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Walden University

College of Social and Behavioral Sciences

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Amy Spangenberg

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Walden University 2017

Abstract

Education and the Development of on-Farm Identity: Dairy Farm Women's Experiences

by

Amy L. Spangenberg

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Educational Psychology

Walden University

October 2017

Abstract

Women throughout the world have found emancipation through education. Yet, there has been no research on the role that education plays in dairy farm women's primary, onfarm identity development and how farm women's identities develop. The purpose of this phenomenological study was to examine dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development. The feminist standpoint theory provided the framework for this study. A homogeneous, purposeful sample of 10 active dairy farm women were interviewed using individual, face to face, semistructured questions to answer the question: What are dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development? Emergent themes and patterns were identified following the in-depth data analysis process of interpretive phenomenological analysis. The findings revealed 3 superordinate themes: identity, identity development, and education. All of the participants discussed factors that contributed to their identity development (family, emotions, and freedom), and they described their perceptions of education's influence on their primary, on-farm identity development. Incidental learning and transfer of skills were perceived as having the strongest influence followed by informal learning, mentorship, and formal learning. The postive social change implication of this research was to change the way agricultural educators and policy makers present information to dairy farm women.

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Dedication

This dissertation is dedicated to my grandmother, Blanche Spielman, who encouraged my continued education. My parents, Arthur and Margot Spangenberg, for all of their love and support. My significant other, James C Marsh, for putting up with me throughout the years that it has taken to complete this journey. My ex-husband, C. John Creppon, Jr., for believing all those years ago that I would eventually take this journey. All of my friends and family for their love and support. This research is also dedicated to all dairy farm women.

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I would also like to thank all of the amazing dairy farm women who took the time out of their busy day to participate in my research study. Their willingness to share their unique experiences is the key to this research and they are owed a debt of gratitude. Of course, I must extend my sincere appreciation to my family and friends. Especially to Ms. Heather Ferrantino for all of her assistance with editing and graph formations.

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Chapter 1: Introduction to the Study

Introduction

There are a variety of contexts in which women have found emancipation through education (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). Latin American women have found freedom through literacy programs (Prins, 2008; Stromquist, 2014), African American women in the United States have gained self-direction through continuing education (Sealy-Ruiz, 2007), and agricultural education has eased the lives of women farming in Asia and Africa (Rao, 2006; Sastry & Manikandan, 2002; Ugbomeh, 2001). These experiences not only provided women with a basic education, they also provided "validation of their identities, affirmation of their worth, and legitimation of their roles in the community" (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010, p. 89). Education gives women a stronger sense of control (Slagsvold & Sorenson, 2008) and "a social context for requesting and receiving improvements in basic treatment and civil rights" (Prins, 2008; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010, p. 89). Agricultural education can also benefit farm women all over the world.

In studies completed in the late 1970s through the early 1990s, scholars discovered that even though farm women's work on the farm was and still is essential to the farms operation, the prevailing views and conventional definitions of farm work does not honor the work that farm women do on the farm (Shortall, 1992). Farm women's endeavors have been ignored in both public and private spheres (Brandth, 2002; Sachs, 1983,1996). In the early 1990s, researchers documented perceptions of farm women as

subservient and directed by the male farmer (Bryant, 1999). Those women were perceived to have taken on the role of assistant or helper (Beach, 2013).

Starting later in the 1990s, reflecting changes in cultural and feminist research, scholars looking at rural and farm women began to focus on identity issues (Beach, 2013; Bryant, 2002). Agrarian ideology maintains gendered divisions of labor on farms. According to an agrarian ideology, men and women enjoy completing their assigned roles, but this does not mean that this is true on a day-to-day basis (Beach, 2013). Beach (2013) stated, "the way we speak about men and women on farms may not correspond to the way they really are" (p. 214).

In the 21st century farm women are taking on the identity of farmer for themselves (Brasier, Sachs, Kiernan, Trauger, & Barbercheck, 2014). The farm women who identify as farmers often find themselves caught in the middle of socially mandated roles. Some women may experience discomfort in agricultural educational events that are directed toward farm wives and those directed towards men or traditional farmers (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). Farm wife is one possible identity of farm women, but not necessarily one that fits all women on farms.

In past research on the educational needs of farm women in Pennsylvania (PA), scholars have revealed that farm women, no matter which farm identity they hold (i.e., farmer, farm wife, or helper), are looking for many of the same educational events as traditional male farmers (Brasier, Barbercheck et al., 2009; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). For agricultural education programs to meet the needs of women

who identify themselves as farmers, agricultural educational curriculum should include how farm women hold more then one identity and how those identities "shift over time and space" (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008, p. 438). An understanding of the role of education in farm women's primary, on-farm identity development could improve agricultural education programming. To date, there has been little research on how farm women's identities are developed. There was no evidence of research on education's role in dairy farm women's primary, on-farm identity development. This was the problem that I sought to address.

In this study, I described how education plays a role in dairy farm women's primary, on-farm identity development. I described the lived experiences of a sample of dairy farm women to understand how their previous learning (education) has influenced their primary, on-farm identity development. The knowledge generated from this inquiry may provide new insights to inform agricultural education program development. I employed an interpretative phenomenological analysis (IPA) for this study so that I could describe the identified phenomenon.

Chapter 1 opens with a review of the background that supports this study. The problem statement, the purpose of the study, and the research question follow. This chapter also contains a discussion of the theoretical framework, the nature of the study, definitions, assumptions, scope and delimitations, limitations, and the significance of the study.

Background

There has been a lack of understanding of farm women's primary, on-farm identity or how it is developed. Oldrup (1999) believed that farm women's on-farm identity developed through "an integration of earlier experiences and competencies into the current situation" (p. 354). Brandth and Haugen (2011) believed on-farm identity to be "simultaneously situated, multiple, and relational" (p. 37). Vesala and Vesala (2010) believed that multiple on-farm identities develop through "various jobs and roles" (p. 24). Trauger, Sachs, Barbercheck, Kiernan, Brasier, and Findesis (2008) believed that on-farm identities vary "over time and space and in relation to others" (p. 438). Few of the above mentioned studies presented information about education's role in on-farm identity development.

Researchers have focused on the type of educational events that farm women wanted or needed. Gaining an understanding of dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development could assist in the development of appropriate educational programs for farm women. There has been little current research on how farm women develop their primary, on-farm identity. In this research, I began to fill the gap in the literature by discussing the relationship between education and identity formation for farm women.

As more farm women have moved toward identifying themselves as a farmer or primary farm operator, research on 21st century farm women's on-farm identity development can provide policy makers and educators with the knowledge needed to adjust the information they provide to farm women in order to reach the most farm

women (Farmar-Bowers, 2010). Research on education's role in dairy farm women's primary, on-farm identity development will provide information to assist with educational program development. Development of educational programs that address the concerns of farm women will assist with moving agricultural education beyond the traditional ideology of agrarianism.

Statement of the Problem

Historically, farm women have been represented by a traditional labor division (Brasier, Barbercheck et al., 2009; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). This traditional labor division places farm women as caretakers for the young animals or errand runners for their husband or male farmer. This traditional division of labor has caused much of the previous research on farm women to be focused on the farm wife or helper identity rather than on women as farmers or primary operators or business partners. However, farm women's identities are evolving as the number of farm women identifying themselves as farmers or primary operators has changed, especially in sustainable agriculture. The total number of women primary operators (women running their own farmers and making the business decisions) in the United States (288,264) had decreased by 6% since 2007's Agricultural Census (USDA, 2014), as the total number of farms in the United States decreased by 4%. Even though the number of women primary operators has decreased in the United States and PA, this population continues to experience a lack of appropriate agricultural education and technical training events. This may be a factor in the overall decrease of farms in the United States (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwatzberg, 2010).

Farm women identify themselves as farmers, primary farm operators, business partners, farm wives, landlords and bookkeepers (Brasier, Sachs et al., 2014; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). The research on farm women's primary, on-farm identity has been limited in their focus (Brasier, Sachs et al., 2014). The research on farm women's education has also been limited to identifying these women's educational wants and needs (Brasier, Barbercheck et al., 2009; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008; Trauger, Sachs, Barbercheck, Kiernana, Brasier, & Schwartzberg, 2010). This is a gap in research in regard to previous learning's (education's) impact on farm women's primary, on-farm identity development. Therefore, I focused on how dairy farm women perceive previous learning and its influence on their primary, on-farm identity development. The results of this study can be used by agricultural educators and policy makers to adjust how they present information to farm women.

Purpose of the Study

The purpose of this IPA research was to describe Wayne County, PA dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development. Farm women occupy multiple essential positions on their farm. They tend to identify themselves with numerous and various possible identities that reflect their concurrent contributions in various areas (Kallioniemi & Kymalainen, 2012; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwatzberg, 2010). In this study, I explored dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development.

Research Question

The research question that guided this phenomenological study was the following: What are dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development?

Theoretical Framework

Feminist standpoint theory provided the framework for this IPA research.

Feminist standpoint theory evolved from the endeavors of Harding, Smith, and Hartsock (Cohen & Crabtree, 2006). Feminist standpoint theorists focus on women's everyday life (Cohen & Crabtree, 2006; Intemann, 2010; Sachs, 1996). Researchers using this theory emphasize the connections between expansive social configurations, such as education and unique varieties of comprehensions, such as identity (Harding, 1991; Sachs, 1996). Harding (1991) believed that standpoint epistemologies are the best for those who are using it to explore "the relationship between patterns of thought" (p. 134), such as identity and the traditional circumstances that produce corresponding logical ideals, such as previous learning (education). A more detailed explanation of feminist standpoint theory will be presented in Chapter 2.

By using the feminist standpoint theory as the framework for this IPA study, I was able to recognize the connections between education and identity development, as well as gain an understanding of dairy farm women's identity development in relation to their previous learning (educational) experiences that they use in their everyday lives.

Nature of the Study

The aim of IPA research is to complete a detailed exploration of how participants make sense of their personal and social world (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). IPA researchers seek to understand the meanings that particular experiences, events, or states hold for the participants (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). IPA is phenomenological in nature because it involves a detailed examination of the participants' world; it attempts to explore their experiences and is concerned with their perception of an object or event (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). Based on those concepts, I believed that IPA was the most appropriate approach for this study on dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development.

This study took place on active dairy farms in Wayne County, PA. I conducted in-depth, semistructured, face-to-face interviews with 10 dairy farm women. All data collected from the interviews were interpretatively analyzed, seeking superordinate themes. Each participant's case was analyzed through a sustained engagement with the transcripts and the process of interpretation (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). Once each case was individually analyzed, I worked across cases looking for convergence and divergence (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008).

Operational Definitions

The definitions of terms were limited in this study due to the influence of the feminist standpoint theory. Feminist standpoint theory supports the use of subjective rhetoric and terminology (Harding, 1991; Intemann, 2010). The participants were viewed

as experts in this topic area (Harding, 1991; Smith & Osborn, 2008). The following definitions are being provided for clarity.

