0.09	+		
	[0.05]			
Percentage of life spent on-farm			-0.001	
			[0.001]	
Age	0.003		0.003	
	[0.002]		[0.002]	
Married/cohabiting	-0.24	*	-0.21	*
	[0.11]		[0.11]	
Some College/2 Yr Degree	0.10		0.08	
	[0.07]		[0.07]	
4 Yr Degree+	0.01		-0.01	
	[0.07]		[0.07]	
Income \$40,000 to \$79,999	0.08		0.08	
	[0.05]		[0.05]	
Income \$80,000+	0.11	+	0.11	+
	[0.06]		[0.07]	
Has children	-0.11		-0.10	
	[0.07]		[0.07]	
Income missing	-0.12		0.110	
	[0.08]		[0.08]	
	R <sup>2</sup>	0.01	0.060	
		F(9, 235) = 1.73, p=.08	F(9, 235) = 1.57, p=.12	

Note: \*\*\*p ≤ .001; \*\*p ≤ .01; \*p ≤ .05; +p < .10

n=245

*Reasons Have Not Worked Off-farm.* Of those who have not worked off-farm in the last five years, the motivations for not doing so are examined next. Farming

background and identity are expected to be predictors of women reporting they do not work off-farm because they are needed elsewhere in hypothesis 3. Table 9 examines a scale consisting of both needed elsewhere reasons for working off-farm (needed at home and needed on the farm) for associations using separate models by each focal independent variable. In Model 1, being raised on-farm was not a significant predictor of indicating being needed elsewhere as motivation for not working off-farm. In Model 2, percentage of life spent on-farm has a positive association with indicating being needed elsewhere as motivation for not working off-farm, controlling for other variables ( $B=.005, p<.05$ ). That is, each percentage point increase in life spent on-farm resulted in an increase of 0.005 in the needed elsewhere scale.<sup>3</sup>

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<sup>3</sup> In Tables A.4 and A.5, Appendix A, logistic regression models predict the two reasons of being needed on-farm or at home by each farming background focal independent variable. Being raised on-farm is not a significant predictor of either of the needed elsewhere reasons for not working off-farm. However, each percent increase in percentage of life spent on-farm was associated with a 3 percent ( $p<.05$ ) increase in estimated odds of indicating being needed on the farm/ranch and a 6 percent ( $p<.01$ ) increase in odds of indicating being needed at home as reasons for not working off-farm.

**Table 9: OLS regression models predicting Needed elsewhere reasons for not working off-farm**

	Model 1	Model 2
	B [robust se]	B [robust se]
Raised on-farm	0.08 [0.08]	
Percentage of life spent on-farm		0.005 * [0.002]
Age	-0.002 [0.003]	-0.003 [0.003]
Married/cohabiting	-0.08 [0.17]	-0.09 [0.15]
Some College/2 Yr Degree	0.11 [0.12]	0.12 [0.11]
4 Yr Degree+	0.04 [0.13]	0.08 [0.12]
Income \$40,000 to \$79,999	-0.09 [0.11]	-0.07 [0.10]
Income \$80,000+	-0.18 [0.13]	-0.12 [0.13]
Has children	-0.003 [0.16]	-0.01 [0.14]
Income missing	-0.24 [0.16]	-0.19 [0.14]
	R <sup>2</sup> 0.09	0.16
	F(9, 77) = 1.08, p=.38	F(9, 77) = 1.60, p=.13

Note: \*\*\*p ≤ .001; \*\*p ≤ .01; \*p ≤ .05; +p < .10

n=87

The final reasons for not working off-farm were not being able to find a job, being retired, and being disabled or physically unable to work. Because of the small proportion who selected “can’t find a job” and “disabled or physically unable to work” as reasons for not working off-farm, I do not estimate multivariate models for them here.



However, I do estimate a model for retirement. Retirement would logically influence a woman to not work off-farm, regardless of her farming background. Table 10 shows the results of logistic regression models predicting retirement as a reason for not working off-farm by being raised on-farm (Model 1) and percent of life spent on-farm (Model 2). Even after controlling for age and the other variables, the odds of indicating retirement were much higher for women raised on-farm compared to those raised off-farm (OR=9.09,  $p<.01$ ). As expected, each year increase in age increased estimated odds by 28 percent and 24 percent respectively for indicating retirement as a reason for not working off-farm in both models ( $p<.001$ ). Percent of life spent on-farm was not a significant predictor of indicating retirement as a reason for not working off-farm.

**Table 10: Logistic regression models predicting Retired as reason for not working off-farm**

	Model 1			Model 2		
	B	Odds Ratio		B	Odds Ratio	
Raised on-farm	2.21	9.09	**			
		[7.26]				
Percentage of life spent on-farm				0.004	1.00	
					[0.01]	
Age	0.24	1.270	***	0.22	1.20	***
		[0.07]			[0.06]	
Married/cohabiting	-2.41	0.09	+	-2.47	0.08	+
		[0.13]			[0.12]	
Some College/2 Yr Degree	0.64	1.90		0.76	2.14	
		[1.67]			[1.75]	
4 Yr Degree+	-0.10	0.91		0.28	1.32	
		[0.83]			[1.15]	
Income \$40,000 to \$79,999	1.71	5.55	+	0.77	2.15	
		[5.25]			[1.77]	
Income \$80,000+	-0.04	0.96		-0.24	0.78	
		[1.10]			[0.75]	
Has children	-0.72	0.480		-0.03	0.98	
		[0.55]			[1.02]	
Income missing	2.00	7.40	+	2.16	8.66	+
		[8.9]			[10.40]	
McFadden's R <sup>2</sup>		0.53			0.46	
		LR $\chi^2(9) = 65.57, p < .001$			LR $\chi^2(9) = 54.84, p < .001$	

Note: \*\*\*p ≤ .001; \*\*p ≤ .01; \*p ≤ .05; +p < .10

n=90

## DISCUSSION AND CONCLUSION

Utilizing a foundation of identity theory and past research on agrarian/farming identity and farm women, three hypotheses were developed and tested in this study.

Hypothesis 1 examined the relationship between farming background and being ever employed off-farm. Those with a farming background were hypothesized to be less likely to work off-farm than those without a farming background. Although being raised on-farm was not found to be associated with off-farm employment, increased percentage of life spent on-farm was associated with being less likely to have ever worked off-farm, supporting Hypothesis 1. As expected, developing a farming identity over the span of one's life spent on-farm influences a woman to fulfill her role on the family farm instead of within the waged-labor market. Identities are fluid and can change over time, so it may be that simply being raised on-farm is not as salient in a woman's identity hierarchy as the amount of time she has been on-farm where she may continue to develop and reconstruct a farming identity.

Next, motivations for working off-farm were examined. Economic reasons for working off-farm were not expected to differ by farming background and were not specifically hypothesized. But these reasons are still important influences to examine. Of those who have worked off-farm in the past five years, those who have attended at least some college indicated a higher proportion of money/benefits reasons for working off-farm compared to women with a high school degree or less. This supports the notion that those with higher education will be more likely to utilize this resource by seeking a waged-labor position off-farm (Ollenburger et al. 1989).

Hypothesis 2 expected to find a relationship between farming background and social/non-economic reasons for working off-farm. It was hypothesized that farm women with no or less of a farming background will be more likely to work off-farm for social/non-economic reasons than those raised on-farm. Those raised on-farm and with

increased percentage of life spent on-farm were less likely to indicate that they work off-farm to gain personal income compared to those raised off-farm. In addition, those raised on-farm also were less likely to work off-farm in order to gain independence or for the challenge. This indicates that both measures of farming background show that farm women with a farming background identity may not relate to social/non-economic motivations that are more associated with the waged-labor employment ideal. Instead, they may more readily identify with other reasons of working off-farm that are closely tied to maintaining or supporting the family farming enterprise, although this was only marginally supported in the analyses with a positive association between percentage of life spent on-farm and money/benefits reasons for working off-farm.

Among those who have not worked off-farm in the past five years, motivations for not working off-farm were examined. In Hypothesis 3, it was hypothesized that farming background would be associated with indicating being needed elsewhere as a reason for staying on-farm. While being raised on-farm had no significant association with being needed elsewhere, increase in percentage of a woman's life spent on-farm was associated with indicating being both needed on the farm/ranch and needed at home as reasons for not working off-farm. This hypothesis was supported and maintains the idea that those women who have spent much of their lives on-farm have developed a farming identity that allows them to want to and have the skills to perform roles on the farm. It also supports the idea that agrarian ideology encompasses more traditional gender roles wherein women identify more strongly with being needed at home, to perform tasks such as childcare and household labor.