Farm women's identities: Can include (a) farmer or primary operator-the person who is in charge of the labor and decisions on the farm (Brasier, Sachs et al., 2014); (b) farm entrepreneur-the individual who not only makes decisions about the farm but also looks for other possible farm business activities (Brasier, Sachs et al., 2014); (c) farm worker-apprentice-holds limited authority as a laborer (Brasier, Sachs et al., 2014); (d) farm business partner-shares in all areas of the farm (Brasier, Sachs et al., 2014); (e) worker-professional-primarily works off the farm bringing back to the farm income and benefits (Brasier, Sachs et al., 2014); and (f) farm-wife/domestic partner-may provide onfarm labor as needed but primarily runs the household (Brasier, Sachs et al., 2014).

Previous learning/education: Previous learning/education includes (a) formal learning-usually organized by an institution and extremely contextured (Glover, 2012). Formal learning may include a course on rotational grazing (moving livestock to different feeding areas or pastures every few days) presented by the local Cooperative Extension; (b) informal learning-learner directed (Glover, 2012) like reading a book or journal articles about rotational grazing; (c) incidental learning-unintentional learning that occurs naturally from other functions (Glover, 2012). Incidental learning may include learning about rotational grazing by actually moving the livestock to new pastures; (d) transfer of skills-occurs among others (Heggem, 2014). Transfer of skills may include learning how to milk the cows from another person; and (e) mentor-a person who educates or provides assistance and advice to a less experienced or younger individual.

Assumptions

Based on my own experiences and background of being raised on an active Wayne County, PA dairy farm, and past employment as a field technician in the dairy industry, the following assumptions were considered in this study. It was necessary to explore dairy farm women's experiences and how they interpret those experiences in order to understand how they derived meaning from their previous learning and its influence on their primary, on-farm identity development. The dairy farm women in this study were willing to share their experiences with education and its role in their primary, on-farm identity development. My own experiences of being raised within this dairy farm community did enhance and hinder my own perception of dairy farm women's identity. My experiences enhanced my perception because I understood what it means to be a woman on a dairy farm, but this could have also hindered my perception if I had not been reflective of my experiences as a woman on a dairy farm. These assumptions were necessary in order to allow me to be mindful while examining my own bias during the data collection and analysis processes.

It was also assumed that all information received from the participants was correct and sincere. I assumed that all participants spoke freely and honestly during the interview sessions. I also assumed that the known benefits of information transfer and identity recognition would be beneficial to agricultural program development.

Scope and Delimitations

In this IPA study, I focused on gaining an understanding of how dairy farm women perceived previous learning and its influence on their primary, on-farm identity

development. This understanding could assist agricultural educators and policy makers in changing the way information is presented to farm women, as well as beginning to fill the current gap in the literature.

This study was limited to Wayne County, PA dairy farm women between the ages of 24 to 80. The decision to interview Wayne County, PA dairy farm women as participants for this study was made for convenience. Dairy farm men's experiences were not included in this study due to their experiences being based on their societal position as a farmer (i.e., men are the traditionally recognized farmers in United States society).

Other feminist paradigms, such as feminist empiricism and postmodern feminism, were considered for this study, but were ruled out due to the encompassing nature of the feminist standpoint theory. The knowledge gained from this research should be transferable to other dairy farm women and possibly all women because the focus was on previous learnings influence on identity development. The findings of this IPA study were limited to interpretation rather than quantitative analysis.

Limitations

An accessible homogeneous, purposeful sampling was used to select participants for this study. This sample might have presented a bias because it was restricted to Wayne County, PA dairy farm women. To limit this possible bias, I interviewed participants until saturation was reached or no new themes emerged. The knowledge gained pertained to rural Wayne County, PA. The dairy farm women of this study

expressed their unique experiences in that context. Therefore, it will be up to the reader to make transferences to other populations.

My own bias may have also been a limitation in this study. Having been raised since childhood as a member of the Wayne County, PA dairy community and having worked as a field technician within this community, there may have been potential for those experiences to impede the interview and data analysis processes. Through continual conscious reflection of my experiences, I was able to compose an unbiased understanding of Wayne County, PA dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development.

Significance of the Study

The social change implication of this research was to change the way agricultural educators and policy makers present information to dairy farm women. This study also began to fill the gap in the literature related to previous learning's impact on identity development. The understanding gained from this study can provide policy makers and educators within the dairy industry with the knowledge to alter or adapt the way that information is provided to farm women (Farmer-Bowers, 2010). Research on previous learning's (education's) influence on farm women's identity development should also provide information to assist with the development of educational programs that will address the needs of farm women, while moving beyond the traditional ideology of agrarianism.

The aim of this study was to reveal the unique experiences of Wayne County, PA dairy farm women in relation to their previous learning's influence on their primary, on-

farm identity development. I strove to assist policy makers and agricultural educators to make changes to the way information and education is provided to dairy farm women. This IPA research will assist in clarifying how previous learning influences identity development in dairy farm women. This will be an enhancement to the existing (but limited) literature and could broaden social change initiatives by influencing agricultural education for women based on their primary, on-farm identity. Overall, the social change implication of this study was to provide information that would have an impact on women dairy farmer's educational opportunities.

Summary

Education's influence on dairy farm women's identity development had not been documented. Scholars have not portrayed the thoughts, feelings, and experiences of dairy farm women in regard to their primary, on-farm identity development. This gap might have had an overall impact on the available agricultural educational programs for farm women. In this IPA study, I explored Wayne County, PA dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development. My research began to fill the gap in the literature, as well as contributed to the literature base. The results may influence agricultural education, information, and policies directed at dairy farm women.

In this chapter, I presented the background of this study, the theoretical framework, the nature of the study, the assumptions, scope and delimitations, and limitations of this study. I also provided definitions for clarification purposes, as well as the significance of this study. In Chapter 2, I critiqued the current research on the topic.

The study's methodology was discussed in Chapter 3. The research results were presented in Chapter 4. A discussion of the research results and the implications of the study were set forth in Chapter 5.

Chapter 2: Literature Review

Introduction

The literature on farm women's identity (identities) has been limited in focus by relying on farm roles. The research on farm women's education has also been limited to identifying farm women's educational wants and needs. There was a gap in recent research in regard to education's impact on farm women's identity development. In this IPA study, I described how dairy farm women's lived experiences of their previous learning has influenced their primary, on-farm identity development. The performance of a review of the most recent literature was completed in order for this study to be conducted. The literature review was a continual process throughout the study.

Research on farm women is not new; one of the first studies was completed by Pearson in 1979. Pearson focused on farm women in Colorado, attempting to discern farm women by their work on the farm. Pearson (1979) discovered that most farm women defined themselves as farm helpers, contributing as laborers. Since then other scholars (e.g., Cummins, 2005; Oldrup, 1999; Sachs, 1996) had sought to understand farm women and their everyday lives. Other researchers (e.g., Brasier, Barbercheck et al., 2009; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010) had also worked to understand and improve agricultural education events for farm women. There has been no literature on the role of education in the identity development of dairy farm women.

This chapter will begin with an overview of the research strategy, followed by the theoretical framework and review of the relevant literature. Subjects that will be

discussed in this chapter include identity development, on-farm work, division of labor, off-farm work, education, and policy impact. These subjects will assist in explaining the void in the most recent literature and form the foundation for this study.

Research Strategy

A literature search, beginning in January 2013, was executed using various media augmenting current research as it became available. The following Walden Library databases were used to identify books and articles: Thoreau, EBSCO EBooks, Sage Encyclopedias, Sage Research Methods Online, SOCINDEX, and Taylor and Francis Online, as well as Google Scholar (linked with Walden's Library). The general term farm women was used as the basis for the majority of the searches. Other terms including identity and education were then added to the search criteria (i.e., farm women plus identity or farm women plus education). Other key words searches included farm women plus identity plus education, identity development plus female, and women plus identity plus education. The following phrases and questions were also searched through Google Scholar: How do dairy farm women learn to do what they do, what is women's work on the farm, what are the recognized identities of farm women, how do agricultural educators view farm women, and perspectives on identity development as a way to draw out further information from the Internet and international research. I also made requests through the Northern Wayne Community Library to gain access to any relevant books and articles that appeared in the databases.

There were no studies on education's role in the identity development of dairy farm women's primary, on-farm identity. The research used is the most recent and relevant; however, much of the research is older than 5 years.

Theoretical Framework

The goal of feminist research is to shed light on any bias or injustice, or both, in the treatment of women in different social settings and institutions. Another goal of feminist research is to fill in the gaps in the understanding of women (Brandth, 2002; Cohen & Crabtree, 2006; Sachs, 1996). Feminist standpoint theory provided the framework for this IPA research.

Feminist standpoint theory evolved from the endeavors of Harding, Smith, and Hartsock (Cohen & Crabtree, 2006). Feminist standpoint theorists focus on women's everyday life (Cohen & Crabtree, 2006; Intemann, 2010; Sachs, 1996). Researchers using this theory emphasize the connections between expansive social configurations, such as education (informal learning, transfer of skills, incidental learning, and formal learning) and unique varieties of comprehensions, such as identity (Harding, 1991; Sachs, 1996). Harding (1991) believed that standpoint epistemologies are best for those who are using it to explore "the relationship between patterns of thought" (p. 134), such as identity and the traditional circumstances that produce corresponding logical ideals, such as education.

Standpoint theory has been developed from two primary theorems: situated knowledge theory and epistemic advantage theory (Cohen & Crabtree, 2006). Situated knowledge theorists view a person's social position as having a methodical effect on an

individual's experiences by adapting and restricting what he or she knows in a way that knowledge is gained through a specific outlook. Epistemic advantage theory is based on the belief that some points of view, especially the perspective of marginalized or oppressed groups, are intellectual authorities (Internann, 2010; Sachs, 1996).

The use of standpoints does not reflect a comprehensive view of all members of a group. Group members can provide their own perspective within a populace, such as dairy farm women's perception of education's role in primary, on-farm identity development, in varying manners (Intemann, 2010). The majority of standpoint theorists accept "that women's consciousness is socially constructed" (Sachs, 1996, p. 13), evolving from their shared social experiences. For example, in many cultures, rural women's instilled views develop from their link to their environment, from their endeavors in persistence, as well as from agrarian ideology (Sachs, 1996). However, many rural women can exert some level of control and impact on their lives (Brandth, 2002).

The agrarian ideology can be in opposition to the interest and activities of women. According to the agrarian standpoint, dairy farm women's on-farm identity is not as valued as the male farmer and may be conveyed both socially and academically to society and institutions. Based on the literature review and the agrarian ideology evident in Wayne County, PA's institutional and societal structure, the feminist standpoint theory was the best framework to provide a voice to dairy farm women's perspective of how their previous learning (education) has influenced their primary, on-farm identity development.

Review of Literature

In this study, I sought to understand the phenomenon, context, heart of the circumstance, descriptive statements, and the themes related to education's role in the identity development of dairy farm women. To understand this phenomenon, it was important to understand dairy farm women's perspective of how their previous learning has influenced their identity development. Thus, IPA was determined to be the best approach and in-depth interviews the best way to gather the data.

Identity Development

One of the first theorists to discuss identity was Erikson. Erikson (1968) viewed identity development as a psychosocial process in which young people construct their identity through connections with family, friends, and others. Erikson stated that young people need to develop a connection with society through occupational identification (farmer, farm wife, helper, laborer, farm partner, etc.) and "religious and political views" (as cited in Bartoszuk & Pittman, 2010, p. 444). Erikson also believed that the identity formation process was significant, as any decisions made at this time in a young person's life could have an impact on that individual's entire life (as cited in Bartoszuk & Pittman, 2010, p. 444).