Retirement was not hypothesized to have a relationship with farming background. As expected, age increased a woman's odds of indicating retirement. Interestingly, even after controlling for all other variables, the odds of indicating retirement were significantly higher for women raised on-farm compared to those raised off-farm. This may be due to those being raised on-farm conceptualizing retirement differently than their counterparts raised off-farm. Women raised on-farm may consider themselves to be retired from a wage-earning perspective, while a more loose definition of retirement or being able to retire exists for working on-farm (if one exists at all).

This study, like all studies, is not without its limitations. These data are cross-sectional in nature which does not allow for causal arguments. These data look at farm women at one point in time, and future research should examine how farm women's motivations for employment may change over time as well as if or how their identities may change over time. Another limitation is missing data, and it cannot be assumed that item-missing is completely at random. Future studies would also benefit from attempting to collect a larger sample size from across various states within the United States in order to expand the generalizability of the results. Despite these limitations, this study will expand and update the literature within rural sociology by focusing on farm women's roles and employment motivations.

Overall, this study supports the idea that farming background and identity influence farm women's employment motivations. This research highlights that current farm women make important contributions to the family farming enterprise, yet the motivations for these various contributions may vary by farming background. Their motivations for which work roles they ultimately perform are influenced by not only

economic and human capital factors, but also by factors relating to farming/agrarian identity (or a lack of) as well. That is, some women identify with having a role in on-farm activities while some may identify and be more likely to support the farming enterprise via a system they are more familiar with—the waged labor market.

This study will help inform policy makers about the growing demographic of women who work off-farm as well as highlight the motivations of women who perform their work roles on-farm. Therefore, it is important for policy makers to keep in mind other factors influencing employment motivations, largely because current policies are created focusing primarily on economic motivations (Wozniak and Scholl 1990). Although farming background identity explains only a small amount of variance in motivations for employment, farm women seem to be reacting to structural and human capital factors as well as identity. As more women become employed off-farm, it is important also to offer jobs that a woman with a farming background would identify more with performing. Future research should explore any conflicts between identity and desired role and the work role a woman ends up fulfilling. This could lead to situations where working off-farm becomes necessary financially for a woman's family, but that work role is contrary to her identity and desired on-farm role. Future research should examine this for possible implications for health and mental health outcomes. The importance of women's varied contributions to the family farm and motivations for making those contributions is something policy makers should note in order to craft more-inclusive policies that are not solely focused on male-farmer work roles within family farming as well.

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## APPENDIX A

Table A.1: Logistic regression models predicting Money/Benefits reasons for working off-farm

	Family needed the money n=248			To get health insurance n=240			For retirement benefits n=234					
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio
Raised on-farm	0.61	1.83 [0.88]	0.01	1.02 + [.01]	0.28	1.33 [0.43]	0.01	1.01 + [.01]	-0.01	0.99 [0.33]	0.004	1.00 [.01]
Percentage of life spent on-farm												
Age	-0.02	0.98 [0.02]	-0.03	0.97 [0.02]	0.00	1.00 [0.01]	0.00	1.00 [0.02]	0.02	1.02 [0.02]	0.02	1.02 [0.02]
Married/cohabiting	-0.32	0.73 [0.81]	-0.32	0.73 [.81]	-1.02	0.36 [0.31]	-1.07	0.34 [.29]	-1.00	0.37 [0.32]	-0.95	0.39 [.34]
Some College/2 Yr Degree	0.64	1.89 [1.08]	0.75	2.12 [1.21]	0.80	2.21 * [0.89]	0.86	2.35 * [.94]	1.06	2.88 ** [1.22]	1.06	2.87 ** [1.20]
4 Yr Degree+	0.34	1.40 [0.80]	0.41	1.51 [.86]	1.60	4.96 *** [2.22]	1.66	5.25 *** [2.34]	1.29	3.63 ** [1.63]	1.27	3.56 ** [1.58]
Income \$40,000 to \$79,999	0.07	1.08 [0.58]	0.10	1.10 [.60]	0.40	1.51 [0.53]	0.44	1.56 [.55]	0.83	2.29 * [0.83]	0.84	2.32 * [.85]
Income \$80,000+	-0.73	0.48 [0.29]	-0.74	0.48 [.28]	0.19	1.21 [0.53]	0.22	1.24 [.54]	0.73	2.08 [0.95]	0.77	2.15 + [.98]
Has children	1.19	3.29 * [2.01]	0.98	2.67 [1.65]	-0.15	0.86 [0.46]	-0.26	0.77 [.41]	-0.77	0.46 [0.28]	-0.80	0.45 [.28]
Income missing	-1.21	0.30 + [0.19]	-1.10	0.33 + [.21]	0.46	1.58 [0.90]	0.58	1.79 [1.03]	0.48	1.61 [0.91]	0.54	1.71 [.97]
McFadden's R <sup>2</sup>		0.07		0.08		0.07		0.07		0.07		0.07
		LR $\chi^2(9) = 13.38, p < .15$		LR $\chi^2(9) = 15.16, p < .10$		LR $\chi^2(9) = 20.04, p < .05$		LR $\chi^2(9) = 22.21, p < .01$		LR $\chi^2(9) = 19.01, p < .05$		LR $\chi^2(9) = 19.51, p < .05$