Wentworth and Peterson (2001) claimed that every person develops an awareness of identity through innate capacities, psychological strengths and weaknesses, and available societal circumstances within the individual's life (p. 10). Identity formation is a continual process, rather than a fixed event in time as Erikson believed (1968). Neither Erikson nor Wentworth and Peterson indicated if there are any possible gender

differences in identity development. Feminist researchers and theorists have presented women's identity development models that are related in theory, yet different in development from each other.

The feminist development model (Downing & Roush, 1985) presents movement through five stages in order for an individual's identity to be formulated. Downing and Roush (1985) began describing their model's progression with a passive-acceptance stage in which the individual is unaware of inequity and discrimination. In Stage 2, the person experiences a crisis that forces him or her to confront such inequities. In Stage 3, the individual experiences an involvement with her sisterhood that provides her with a chance to get to know and understand her particular group. In Stage 4, the individual integrates her experiences with a given hardship and attempts to achieve an inner balance. In Stage 5, the person makes a decision to work toward removing "the ism" or hardship of her chosen sisterhood (Downing & Roush, 1985; Hoffman, 2006). This model reflects one possible feminist view of identity development, but not necessarily a view that farm women hold of their identity development. The womanist identity development model, theorized by Helms (1990), contains levels that parallel the feminist identity development model. Helms proposed that women move from society's definition of womanhood to their own definition of values, beliefs, and abilities that make up her individual sense of womanhood (Hoffman, 2006; Ossana, Helms, & Leonard, 1992). Helms's model differs from Downing and Roush's (1985) model in that it does not endorse an active commitment to one set identity, thus indicating that the identity of women may be a continual process (Hoffman, 2006).

Jones (1997) focused on women presenting their identity in their own words.

Jones claimed that this is the best way to understand how women solidify identity, as well as examine the differences between each woman. Jones found that the women relate their developing identity to their self-view, relations with others, ethnic and cultural aspects, and life events. Jones showed that identity is fluid with multiple dimensions of the past, present, and future being incorporated into the self. The women in her study appeared to be unable to discuss their identities without referencing their family experiences. Jones noted that those experiences included contact with family, experiences from childhood, as well as educational influences.

Oldrup (1999) stated that "there is no uniform understanding of how we understand the concept of identity" (p. 345). Oldrup presented a view of identity as a process involving action by a person that leads to the development of a sense of self by incorporating "earlier experiences and competencies into the present situation" (p. 354). Oldrup based her theoretical perspective on "theories of modernity, everyday life, and identity" (p. 346). Oldrup wished "to understand identity as a continual process" and one that incorporated the numerous and varied "experiences of the individual" (p. 354). This reflects the view that identity development is never finished because it is a continual and changing process. Oldrup's view places emphasis on farm women creating an identity within their situation (i.e., on the farm). Oldrup believed her perspective to be a useful way to understand farm women's identity. Every day, farm women participate in numerous varying activities and contexts in which they have diverse backgrounds and experiences.

Brandth and Haugen (2011) approached farm women's identity as being "simultaneously situated, multiple, and relational" (p. 37). By situated, Brandth and Haugen described identity as being developed "with specific social context" (p. 37). Multiple meant that people could not expect all farmers to have matching identities. Brandth and Haugen concluded that their participants hold multiple serial identities. Brandth and Haugen concluded that identity, over time, might not be linear but possibly fluid and context dependent. Related to Brandth and Haugen's perspective, Vesala and Vesala (2010) stated that an individual constructs multiple identities. These identities are based on the different jobs or roles he or she maintains within society. Vesala and Vesala claimed that identities could be viewed as hierarchically structured, either based on the salience of identities or the superiority of identities. Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis (2008) found that farm women's identity varies "over time, space, and in relation to others" (p. 438). Farm women could prioritize various attributes of the self. Therefore, farm women's identity rarely remains fixed (Brandth & Haugen, 2011; Jones, 1997; Oldrup, 1999; Silvasti, 2003; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008; Vesala & Vesala, 2010). Various researchers believe that farm women's identity are at least partially developed from their roles and responsibilities.

Women's Work on the Farm: Roles and Responsibilities

Historically, farm women in farm magazines, especially in articles about successful farmers, have been represented as minor characters, such as wife, mother, or daughter (Walter & Wilson, 1996). In many of the successful farmer articles, women

were established as holding background roles. They were depicted by their relationship to the male farmer or in some other unspecified manner. If farm women were described in any detail, they were portrayed in relation to their "physical appearance, personality, or unusual aptitude for doing men's work" (Walter & Wilson, 1996, p. 244). Those depictions tended to present farm women as nonvital to a successful farm enterprise.

In the 21st century, the majority of farm women are engaged in many different work areas on the farm; yet, their work has been largely unrecognized (Kelly & Shortall, 2002; Walter & Wilson, 1996). In some cases, farm women downplay their actual involvement on the farm (Sachs, 1996). Sachs (1996) believed that this occured because farm women held multiple roles on the farm and because they were flexible and willing to fill in as needed. The invisibility of the work farm women perform may be because the agrarian view depicts farm women as wives and mothers who support their husbands and children (Cummins, 2005).

Previous research on farm women's identity has produced various results.

Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis (2008) presented conflicting identity results and reported that many farm women identify themselves as helpers. Farm women do identify themselves as farmers (mostly in sustainable agriculture) and are working to move beyond traditional agrarian views (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008; Trauger, Sachs, Barbercheck, Brasier, & Kiernan, 2009).

Farm women occupy multiple essential positions on their farm and tend to identify themselves with numerous identities that reflect their concurrent contributions in

various areas (i.e., farm, household, family, workplace, and community; Kallioniemi & Kymalainen, 2012; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010; Tutor-Marcom, & Geer, 2014). Many farm women have been defined as farm wives, showing them in relation to their husbands rather than their children or on-farm responsibilities (Sachs, 1996). Oldrup (1999) discovered that many farm women avoid the traditional women's role in farming. The traditional farm woman identity does not have a positive association with many farm women (Oldrup, 1999). These traditional women are the ones primarily responsible for the household work (Oldrup, 1999).

In the 21st century, women are involved in the agricultural "industry as small sustainable farmers, new farmers, specialist operations, farm laborers, harvest operators, contractors, farm consultants, accountants, bankers, educators, trainers, researchers, media workers, and government officers" (McGowan, 2011, p. 144). Farm women identify themselves not only as farmers (primary operators), but also as farm managers and administrators, or as farm helpers, while still maintaining the traditional expected roles (McGowan, 2011).

Fulton and McGowan (2005) identified five "archetypal caricatures" of farm women: the assistant farm manager, off-farm wage earner, business manager, mentor, and farm laborers. Each of the caricatures overlap each other in the areas of family and household responsibilities. Fulton and McGowan did not present any separation of housewife or homemaker from business manager, assistant farm manager, mentor, or farm laborer. Fulton and McGowan presented the off-farm wage earner as primarily a housewife (on the farm) who contributes to her family farm with her off-farm income and

benefits. Fulton and McGowan also did not present any on-farm responsibilities that separated the caricatures from each other. However, Fulton and McGowan did present five on-farm identities and reinforced the idea that farm women contribute to their farm through various roles and responsibilities while also holding multiple identities.

There are many and various activities, products, and services that men, women, or both are involved in that assist in giving meaning to the identity of a farmer. Brandth and Haugen (2011) believed that a farming identity might be connected to activities or symbolic values. Brasier, Sachs et al. (2014) identified the following possible identities: farmer or primary operator, farm entrepreneur, farm worker-apprentice, farm business partner, farm wife-domestic partner, and worker-professional. Brasier, Sachs et al., described each of those possible identities in their quantitative research. Brasier, Sachs et al., defined the farmer or primary operator as the person who is in charge of the labor and decisions on the farm; the farm entrepreneur is the individual who not only makes decisions about the farm, but also the one who looks at other possible farm business activities. The farm worker-apprentice holds limited authority as a laborer. The farm business partner shares in all areas of the farm, usually with a spouse or partner or another family member. The worker-professional identity, described by Brasier, Sachs et al., primarily works off the farm and bring back to the farm income and benefits. The farm wife or domestic partner may provide on-farm labor as needed but primarily runs the household. Brasier, Sachs et al., developed a quantitative measure that was designed to recognize the multiple and potentially conflicting identities of farm women. Brasier, Sachs et al., believe identities are developed and fortified through on-farm roles and

responsibilities. Thus Brasier, Sachs et al. developed a measure that was able to capture the nature of today's farm women's identity. Recognizing that farm women's numerous roles have varying levels of importance to their identities. Many of the women who participated in Brasier, Sachs et al.'s research identified themselves as farm partners. This identity appears to reflect the movement away from traditional agrarianism. While Brasier, Sachs et al.'s research provided a more recent view of farm women's identities and responsibilities, the study failed to provide any information on how education may play a role in those identities. My study began to fill that gap in the literature. Most of the roles and responsibilities of farm women have generally been allocated by their gender. Women have been and still are responsible for the majority of the household tasks, as well as various barn chores (milking, feeding young stock, cleaning, etc.) or responsibilities. Many farm women also performed the farm bookkeeping, ran errands and filled in as needed (Brasier, Sachs et al., 2014; Kallioniemi & Kymalainen, 2012; Sachs, 1996).

Farm women have become proficient in multi-tasking in order to complete their responsibilities. For instance, many farm women have been known to take children into the barn with them while they milk or complete other barn activities (Sachs, 1996). In general, research on farm women has shown farm women having more than one or two positions on the farm (Brasier, Sachs et al., 2014). These multiple roles illustrate that there are different ways to enter and approach farming (Brasier, Sachs et al., 2014). Even though research has shown that the performances of multiple roles are completed by farm women, not all of these roles are central to farm women's identity.

Division of Labor: Gender Identity

Many individuals residing in urban areas hold a pastoral view of rural life. Rural society, however, tends to be one of the traditional gender relations and identities. Women in rural communities tend to engage in unpaid labor, family, and community concerns; whereas the men are seen as the breadwinners and community leaders. These views of traditional gender relations help to support the idyllic notion of life in the country (Bock, 2014).

In the United States and many other agricultural countries, agrarian ideologies continue to promote patriarchal authority (Sachs, 1996). According to some researchers, this helps to hide the arduous lives of farm women and maintains the view of agriculture as a male profession (Bock, 2014; Cummins, 2005; Istenic, 2014; Sachs, 1996).

Agrarianism views farming as an exceptional way of life and it delineates the proper ethical status of women as wives and mothers who bolster their spouses and parent their children to continue the farm (Sachs, 1996). This leads many farm women to view farming as a collective conscience (Cummins, 2005).

These traditional ideals can be clearly seen when one looks at the way decisions are made and how work is divided on many family farms (Istenic, 2014). The hard and fast nature of the "gender statuses and roles on family farms" (Istenic, 2014, p. 10) can be accounted for in part by who owns the land. Previous research has found that in cases where farm women are the landowner and proprietor of the farm, the farm labor tends to be divided more equally between genders. Previous research completed with European farm families has shown women were abandoning the field of agriculture because of the

division of labor. This could be clearly seen when observing the amount of unpaid labor performed (Istenic, 2014).

Heggem (2014) suggested that the gendered division of labor was expressed as a hierarchial ideal of competence; ranking work related to men as more important than those responsibilities related to women. This is based upon the cultural understanding of male and female competencies. Heggem's Norwegian grounded theory study suggested that there was a distinct perspective held by the farmers interviewed in relation to women taking over family farms. Research that has focused on farm women who had stepped beyond the traditional division of labor, such as women doing tractor work, has shown that these women either downplay or conceal their on-farm labors (Pini, 2005). Those women tended to emphasize their domestic and household responsibilities as a way to define the "boundary between themselves and men" (Pini, 2005, p. 6). When Heggem (2014) looked at tractor work in relation to gender, the results indicated that there was a basic understanding among those farmers interviewed that girls are predisposed to animal care, and boys are inclined to be more efficient with tractors and other machinery. The participants in that study believed that these differences were innate and gender-based.

Bock (2014) reported that women farmers (women who identify themselves as primary operators of the farm) are on the rise. Bock found that numerous farm women began new businesses on their farms in an attempt to support the family farm during times of financial hardship. Other researchers who have looked at nontraditional farm women (research usually completed with sustainable farm women) found that those women were able to discuss their gender effect on their decisions and choices (Trauger,

Sachs, Barbercheck, Brasier, & Kiernan, 2009), especially in regard to problems and barriers they have experienced. Many of those women reported feeling that "they were not taken seriously as farmers" or that the "exclusionary nature of rural and agricultural communities meant being denied credibility" (Bock, 2014. P. 4). These same women were able to express their experiences as women farmers utilizing the strength of their identity as women, as well as their ability to maximize new possibilities in their communities (Bock, 2014; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). The majority of the women in these studies were involved in sustainable agriculture not, dairy farming.

One way that farm women are negotiating their position in a masculine role while retaining their feminine identity has been to adopt a view of farming as a business (Pini, 2005). Viewing farming as a business allows for the renaming of the gender specific roles (Pini, 2005). As farm women resist their subservient positions, they are constructing new identities and new ways to live as farm women (Silvasti, 2003). Keller (2014) traced the pathways women farmers have taken into the field of agriculture, focusing on the significance of gender for women who wish to be recognized as a farmer. Keller found that the women interviewed needed to hold a different rural feminity in relation to their identity as a farmer in order to be recognized as farmers in the current male dominated agricultural field.

Off-Farm Work

Many farm women hold off-farm jobs. Some of these women maintain minimal on-farm responsibilities, such as household work, while others maintain their on-farm

responsibilities while having off-farm employment. Off-farm work can be described "as a farm family survival strategy" (Kelly & Shortall, 2002, p. 335) that is not only necessary financially, but also important to keeping the farm going as a business and maintains their husband's position as a farmer or primary operator.

Off-farm work does not appear to have any impact in farm women's home (domestic) responsibilities. Farm women just assume off-farm work as another work role in addition to their on-farm work, which tends to lead to exhaustion (Kelly & Shortall, 2002). Thus far, there has been no research that shows that off-farm work has changed the overall agrarian view related to women's farm work. Nor has it had any impact on increasing efforts to include farm women in agricultural policies or training programs (Kelly & Shortall, 2002). Even when it is the women who are the full-time farmers while their husbands or partners work off the farm, the agrarian view still holds that women's on-farm work is not as important as that of the male. Women who work off-farm do not necessarily have fewer on-farm responsibilities; in fact, many farm women just take the off-farm work as another role, responsibility, or identity within themselves.

Farm Women and Education

Education and learning can be described in various ways. Glover (2012) defined formal learning, informal learning, and incidental learning in research on rural resilience and Heggem (2014) discussed transfer of skills as part of research completed on the tractor gene. Glover (2012) defined formal learning as usually organized by an institution and extremely contextured. Informal learning was defined as being learner directed, and incidental learning was defined as unintentional learning occurring naturally

from other functions (Glover, 2012). Heggem (2014) indicated transfer of skills occurs among others, such as parents, grandparents, or siblings (Leckie, 2010).

Education and learning are important pieces to farm women's ability to be successful in the farm business. Glover (2012) discovered "lifelong learning was a key factor in determining the success and resilience of the business" (p. 366). A great deal of the information and expertise that is needed for farming is transferred across generations (Leckie, 2010). Farmers tend to draw from the knowledge they have gained in the past or from others (Glover, 2012). The family's hierarchy, economic status, personal interest, and occasions to help, play a key role in what females learn on the farm (Keller, 2014; Leckie, 2010). It would appear that learning to farm remains largely gender related (Keller, 2014; Leckie, 2010; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010).

Cooperative extension educators agree that farm women have educational needs. Agrarian beliefs however, continue to impact the types of programs agricultural educators present to farmers (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). Educational curriculums tend to be mainly directed at the male farmer (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). When educators in Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg's (2010) research did consider farm women's educational needs, they often believed that women farmers did not fit the offered programs and that the women need to change rather than the educator making the programming female specific or even gender neutral. If agricultural educators did view farm women as an authentic farmer, it was because they bypassed the

"expected gender roles" (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010, p. 93).

Researchers have found that some educators did believe men and women have different educational needs, others did not (Brasier, Barbercheck et al., 2009; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). Those educators who did recognize differences identified the differences as "learning style and learning context" (Brasier, Barbercheck et al., 2009, p. 5), or as Brasier, Barbercheck et al. (2009) stated "program delivery and educational environment" (p. 9).

Various researchers (Babercheck et al., 2009; Brasier, Barbercheck et al., 2009; Brasier, Sachs et al., 2014; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008) have found that farm women throughout the U.S. and around the world wish to gain knowledge and receive skills training in similar areas. Women farmers have been reported to seek educational events related to

equipment operation and maintenance, working with local government, planning for retirement, building infrastructure, labor management, keeping up to date with legislation, marketing products, pest management, communication with farm workers, increasing productivity, fertility, organizing and running meetings, maintaining environmental health, managing finances, keeping workers and family safe, and using computers (Rani, Yadav, & Goyal, 2012, p. 313-314).

There are still problems for farm women who wish to participate in agriculture and agricultural education (McGowan, 2011). Stereotyping and male attitudes, farm women's own attitudes, interests, work and family responsibilities have been identified as

possible barriers to farm women attending educational events. Other identified barriers can include: Lack of knowledge or skills and experience regarding the business; lack of women in the industry and role models; distance or isolation; time; access to or awareness of farm positions; lack of money or business income; age or physical ability; staffing and supervision issues; and limited industry development (Barbercheck et al., 2009; McGowan, 2011). It should be noted that the identity or role of housewife (farmer's wife) and mother also influence farm women's enrollment in agricultural education and training (Istenic, 2014).

Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis (2008) found that the traditional educational programs for farm women failed to recognize that women's identities are multifaceted in construction. Farm women's identities vary across time and space as more experience and resources are gained (Oldrup, 1999; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008). For agricultural education to meet the needs of women, instructors must acknowledge that identities are not fixed and incorporate this into course development (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008).

It is unfortunate that today's farm women, who need solid agricultural information and knowledge, continue to find that the field of agriculture does not recognize their talents, needs, or viewpoints (Leckie, 2010). Women who have taken over control of the farm business tend to develop a self-directed, ongoing educational program in order to increase their skills and knowledge (Farmar-Bowers, 2010).

Various researchers have suggested ways to increase farm women's attendance in Cooperative extension programs. These recommendations include: Developing an awareness of how the farm operates: understanding the optimal time, place and venue: developing gender-specific groups; asking women to be involved in program development; considering suitable images and publicity; utilizing proper vernacular; and collecting data by gender and age (McGowan, 2011). Utilizing strategies that target farm women would assist in ensuring the future of family farms (Barbercheck et al., 2009). Researchers have suggested that educators need to show women farmers and farm women in general, that they are being taken seriously by making personal contact with them (Barbercheck et al., 2009). Another suggestion was for educators to develop a plan so that farm women and women farmers can build a support network in their community (Barbercheck et al., 2009; Tutor-Marcom, Bruce, & Greer, 2014). It has also been strongly suggested that educators should offer various educational models and various dates and times to farm women (Barbercheck et al., 2009). Educators should consider offering women educational events on female run farms; ask women farmers to be presenters or farm panel members; or to be involved in consulting (Barbercheck et al., 2009). It is important for educators to pay attention to what farm women and women farmers have to say.

A key point presented by Trauger, Sachs, Barbercheck, Brasier, & Kiernan (2009) was that in order for agricultural education to meet the needs of farm women and women farmers it needs to value and recognize that all women on farms hold multiple identities that develop "within the larger group identified as farm women (intersectionally)" (p.

438). In addition farm women's identities are not constant but "shift over time and across space (seriality)" (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008, p. 438). Developing appropriate educational programming for farm women should be done through the lenses of intersectionality and seriality in order to meet their needs and attract them with educational events that they want to attend (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008).

A participant in Keller's (2014) study talked about how she wants to teach other women who wish to be small-scale farmers by showing them how to maintain and repair farm equipment, such as tractors. This is in line with Tutor-Marcom, Bruce, and Greer's (2014) discovery that farm women must be given the chance to work with other farm women to share farm management techniques and to seek support in their endeavors. It would appear from these studies that farm women would value agricultural educational programs that are developed and instructed by other farm women who are able to recognize the multiple identities that farm women hold.

Farm Women and Policy Impact

Feminist scholars who focus their studies on women in agriculture are attempting to give voice to farm women in order to change policies and improve the lives of these women (Sachs, 1996). Sachs (1996) believed that even though officials within the government recognize the value of farm women, they rarely act on changing the traditional agrarian views.

Even though farm women have made, and continue to make, crucial contributions throughout the centuries, politicians, agricultural educators, and researchers have under

appreciated the worth of women's labor on farms and have viewed it as immaterial to the field of agriculture (Walter & Wilson, 1996). In the 21st century, farm women are participating more and more in the running of the farm business. Policy makers who are aiming to improve all aspects of agriculture should acknowledge farm women's increased participation and make adaptations to the information farm women receive (Brasier, Sachs et al., 2014; Farmar-Bowers, 2010). This want and need presents "policy makers and educators with the perfect occasion to develop new educational programs and new methods of delivery" (Farmar-Bowers, 2010, p. 228) that can assist farm women in increasing their level of farming and business skills necessary for operating a successful farming enterprise.

The European Commission has recognized that gender equality is necessary in agriculture; identifying it as a relevant political issue and intergrating it into essential documents and programs (Istenic, 2014). Gender issues should be addressed due to the fact that they are essential for strategies directed toward: "(1) improving the technical and economic aspects of farming and (2) implementing sustainable development ideals" (Farmar-Bowers, 2010, p. 150).

Literature Related to Research Design

The majority of the research studies reviewed in this chapter were qualitative studies. There was a mixed methods study completed by Kelly and Shortall (2002) that examined the changes that occurred on Northern Ireland farms, specifically women's off-farm work. That study indicated that farm women in Northern Ireland were committed to

their family and farm and did what they could to maintain the family's well-being and farm survival.

Brasier, Sachs et al. (2014) utilized a quantitative study to test their proposed farm women identities. Two thousand surveys were mailed out to farm women throughout the Northeastern United States but only 815 (40.7%) of the surveys were returned.