Note: \*\*\*p ≤ .001; \*\*p ≤ .05; \*p ≤ .10

**Table A.2: Logistic regression models predicting Social/Non-economic reasons for working off-farm with Raised on-farm as focal independent variable**

	To be around other people n=226		To get away from farm/ranch n=214		To earn personal income n=238		To gain independence n=224		For the challenge n=219	
	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio
Raised on-farm	-0.20	0.82 [0.24]	-0.07	0.93 [0.35]	-0.88	0.42 ** [0.13]	-0.65	0.52 * [0.16]	-0.74	0.48 * [0.15]
Age	0.01	1.01 [0.01]	-0.03	0.97 + [0.02]	0.01	1.01 [0.02]	0.002	1.00 [0.02]	0.03	1.03 * [0.02]
Married/cohabiting	-0.51	0.60 [0.042]	-0.91	0.40 [0.33]	-1.04	0.35 [0.29]	-1.45	0.23 * [0.16]	-0.54	0.58 [0.42]
Some College/2 Yr Degree	0.35	1.42 [0.58]	0.02	1.03 [0.51]	0.16	1.17 [0.55]	1.21	3.33 ** [1.58]	0.86	2.37 + [1.12]
4 Yr Degree+	-0.26	0.77 [0.33]	-0.39	0.68 [0.36]	-0.18	0.84 [0.40]	0.66	1.93 [0.94]	0.98	2.66 * [1.27]
Income \$40,000 to \$79,999	-0.17	0.84 [0.28]	0.08	1.08 [0.44]	0.18	1.20 [0.43]	0.64	1.90 + [0.67]	1.07	2.93 ** [1.09]
Income \$80,000+	0.60	1.83 [0.77]	-0.15	0.86 [0.46]	0.88	2.41 + [1.19]	0.38	1.46 [0.63]	1.22	3.38 ** [1.49]
Has children	-0.87	0.42 + [0.21]	0.64	1.91 [1.38]	-1.16	0.31 [0.21] +	0.40	1.49 [0.84]	-1.28	0.28 * [0.16]
Income missing	-0.21	0.81 [0.39]	-0.37	0.69 [0.48]	0.69	1.99 [1.14]	0.20	1.22 [0.66]	1.72	5.59 *** [3.02]
McFadden's R <sup>2</sup>		0.03		0.03		0.06		0.06		0.11
		LR $\chi^2(9) = 10.34, p = .32$		LR $\chi^2(9) = 6.83, p = .65$		LR $\chi^2(9) = 17.02, p < .05$		LR $\chi^2(9) = 16.87, p < .05$		LR $\chi^2(9) = 32.72, p < .001$

Note : \*\*\*p ≤ .001; \*\*p ≤ .01; \*p ≤ .05; +p < .10

**Table A.3: Logistic regression models predicting Social/Non-economic reasons for working off-farm with Percentage of life spent on-farm as focal independent variable**