According to Brasier, Sachs et al., there were no surveys returned by dairy farm women. This study contributed to the literature with the development of a quantitative measure that recognized the identities of farm women but failed to address how farm women perceive those identities. Both mixed methods and quantitative studies keep the researcher(s) as outsider, which did not fit with my being an insider within my research.

Many of the studies reviewed were phenomenological, others were case studies and one was a narrative study. Glover (2012) completed a case study with 10 farm businesses in the United Kingdom focusing on resilience, particularly the role of innovation and learning. The data gathered in that study indicated that through learning events farmers were more often resilient and willing to be engaged in innovative activity to keep the farm business going. Silvasti (2003) completed a narrative study, presenting two stories of farm women who identified themselves as farmers. Both case study and narrative research allow for the investigator to become an insider as well as an outsider through data collection. These types of studies, however, keep the research as an outsider during the data analysis.

I considered several different designs for my study. Narrative study was considered, but as an insider I felt that narrative research could be too limiting since it is

usually only one or two individual stories and experiences. Case study was also considered, but rejected; because I wished to understand the perceptions of dairy farm women in relation to previous learning and its influence on their primary, on-farm identity development. In order to do so required a contemplation of the role of education (previous learning) in the identity development process, especially when being viewed from farm women's perspectives.

IPA was the best design for my study because it allows for, even pushes toward, insider research and it allowed me to be able to understand the role of education in describing the lived experiences of Wayne County, PA dairy farm women's primary, onfarm identity. This understanding may lead to the development of agricultural education programs specifically for women, and may change the way policy makers' present information to farm women

Summary

Through feminist standpoint theory, which looks at regular oppressions in society that under value women's knowledge, it may be possible to bring about the change needed in agricultural education and agricultural policies to improve the way farm women receive information. Farm women need to be empowered to rise above the difficulties linked to women specific agricultural education programs. Reaching women through agricultural education programs is the empowerment passageway that may bring about the social change needed in today's agricultural field. The influence of education on farm women's primary, on-farm identity development was a gap that had been identified by the literature review.

The research methodology and research design are described in Chapter 3. IPA had been chosen to provide a voice to the dairy farm women in this study. IPA allowed me to gain a better understanding of their lived experiences with education as it has influenced their identity development. IPA provided a different way to listen to the voices of dairy farm women as they explained their experiences with education and the role that education has played in their primary, on-farm identity development. Chapter 4 provides discussion about the data collected in the in-depth interviews and addresses any outstanding findings. All of the dairy farm women are presented through their own words. Social change implications and possible future research areas are discussed in Chapter 5.

Chapter 3: Research Method

Introduction

The purpose of this IPA research was to describe Wayne County, PA dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development. Farm women occupy multiple essential positions on their farm. They tend to identify themselves with numerous and various possible identities that reflect their concurrent contributions in various areas (Kallioniemi & Kymalanien, 2012; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). In this study, I explored dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development. In this chapter, I will discuss the research design and rationale, the role of the researcher, the methodology, and issues of trustworthiness

Research Design and Rationale

The research question guiding this IPA study was the following: What are dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development? The research on farm women's identity has been limited in their focus based on on-farm roles (Brasier, Sachs et al., 2014). The research on farm women's education has also been limited to identifying farm women's educational wants and needs (Brasier, Barbercheck et al., 2009; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). There was a gap in the literature in regards to education's influence on farm women's primary, on-farm identity development. IPA was

an appropriate approach to use to explore how dairy farm women are making sense of their previous learning and its influence on their primary, on-farm identity development.

IPA's approach is phenomenological in nature because it involves completing a detailed examination of the participant's experiences, and it is focused on the individual's perception of those experiences (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). This allows themes to emerge from the data rather than using quantitative methods that posits variables and constructs. At this time, education's influence on dairy farm women's identity development does not have any predisposed, presupposed constructs or variables that can be used in quantitative analysis. The purpose of this research was to find out how dairy farm women perceive education's role in their primary, on-farm identity development; therefore, it was appropriate to use qualitative research.

Quantitative research was not considered for this study due to the desire to understand dairy farm women's perceptions of education's influence on their primary, on-farm identity development, thus making it impossible to be able to postulate interactions, correlations, or support surveys (Creswell, 2009). Case studies and narrative research were considered within the framework of qualitative research. Even though case studies would provide the individuals' perspectives, it limits the researcher to an insider/outsider position. Narrative research limits the relationships of the meanings that IPA can bring about; thus, narrative research was not a better choice (Creswell, 2013; Maxwell, 2013; Patton, 2015). Because there was an absence of an understanding of the context, purpose, and significance of education's influence on dairy farm women's primary, on-farm identity development, IPA was best suited to finding out how dairy

farm women perceive education's role in their primary, on-farm identity development (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). IPA allows for, even encourages, insider research. IPA uses semistructured interviews, which allowed me to have a dialogue with my participants that was flexible enough to be able to explore interesting and important areas as they arose (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008).

Role of the Researcher

Qualitative researchers are the data collection tool (Blythe et al., 2013; Creswell, 2013; Maxwell, 2013; Patton, 2015). For this study I was an insider. As the instrument of data collection, my experiences and identities had an influence on the way I collected and analyzed the data (Blythe et al., 2013). It was important that I identify my position in the research. This was important to my relationship with the participants. As the researcher and an insider, I kept a research journal in order to be self-reflective during the entire research process of this study. The journal included a record of my reactions, thoughts, and observations of any nonverbal data.

The credibility of this IPA study was strengthened by my own Wayne County, PA dairy farming experience, knowledge of the dairy industry, and experience as a counselor. I was raised on an active Wayne County, PA dairy farm and held many onfarm responsibilities myself until 1997. I also had more recent knowledge of the dairy industry, having worked as a field technician for an agri-business for 8 years; I resigned from the position in January of 2015. I did have professional knowledge of the potential participants, as well as having known many of the potential participants since childhood; but, I lacked any knowledge of their lived experiences related to their past learning

experiences. Because I no longer held a professional position in the dairy industry, there were no foreseeable possible ethical issues that needed to be managed. My possible bias was related to my personal experiences within the dairy industry. I was the only contact to the participants as well as the one who analyzed the data.

Methodology

Participant Selection Logic

This IPA study was conducted in rural Wayne County, PA. The scope was limited to a homogeneous, purposeful sampling of 10 dairy farm women, between the ages of 24 to 80. Each of these women were living on an active dairy farm, except one, who had married and moved off the farm 2 weeks prior to her interview. IPA studies are usually completed with a small sample. Smith and Osborn (2008) stated that several factors effect IPA sample size: "The degree of commitment to the case study level of analysis and reporting, the richness of the individual cases, and the constraints one is operating under" (p. 57). Smith and Osborn suggested that three is a good sample number for students. Smith and Osborn believed that three participants "allow sufficient in-depth engagement with each individual case but also allow a detailed examination of similarity and differences" (p. 57). Guest, Bunce, and Johnson (2006) discussed sample sizes in relation to saturation or "the point at which no new information or themes is observed in the data" (p. 59). Guest et al. believed that saturation occurs within 12 interviews, though they suggested that "basic elements for metathemes" are present by six interviews (p. 59). Based on the information gathered from Guest et al. and the suggestions made by Smith and Osborn, I believed that 10 participants would allow me to obtain a detailed interpretative account of dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development.

Only participants who were over the age of 21 were included due to the focus on past learning experiences. I had worked as a field technician within the Wayne County, PA dairy farm community; hence, participants were drawn from this dairy farm community. If for some reason 10 participants could not be recruited in Wayne County, PA, I would have expanded recruitment into nearby Susquehanna County, PA.

In this IPA study, I sought information from typical dairy farm women who resided on an active dairy farm. I personally asked each participant to join this IPA study because I have personal knowledge of the active Wayne County dairy farms. I discussed the research with each individual dairy farm woman, and appointments were made for the interviews. The context of this research may have been changed by my presence. It is natural for the researcher to have power in the research relationship, which could have caused a change in the dynamic for the participant. As an inside researcher, however, I was viewed on an equal level, "minimizing the power differential" between the participants and myself (Blythe et al., 2013, p. 9). I also elevated any power disparity by allowing the participants to choose their interview environment and their personal pseudonym to increase participant autonomy and decrease possible barriers to participation.

Instrumentation

According to Smith and Osborn (2008), semistructured interviewing is "the best way to collect data for an IPA study" (p. 57). Semistructured interviews allowed me to

engage in a dialogue with the participants. By using semistructured interviews, I provided a complete list of questions in an interview protocol (see Appendix B) that guided me but did not dictate the interview (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). Interview questions included the following: Tell me about where you grew up? How did you come to dairy farming? Being guided by the interview protocol rather than dictated by it, I developed rapport with the dairy farm women I interviewed. I was also free to probe areas of interest that arose, and I was able to follow the interests or concerns of those women (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008).

In IPA studies, there is a desire to attempt to enter the psychological and social world of the participant (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). Because of my desire to be as much of an insider as possible, the participant had more control of the direction the interview took, as well as introducing areas of interest that I did not think of. In this relationship, the participants were viewed as experiential experts on the topic and needed to have maximum opportunity to express their thoughts (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). I chose semistructured interviews for my data collection because it was the best possible way to collect data through interaction with those who know, thus gaining an understanding of the meaning of their experiences in their words. Semistructured interviews contain both strengths and weaknesses. The building of rapport was facilitated with semistructured interviews. This type of interview gave me greater flexibility and allowed me to explore novel areas (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). The most important advantage to using semistructured interviewing in IPA studies is that it often produces rich data. On the down side of

semistructured interviews, I had to reduced control over the interview situation. Also, this type of interviewing takes longer and can be more difficult to analyze (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008).

As an interviewer it was important to remember that not every person who I interviewed was going to be as cooperative, articulate, and perceptive as another. It was important that I had interview skills. Interviewing is not a neutral tool for data collection. It was an outcome of the interactions between me and the dairy farm women being interviewed, as well as the context of the interview setting (Creswell, 2013; Maxwell, 2013; Patton, 2015). With the guidance of my dissertation committee, I developed my interview questions using my research question as the framework for the semistructured interviews. I developed a series of open-ended questions and probing questions that allowed me to answer the research question.

Procedures for Recruitment, Participation and Data Collection

All of the data for this IPA study were gathered through face-to-face, semistructured interviews. I interviewed all of the participants personally for approximately 45 minutes to 1 hour and 15 minutes guided by the interview protocol. I digitally recorded all of the interviews with my IPhone memo application and had them transcribed verbatim by Transcribeme.com. I either mailed or e-mailed a copy of the transcription to the participants so that a member check could be completed. I used member checking to allow the participants the opportunity to add corrections if needed. This also allowed me to ask further questions for clarification purposes in an attempt to add trustworthiness. If any information was added or changed, the participants were

asked to verify the transcript one more time. The final verification of the transcripts was done by mail or e-mail. Participants in this study were not compensated for their time.

In order to increase reflexivity and foster the transcription analysis, I used a research journal. IPA supports reflexivity throughout the research process. The use of a research journal not only assisted with reflexivity, it also assisted in keeping a record of all of my thought processes and increased my self-awareness. I continually added notes during the entire research process for transparency of the overall process.

Data Analysis

All of the data gathered from the interviews were interpretatively analyzed to answer the question: What are dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development? The digital recordings of the interviews were transcribed through Transcribeme.com. The transcripts were participant reviewed for accuracy. My field notes were also transcribed for accessibility.

I had an interpretative relationship with each individual transcript. This involved having a sustained engagement with the transcripts and the process of interpretation (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). Beginning with the transcript of the first interview, I read the transcript several times in order to get "as familiar as possible with the account" (Smith & Osborn, 2008, p. 67). I made notes about what was interesting and significant, attempted to summarize or paraphrase, and began to make associations and connections. Once the preliminary interpretation was complete, I began to document emerging themes. I then made a list of the themes and began to cluster them. I produced a table of the themes with identifiers related back to the transcripts.

This process was completed with each individual transcript. Once each transcript had been analyzed, I worked across cases looking for convergence and divergence. A final table of superordinate themes was developed while continually working back and forth between transcripts (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008).

Once all of the analysis had been completed, I explained the themes through a narrative account. In this write-up the themes were explained, illustrated and nuanced (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008, p. 76). I used the narrative to describe the participants' responses, interspersing it with verbatim extracts from the transcripts to support the cases. I worked to ensure that the participants' accounts and my interpretations of those accounts were separated. As I presented the extracts within the unfolding narrative, I continued to extend the analytic commentary on them. This followed with the "processual, creative feature of qualitative psychology" (Smith & Osborn, 2008, p. 76).

Issues of Trustworthiness

Credibility

The credibility of qualitative research is based upon the researcher ensuring that the findings are accurate and valid (Creswell, 2013; Maxwell, 2013; Patton, 2015). Credibility in this IPA research study was seen as the extent to which the results mirror the true and accurate experiences of dairy farm women. To ensure credibility in qualitative research, I informed the participants of any risks involved in this study. I provided a consent form for the participants to sign. As a part of the consent, the participants needed to be aware that they had the right to leave the study at any time.

I ensured that participants felt safe and secure in order to elicit honest and candid responses to the interview questions and to encourage elaboration as needed. I asked the participants to choose their own pseudonym and interview location in an attempt to make them feel safe and secure. The interviews were audio (digital) recorded and transcribed through Transcribeme.com.

Transferability

Transferability refers to the process that readers use to "note the specifics of the research situation and compare them to the specifics of an environment or situation with which they are familiar" (Barnes et al., 2012, p. 4-5). If the reader finds enough similarities, then he or she "may be able to infer that the results of the research would be the same or similar to his or her own situation" (Barnes et al., 2012, p. 5). In order for my readers to be able to find the results of my study transferable, I provided a detailed description of my research context and methods (Barnes et al., 2012).

I provided thick descriptions in the results of my study, as well as throughout my study. I provided information and details about the participants. I described the study's location, the methods used, and my own role as an insider in this study. By providing thick descriptions, the readers will be able to "make an informed judgement about whether they can transfer" my findings to their own environment or situation (Barnes et al, 2012, p. 6).

Dependability and Confirmability

When discussing dependability and confirmability in qualitative research, researchers are referring to the reliability or repeatability of the findings. In an attempt to

ensure dependability and confirmability, I kept a journal to record my thoughts, choices, and decisions that I made in relation to this IPA study. As an insider in the Wayne County, PA dairy farm community, it was important that I was as reflexive as possible, documenting any bias or misunderstandings within my journal. Also, as a part of my journal, I tool observational notes during the interviews and used those notes during the data analysis process in order to verify that themes and interpretations were not impacted by my bias or misunderstanding.

Ethical Procedures

I adhered to the principles of justice, beneficence, and respect as presented in the Belmont Report (1979). All participants in the study were treated with respect and provided with an accurate representation. The issues of beneficence and respect can be a concern during the interview process. Therefore, I worked to ensure that all participants felt safe and comfortable while presenting their lived experiences with previous learning with regard to their primary, on-farm identity formation. Efforts were made to make it clear to the participants that they could stop the interview for a break or end the interview at any time without any penalties.

The participants were required to sign the Walden University consent form in order to participate in this study. I provided and discussed the consent form with each participant prior to the face-to-face interviews. The consent form included: The purpose of the study and data collection procedures; confidentiality information; risks and benefits associated with participating; and a place for the participants' signature. All of the participants for this study were over the age of 21, hence eliminating any possible

ethical concerns in that area. There was the possibility of elderly or pregnant participants but due to the very low risks involved in participating in this study, this was not a concern

Following the transcription of the interview, participants were given the opportunity to review the transcripts or opt out of the member checking. Those who elected to review the transcripts, were provided with a textual copy of their interview and asked to confirm that the data collected was accurate. If they determine that any of the textual data was unrepresentative of their experiences, they were asked to amend incorrect data through the mail or e-mail. All corrections were evaluated in comparison to the original text to ensure that the participant did not significantly alter the responses. Any such alterations might have been an issue of credibility and were reported in Chapter 4.

The consent forms, journal, and digital recordings are stored in my home office in a locked file cabinet. The interviews were transcribed through Transcribeme.com. The transcripts are stored on my password protected computer, and all hard copies stored in a locked file cabinet in my home office. The participants' names have been removed from all documentation only pseudonyms are used. All computer files are contained on a universal serial bus (USB) drive stored in a locked safe. All other data and materials will be stored in a locked file cabinet in my home office for a minimum of 10 years. There was not any type of data collection completed until I received approval from the Walden University IRB (06-15-16-0296548).

Summary

Chapter 3 has focused on the structure of the research study that was conducted. The participants, role of the researcher, ethical considerations, data collection, and data analysis were presented and detailed. The framework of this IPA study was guided by the feminist standpoint theory. This created a supportive, self-disclosing, and nonexploitive relationship. This also produced a narrative description of the lived experience of previous learning and its impact on dairy farm women's primary, on-farm identity development. The full context, purpose, and significance of the phenomena was presented within these standards to ensure ethicality and trustworthiness of the study. Chapter 4 details the results and Chapter 5 discusses the results more fully.

Chapter 4: Results

Introduction

The purpose of this IPA research was to describe Wayne County, PA dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development. Farm women occupy multiple essential positions on their farm. They tend to identify themselves with numerous and various possible identities that reflect their concurrent contributions in various areas (Kallioniemi & Kymalainen, 2012; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010). In this study, I explored dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development. In this chapter, I discuss the demographics of the 10 dairy farm women who participated in this study, the data collection and analysis strategies I used, evidence of trustworthiness, credibility, transferability, dependability and confirmability, as well as the results of my analysis.

Demographics

Data were collected from a total of 10 dairy farm women in Wayne County, PA. Each of the participants in this study selected her pseudonym that was used to identify her in this study. Table 1 lists demographic information for each of the dairy farm women. The age range of the 10 Caucasian dairy farm women was 24–80. The length of time living on a dairy farm ranged from 22–68 years. All of the dairy farm women are high school graduates, three of the women hold associate degrees, and one has earned her bachelor degree.

Table 1

Demographic Data

Participant	Age	Dairy	Years on	Marital	Educational
		Type	Farm	Status	Level
Amanda	80	cows	62	widow	high school
Hiedi	75	cows	55	married	high school
Rose	68	cows	68	married	high school
Joan	67	cows	67	divorced	high school
Fanny	61	cows	61	married	associate
Katie	58	cows	40	married	high school
Sue	49	cows	49	married	associate
Kay	46	cows	24	married	high school
Lynn	44	goats	28	married	associate
Brooke	24	goats	22	married	bachelor

Amanda was raised in a small rural town with no exposure to any type of farm animal until she and her husband purchased their dairy farm. At the time of the interview, Amanda worked her dairy farm with her son and daughter-in-law since her husband's passing. She is Heidi's sister and Fanny's mother.

Heidi was raised in a small rural town with some exposure to farm animals when she spent summers on her sister Amanda's dairy farm. She married a dairy farmer, and they purchased a dairy farm of their own. At the time of the interview, Heidi dairy farmed with her husband, son, and granddaughter.

Fanny was raised on a dairy farm. She married a dairy farmer and at the time of the interview, farmed with him and her brother-in-law on their family farm. Fanny continued to complete some of the paper work for her mother, Amanda's dairy farm.

Rose was raised on a dairy farm, but had no responsibilities related to the dairy animals. She married a dairy farmer, who later became unable to participate in the dairy

farm work due to health issues. At the time of the interview, Rose dairy farmed with her son and his family. She is Kay's mother-in-law.

Kay was raised in a small rural town with exposure to farm animals, but not with dairy cows until she worked on a large dairy farm after high school. At the time of the interview, Kay dairy farmed with her mother-in-law (Rose), her husband and their children.

Joan was raised on a dairy farm and continued to farm on the same farm with her son. At the time of the interview, she was a retired caregiver who started to run the dairy farm with her father and ran the farm on her own before her son took over the operation.

Katie was raised in a small rural town with exposure to a dairy farm through friends of her parents. At the time of the interview, Katie, her husband, and son ran an organic dairy farm.

Sue was raised on the dairy farm that, at the time of the interview, she and her husband continued to operate. Due to her parents health issues, she and her siblings began running the dairy farm at a young age (14 for Sue). Also, at the time of the interview, Sue and her husband operated an on-farm creamery selling pasteurized and homogenized milk and ice cream.

Lynn was raised in various rural small towns, as her family moved a great deal.

Lynn was exposed to farm animals, but had no real responsibility for their care. At the time of the interview, Lynn was married to a dairy farmer, but maintained a full-time nonagriculture career. Lynn's husband operated a dairy cow farm and a butcher shop.

Lynn became involved with her daughter's (Brooke) dairy goats when Brooke went to

college. This family operated farm had a raw milk license allowing them to bottle and sell all of the milk that they produce.

Brooke was raised on her family's dairy farm. At the time of the interview, she had been involved with dairy goats for many years and shared the responsibilities with her mother, Lynn. I had proposed that all of the women would be living on an active dairy farm and all are except Brooke, who recently married (2 weeks prior to the interview), and moved off of the farm. She also maintained a full-time position within the agricultural field.

Data Collection

The 10 participants for this study were selected using a homogeneous, purposeful sampling of dairy farm women in Wayne County, PA. IPA studies are usually completed with a small sample. Smith and Osborn (2008) stated that several factors affect IPA sample size: "the degree of commitment to the case study level of analysis and reporting, the richness of the individual cases, and the constraints one is operating under" (p. 57). In this study, I was committed to providing rich descriptions of the perceptions of the participants by completing analysis until no new themes emerged from the data.