	To be around other people n=228		To get away from farm/ranch n=216		To earn personal income n=241		To gain independence n=226		For the challenge n=221	
	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio
Percentage of life spent on-farm	0.001	1.00 [0.01]	0.01	1.01 [0.01]	-0.01	0.99 * [0.01]	-0.001	1.00 [0.01]	-0.002	1.00 [0.01]
Age	0.004	1.00 [0.01]	-0.03	0.97 + [0.02]	0.02	1.02 [0.02]	0.004	1.00 [0.02]	0.03	1.03 * [0.02]
Married/cohabiting	-0.45	0.64 [0.44]	-0.78	0.46 [0.37]	-0.91	0.40 [0.33]	-1.25	0.29 [0.20]	-0.39	0.68 [0.47]
Some College/2 Yr Degree	0.29	1.35 [0.54]	-0.020	0.99 [0.48]	-0.03	0.97 [0.45]	1.10	3.01 * [1.40]	0.69	2.00 [.93]
4 Yr Degree+	-0.36	0.70 [0.29]	-0.46	0.63 [0.33]	-0.40	0.67 [0.31]	0.52	1.68 [0.80]	0.81	2.26 + [1.05]
Income \$40,000 to \$79,999	-0.13	0.88 [0.29]	0.10	1.11 [0.46]	0.23	1.26 [0.44]	0.70	2.01 * [0.70]	1.07	2.91 ** [1.07]
Income \$80,000+	0.63	1.89 [0.78]	-0.11	0.90 [0.48]	1.04	2.84 * [1.38]	0.53	1.70 [0.71]	1.35	3.84 ** [1.66]
Has children	-0.88	0.41 + [0.21]	0.57	1.76 [1.29]	-1.04	0.35 [0.24]	0.40	1.50 [0.83]	-1.17	0.31 * [0.17]
Income missing	-0.18	0.83 [0.41]	-0.30	0.74 [0.52]	0.65	1.92 [1.10]	0.20	1.22 [0.66]	1.69	5.44 ** [2.92]
McFadden's R <sup>2</sup>		0.03		0.04		0.06		0.05		0.09
		LR $\chi^2(9) = 9.86, p = .36$		LR $\chi^2(9) = 7.59, p = .58$		LR $\chi^2(9) = 14.97, p < .10$		LR $\chi^2(9) = 13.08, p = .16$		LR $\chi^2(9) = 27.07, p < .001$

Note: \*\*\*p ≤ .001; \*\*p ≤ .01; \*p ≤ .05; +p < .10

**Table A.4: Logistic regression models predicting Needed elsewhere reasons for not working off-farm with Raised on-farm as focal independent variable**

	Needed on-farm/ranch n=83		Needed at home n=78	
	B	Odds Ratio	B	Odds Ratio
Raised on-farm	0.35	1.42 [0.84]	0.84	2.32 [1.63]
Age	0.002	1.00 [0.03]	-0.04	0.95 [0.03]
Married/cohabiting	-0.78	0.46 [0.55]	-0.87	0.42 [0.53]
Some College/2 Yr Degree	0.56	1.76 [1.31]	1.160	3.18 [2.68]
4 Yr Degree+	0.48	1.61 [1.22]	0.23	1.26 [1.01]
Income \$40,000 to \$79,999	-0.34	0.71 [0.51]	-0.88	0.42 [0.35]
Income \$80,000+	-1.17	0.31 [0.24]	-1.04	0.35 [0.32]
Has children	0.26	1.30 [1.25]	0.48	1.62 [1.86]
Income missing	-0.47	0.62 [0.59]	-2.05	0.13 * [0.12]
McFadden's R <sup>2</sup>		0.05		0.17
		LR $\chi^2(9) = 4.62, p=.87$		LR $\chi^2(9) = 14.14, p=.12$

Note: \*\*\*p ≤ .001; \*\*p ≤ .01; \*p ≤ .05; +p < .10

**Table A.5: Logistic regression models predicting Needed elsewhere reasons for not working off-farm with Percentage of life spent on-farm as focal independent variable**

	Needed on-farm/ranch n=84		Needed at home n=79	
	B	Odds Ratio	B	Odds Ratio
Percentage of life spent on-farm	0.03	1.03 *	0.05	1.06 **
		[0..01]		[.02]
Age	-0.01	0.99	-0.08	0.93 *
		[0.03]		[0.04]
Married/cohabiting	-0.80	0.45	-1.21	0.30
		[0.54]		[0.39]
Some College/2 Yr Degree	0.54	1.71	1.33	3.78
		[1.20]		[3.21]
4 Yr Degree+	0.62	1.86	0.70	2.02
		[1.40]		[1.66]
Income \$40,000 to \$79,999	-0.18	0.84	-0.89	0.41
		[0.58]		[0.36]
Income \$80,000+	-0.89	0.41	-0.82	0.44
		[0.32]		[0.43]
Has children	0.09	1.10	0.30	1.35
		[1.06]		[1.59]
Income missing	-0.27	0.76	-1.85	0.16 +
		[0.74]		[0.16]
McFadden's R <sup>2</sup>		0.09		0.27
		LR $\chi^2(9) = 8.17, p=.52$		LR $\chi^2(9) = 22.51, p<.01$

Note: \*\*\*p ≤ .001; \*\*p ≤ .01; \*p ≤ .05; +p < .10