The interview process began in August 2016 and ran through October 2016. The interviews averaged an hour with the shortest interview lasting 45 minutes and the longest being 1 hour 15 minutes. All but two of the participants choose to complete the interview in the kitchen/dining area of their home. Smith and Osborn (2008) stated, "the location of the interview can also make a difference. People usually feel most comfortable in a setting they are familiar with, as in their own home" (p. 63). Padgett

(2017) suggested that in-depth interviews should "take place in a private setting conducive to trust and candor" (p. 114). One of the two interviews not conducted in the participant's home was conducted in the kitchen of the farmhouse the participant was raised in; her home was around the corner but still on the dairy farm property upon which she was raised. The other interview was conducted in the kitchen area of the butcher shop that is on the dairy farm. All of the participants were interviewed one time, except Rose, who was interviewed twice due to an equipment malfunction during her first interview. I had proposed that all of the face-to-face interviews would be digitally recorded with a Livescribe smartpen. Unfortunately, I discovered during my practice interviews that the Livescribe smartpen was no longer in working order, so all of the interviews were recorded using the memo application on my IPhone. The memo application did fail to record the first interview that I completed, but the participant (Rose) was willing to complete the interview a second time to ensure the quality and accuracy of the information gathered from her interview. I was able to compare the information provided in her first interview to the information provided in her second interview through my notes and journal. By comparing the information from both interviews, I was able to provide rich details in my results, while maintaining accuracy of the information. Odinot, Memon, La Rooy, and Millen (2013) found that completing repeated interviews does brings forth previously unreported details.

I began each interview by reviewing the consent form and providing a signed copy to each participant. All of the participants agreed to be audio recorded during the interview. All of the participants appeared to understand the interview process and were

aware that they could stop the interview at any time. Each participant was asked the 10 semistructured questions from the interview protocol. I used nonverbal prompts, such as nodding and smiling. I also used verbal prompting, such as "could you explain that" or "what do you mean" during the interviews to gather further information. Upon completing each interview, I thanked the participant for her time and insight.

Data Analysis

All of the data that were gathered from the interviews were analyzed to answer the following question: What are dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development? The digital recordings of the interviews were transcribed verbatim through Transcribeme.com. Each of the participants reviewed her transcript for accuracy. Several women made changes to the transcript in relation to incorrect wording (i.e. the transcriber program did not correctly identify a word). Another participant added information to her transcript for clarification. All changes where noted and incorporated during analysis as well as compared to the original transcription. My field notes were also transcribed for accessibility.

I had an interpretative relationship with each individual transcript when I immersed myself into each recording and transcript. I read and reread each transcript until I felt I understood what each of these dairy farm women were saying. This relationship involved having a sustained engagement with the transcripts and the process of interpretation (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008). I began the process with the transcript of the first interview by reading the transcript; after reading a particular transcript, I listened to the recording of that interview several times in order to get "as familiar as possible with the account" (Smith & Osborn, 2008, p. 67). I made notes about what was interesting, surprising, and significant; I summarized or paraphrased and made associations and connections. Upon completion of the preliminary interpretation, I documented the emerging themes. I made a list of the themes and clustered them within three categories: identity, identity development, and education. I produced tables of themes with identifiers related back to the transcripts.

Table 2

Frequency With Which a Subordinate Theme was Supported: Identity

Participant	Laborer	Mom	Boss	Business Woman	
Amanda	X				
Heidi	X				
Rose	X				
Joan	X				
Fanny	X				
Katie	X				
Sue	X				
Kay		X			
Lynn			X		
Brooke				X	

Table 3

Frequency With Which a Subordinate Theme was Supported: Identity Development

Participant	Family	Role Model	Mentor	Emotion	Freedom
Amanda	X		X	X	X
Heidi	X		X	X	X
Rose	X		X	X	X
Joan	X		X	X	X
Fanny	X	X	X	X	X
Katie	X		X	X	X
Sue	X	X	X	X	X
Kay	X	X	X	X	X
Lynn	X		X	X	X
Brooke	X	X	X	X	X

Table 4
Frequency With Which a Subordinate Theme was Supported: Education

Participant	Formal Learning	Informal Learning	Incidental Learning	Transfer of Skills	Mentorship
Amanda			X	X	
Heidi		X	X	X	
Rose		X	X	X	
Joan			X	X	X
Fanny			X	X	X
Katie		X	X	X	
Sue	X	X	X	X	X
Kay			X	X	
Lynn		X	X	X	
Brooke	X		X	X	X

Tables 2, 3, and 4 represent the frequency with which subordinate themes were supported by each participant. To develop my emerging themes into subordinate themes, I focused on capturing crucial pieces from the participant's narrative, paying more attention to the parts rather than the whole. This process was completed with each individual transcript. Upon completion of the analysis of each transcript, I worked across cases looking for convergence and divergence. I developed a table of superordinate themes while continually working back and forth between transcripts (Pietkiewicz & Smith, 2014; Smith & Osborn, 2008).

Table 5

Master List of Superordinate Themes

Superordinate	Subordinate			
Themes	Themes			
Identity	Laborer			
	Mom			
	Boss	Business		
Woman				
Identity Development	Family			
	*Role Model/*Mentor			
	Emotional			
	*Pride/*Sadness/*Worry/*Joy			
	Freedom			
	*Flexibility/*Cor	ntrol		
Education	Formal Learning			
	*College/*Other	courses		
	Informal Learning			
	*Self-education			
	Incidental Learning			
	*Experience			
	Transfer of Skills			
	*Family/*Role Model			
	Mentorship			
	*4-H			

Table 5 shows how the superordinate themes were generated based upon the participants' key words and phrases that I clustered into the subordinate themes in Tables 2, 3 and 4. I looked for patterns across the transcripts. The superordinate themes encompassed higher order concepts shared by most, if not all, participants. The superordinate themes were not developed based solely on their frequency but in the richness of the original data. In the results section, I illumine the superordinate themes with rich examples described by the participants. The transcripts excerpts that assisted in the development of the themes are included in that section to aide others to understand and evaluate make meaning with my interpretations of the dairy farm women's experiences and perceptions.

Evidence of Trustworthiness

Credibility

The credibility of qualitative research is based upon the researcher ensuring that the findings are accurate and valid (Creswell, 2013; Maxwell, 2013; Patton, 2015). Credibility of this IPA research study was seen as the extent to which the results mirrored the true and accurate experiences of dairy farm women. To ensure the credibility of my qualitative research, I informed the participants of any possible risks involved in this study. I provided a consent form for the participants to sign. As part of the consent, participants were informed that they had the right to leave the study at any time.

I asked the participants to choose their own pseudonym and interview location in an attempt to make them feel safe and secure. By asking the participants to pick a

pseudonym and interview environment I was able to elicit honest and candid responses to the interview questions and encouraged elaborations as neded. The interviews were audio (digital) recorded and transcribed through Transcribeme.com.

Transferability

Transferability refers to the process that the readers use to "note the specifics of the research situation and compare them to the specifics of an environment or situation with which they are familiar" (Barnes et al., 2012, p. 4-5). If the reader finds enough similarities, then he or she "may be able to infer the results of the research would be the same or similar to his or her own situation" (Barnes et al., 2012, p. 5). I provided a detailed description of my research context and methods, so that my readers would be able to find the results of my study transferable (Barnes et al., 2012).

I provided thick descriptions in the results section of my study, as well as throughout my study. As part of the thick description, I provided specific information and details about the participants. I described the study's location, the methods utilized, and my own role as an insider in this study. By providing thick descriptions the reader will be able to "make an informed judgement about whether they can transfer" (Barnes et al., 2012, p. 6). my findings to their own environment or situation.

Dependability and Confirmability

When discussing dependability and confirmability in qualitative research, researchers are referring to the reliability or repeatability of the findings. I kept a journal to record my thoughts, choices, and decisions that I made in relation to this IPA study in order to ensure dependability and confirmability. As an insider in the Wayne County, PA

dairy farm community, it was important that I was as reflexive as possible; documenting my bias or misunderstandings in my journal. For example, I know many of the participants in this study, some since childhood; therefore I held beliefs about their possible primary on-farm identity that I documented in my journal as part of my notes about each interview. Documenting the primary, on-farm identity that the participants themselves identified and comparing it to the primary, on-farm identity I thought maybe possible enabled me to reflect upon my own thought processes and assisted with acknowledging and removing that possible bias during the analysis phase. Within my journal I also took observational notes during the interviews and utilized those notes during the data analysis process in order to verify that themes and interpretations would not be impacted by my bias or misunderstandings.

Results

The purpose of this qualitative phenomenological study was to describe Wayne County, PA dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development. Three superordinate themes and ten subordinate themes emerged from the analysis of the participant's transcripts; all of which assisted in answering the following research question: What are dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development?

The subordinate themes were presented in Tables 2, 3, and 4 and the superordinate themes are presented in Table 5. In the following section I explain the three superordinate themes supported by participant excerpts from their transcripts.

Identity

A dairy farm women's identity is multi-faceted, which reflects all of her various roles on the farm and in her life. Not only are these women wives, mothers, grandmothers, and aunts; they are also caregivers, veterinarians, gardeners, bakers, and bookkeepers. Dairy farm women appear to have a difficult time identifying their primary, on-farm identity, probably because of the multiplicity. The first superordinate theme captured the dairy farm women's primary, on-farm identity.

The majority of the dairy farm women that participated in this study identified their main on-farm identity as laborer. Most defer the title of farmer to the men in their lives; though Rose stated "I'm the only farmer left in the family" when talking about her family of origin. This deference does not appear to occur because they feel inferior to the men but due to the perception that they are equal to or in partnership with the men. Sue expressed this perception of partnership as:

My husband, we work really good together. Um and we kinda work off of each other, like he'll come up with something, an idea, and we'll discuss. And we'll either capitalize on it, or not. No, we – it's total teamwork in every decision-making process. Because if you're not on the same page, it's not gonna work. Heidi stated "You have to work side by side with your husband".

As for the laborer identity several women expressed the reason for this identity. Joan stated: "chore girl' (laborer) because that's what I do the most. Just anything that needs doing extra, you know".

Heidi talked about: "Trying to keep the farm together, I guess. Because when he needs something I go for it. If they need somebody to do calves, I have to do calves. If they need somebody to get the cows, I have to get the cows. I'm indispensable". Three of the participants discussed the fact that what they do involves labor but reported other primary, on-farm identities for themselves. Kay stated that her identity is mom because: "I think with family and the farming it's 24/7". Lynn identified herself as boss because: "I'm more the organizer, and how to do things the right way".

Brooke identified herself as a business woman explaining that: Because it's not just doing the chores in the barn, it's you know, we do marketing of the milk, we do travel with the milk, we do you know, the bottling of the milk is separate from doing chores, if you think about it – because it's a process in itself. Um, and talking to your individual vendor if you want to call them vendors, or your retail stores that are selling your milk, and then you have to introduce yourself to the public, and your customers, and teach your customers about your specialized product, because raw milk has to be treated in a more, you know, specific way than pasteurized milk.

Identity Development

A dairy farm woman's identity development appearred to be as multi-faceted as her identity. This seemed to be a reflection of not only the various roles she has on her farm but also a reflection of all of the pieces that make up who she is to herself and the world around her. The second superordinate theme captured the dairy farm women's primary, on-farm identity development.

Family

Family is the core of who these dairy farm women are. Be it their family of origin or family of their own. Many of these women perceived at least one family member as a role model or mentor. Those who perceived a family member as a role model discussed the things that they still hold true in their hearts.

Fanny viewed both of her parents as role models. She stated her father: "Told me the quicker you do it the quicker you get done. And I've always remembered them words, and I've tried to still follow that motto I guess". While saying this about her mother: "She just is always a hard worker, and I try to work as hard as her. I know I haven't but she just taught me like, just do your work and do it the best you can".

Those women that perceived a family member as a mentor talked about the things for which they were grateful. Fanny viewed her uncle as a mentor and said: "He got me in 4-H and stuff and he broadened my world a little and I appreciate him for that".

Brooke viewed her father as both a role model and a mentor: "He is my number one hero, ever. I don't know anybody who is smarter, more caring, more loving in the entire world. I don't".

These women told me stories about events or occurrences with their family and talked about what were some of the best things about living on a dairy farm in relation to their children.

Amanda stated: "You're there to see your kids get on the bus and you're there when they come home".

Kay pointed out that even though there might not be a lot of free time they always tried to spend some time with their children.

And we didn't always do a lot of things – uh, big things with the kids, but a half hour in the pond or going fishing with one of the boys who likes fishing. And um, just doing things periodically that they like and keeping interest is a big plus with kids.

Lynn had a different perspective about farming and family which she expressed in this way:

I'm on a farm now. The farm wasn't really something I wanted, because to me it didn't provide money for me to raise my children, so I waitressed myself at night, and put myself through college while we lived on the farm. So [husband] did all of the farm work. We were like to separate people pretty much, but we had children.

Lynn also described her perception of dairy farming and full-time employment as: "One gives me the quality of how I want to live my life. The other just gives me the monetary of what I know I need to live in this society".

These women expressed pride, sadness, worry, and joy in relation to their family and their farm. There was pride expressed in regard to the fact that they were still operating a dairy farm.

Heidi stated: We started off at nothing and our mortgage payment was \$200 a month and I thought, we'll never get the farm paid off and our first milk check was \$90. \$200 a month for mortgage and we had 25 cows, four heifers, and the

house was in deplorable condition. It was really bad. And I look back and think, how on earth did we do that? But somehow we managed to survive with a house full of kids.

There was also pride expressed in relation to the things that they could do on their own that helped ease the burden that came from operating a dairy farm.

Rose stated: I always felt that if I could do something, I did it. [Husband] and dad (husband's father) had enough other things on the farm that needed doing that I couldn't do. If I did what I did, it freed them up to do the other things. That philosophy has kept this farm from needing to hire outside help. Truly a family farm that has defined the books and made a living from just family, no outside hire.

There was sadness related to the past for some of the women, the loss of parents, grandparents, and/or siblings, etc. Kay spoke about the loss of her husband's grandmother:

When they're a part of your life so much and have been um – have influenced your kids and your life and it's just, um, I don't think there's hardly one day we go by where we don't think of grandma one way or the other.

In Sue's case, her sadness came from what she perceived as a lost childhood. Sue and her siblings became responsible for the farm's continued operation when Sue was just 14 years old.

My parents were sick at 40 and 42, and all that mattered is that the chores got done. Didn't matter if it was just [brother] and [sister] and me. Or it was usually just [brother] and me.

Worry was expressed in concern for the continued operation of the farm. As Joan put it "Well, nobody knows what I do." Joy generally seemed to extend from and in conjunction with the pride they felt.

Freedom

For the dairy farm women represented in this study routine seemed to provide them with a sense of freedom which played a role in their identity development. This sense of freedom derived from the perspective that once their 'chores' were done they were free to do other things or from not having a boss.

Rose expressed her freedom as: The versatility and also the flexibility, you can do what you want when you want. Making your own calls on what's important to you...working with family instead of people you don't know, maybe you can't get along with.

Kay simply put it as: "Basically, still have chores on both ends of the day".

For Heidi freedom was represented in her being able to volunteer in her community. Joan stated: "my day is very consistent" which to her was a sort of freedom.

Sue expressed her sense of freedom as:

Not clocking in part is the best, but the pay sucks, because all of my kids learn that once you clock in at a job, they own you. There's no 20 minutes on the living

room floor after lunch. There's no snowmobile randomly during the week once your chores are done. There's no, I'm going to town today for a couple hours and go shopping whenever you feel like it. You know, around your chore schedule. They own you. Nobody owns me. But that the biggest thing – being your own boss. But then, you know when you're sick, you're still working.

Several of the other women expressed the same feeling of being your own boss. Katie discussed her view of dairy farming and the sense of freedom by saying: "It's a way of life, and it's how family is brought together, and works together, and we're our own boss".

While Lynn used a comparison:

Farming is kind of like being a chef, or working in a place that may not appeal to other people. If you don't really love it, if it's not in your heart, you're not going to do it. You have to love what you're doing.

Brooke stood out because she did not talk about dairy farming as providing her a sense of freedom. However, her thoughts followed closely with those if Katie and Lynn.

Brooke explained dairy farming by saying:

I mean the amount of pure torment you go through has to balance out with the amount of love and the amount of passion you have for it. So being able to be there for every point of that and tie that into making money, or at least making enough to live.

To me Katie, Lynn and Brooke were able to express the love and passion that is needed to continue to be a dairy farmer even when the future of the farm is continually threatened by society's lack of understanding.

Education

To dairy farm women, learning (education) did play a role in her primary, onfarm identity development. However, she may not perceive the learning as a piece of her identity development because the majority of learning that impacted their identity development did not occur in a classroom. The third superordinate theme captured the dairy farm woman's perceived learning events.

Formal education

I previously defined formal education in chapter one as: Usually organized by an institution and extremely contextured (Glover, 2012). Four of the dairy farm women in this study had completed formal education beyond high school. Of those four women only two obtained a degree that could or did impact how they completed their work on the farm. Brooke knew that she wanted to continue to have her dairy goats and that she wanted to turn her passion for her goats into a business. Brooke completed her bachelor degree in agri-business and expressed that at least some of her book learning was being utilized in her micro-business.

Sue stated that while she was growing up: "There was never any encouragement to go to college, to do something". Yet, later in her life she got her associate degree in veterinary science. Sue called her degree her back-up plan if something happened and she could not operate her dairy farm anymore. Sue did not perceive her degree as having

any impact on her work but did say that a dairy management course that she completed had an impact. The majority of the other women had considered continuing their education beyond high school but stated that there was no money available for them to be able to do so.

Informal learning

I previously defined informal learning in chapter one as learner directed (Glover, 2012). The majority of the dairy farm women in this study perceived this type of learning as self-education and used this type of self-directed learning to improve their family farm and themselves.

Sue expressed her informal learning in this way:

Read more of that in dairy periodicals. I read them all the time and I'm constantly picking stuff out there that – you know, that I'll compare to or try it.

Sue reinforced the need for this type of learning by saying:

If you don't get your head outta the sand, you're not gonna keep up in this industry. So if you're not seeking information in the periodicals – which in a lot of instances, that's all people, have – that's their only ticket to the outside world.

Katie explained that for her self-education was the key to making her family farm better. She said:

Reading, you know different articles on, well you should do this and you should do this – still learning.

For Katie she perceived this type of learning as:

It actually gives you a different insight on things that you are already doing that you can do different, that actually like save you time, or uh, it helps you to figure out something that's wrong with one of your animals that, you know, that the current treatment you're using doesn't work. Or, you know, things to even look for in cows and stuff.

Incidental learning

I previously defined incidental learning in chapter one as unintentional learning that occurs naturally from other functions (Glover, 2012). The dairy farm women in this study did not describe any occurrences of this type of learning. However, a few of the women mentioned learning by 'trial and error' and Lynn stated "you have to learn when you're implementing yourself." I would have to say from my own experience this type of learning does occur on dairy farms. For example, if one of the chores is to bottle feed the calves; you learn that each calf drinks differently. From my own personal experience feeding calves; I learned to recognize when a calf was not feeling well just because it drank differently from the previous feeding.

Transfer of Skills

Transfer of skills was defined in chapter one as – occurs among others. For all of the dairy farm women in this study this was the most prominent type of learning. Each of these women talked about learning by observing a parent, grandparent, a family friend, their husband, a co-worker, or from being involved in 4-H. Rose stated for her learning to do what she does on her farm, was through being:

Thrown into it. By choice, I chose it. And just by example, you know, working with my mother-in-law, who had done it for years.

Heidi talked about her transfer of skills occurring: By watching. I can fix the water bowl, deliver a calf, put a plug on an electrical outlet. You just learn, I guess.

For Joan: It just sorta happened. It's just what happened. It's just the way it was.

I mean even when – as a little kid, why we all had our jobs.

Brooke stated:

I watched my dad and asked lots and lots of questions. Being able to follow around on his shirt tail, literally sometimes, and work with him through many business transactions, um, coming up with ideas to fix problems, being there in the middle of the night when the cows are calving, or, you know, when we have to put one down, or, you know, when the manure pipe clogs – or the tractor's not working, or there's an ice storm and we need the generator.

Many of these women described learning to milk the cows or how to drive the tractor or operate other farm machinery from their parents or their husbands. Heidi stated that her son made her learn how to operate the skid steer when they bought one for the farm. Katie talked about how operating some of the machinery was her favorite thing to do on the farm.

Lynn described this type of learning as:

That's how you learn, that how you teach, and people will remember that.

They'll always remember that before they remember what they read in a book, because that face—to-face makes a difference

Mentorship

When discussing transfer of skills mentorship could not be left out of the conversation, especially for some of these women. These dairy farm women had mentors and role models within their family but also outside of the family through 4-H. Fanny said that being involved in 4-H gave her the opportunity to meet "people I would have never met otherwise".

Joan stated: I look at 4-H as a big part of my life. Now yes, I took cooking and sewing and stuff like that. But it gave me the start I needed.

Joan continued the mentorship of 4-H with her sons and was looking forward to when her granddaughter would be old enough to become a 4-H member. Heidi and Amanda's children were involved in 4-H, as a matter of fact Heidi's husband was instrumental in getting Amanda's children in 4-H. The mentorship of 4-H continued through the children and grandchildren of these dairy farm women.

Brooke was involved in 4-H as a child and teenager and even continued her involvement through her college career. Brooke was a very proud supporter of the mentorship that 4-H provided. She described her experience with 4-H in this way:

4-H started me on my leadership kind of role. I had amazing leaders when I was younger, they all worked together in order to help the kids learn. To be able to have a program where you get to do animals and have fun and learn at the same

time, it was great chemical combination for me, because I loved to learn – I loved animals, and I really needed more help in the leadership and, you know, the social part.

Brooke has taken the steps to become a dual key leader of her own 4-H club explaining that she did this because "I just love that moment when you teach a child something, and you see the light bulb go off."

Summary

In this chapter I discussed how I used IPA and presented the results of the research question: What are dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development? Three superordinate themes that answered this question were identified: Identity, identity development, and education. These three superordinate themes represent the most salient experiences and perceptions of dairy farm women in relation to previous learning and its influence on their primary, on-farm identity development.

Dairy farm women's quotes broadened the content, bringing the dairy farm woman's authentic voice forward. In chapter 5 I discussed the interpretation of the findings, the limitations of the study, the recommendations for future research and the implications for positive social change for dairy farm women, agricultural educators and policy makers.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this qualitative, phenomenological study was to describe Wayne County, PA dairy farm women's perceptions of previous learning (education) and its influence on their primary, on-farm identity development. Farm women occupy multiple essential positions on their farm. They tend to identify themselves with numerous and various possible identities that reflect their concurrent contributions in various areas (Kallioniemi & Kymalainen, 2012; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010).

Three superordinate themes and 10 subordinate themes emerged from the data analysis. The dairy farm women in this study discussed their identity: laborer, mom, boss, and business woman. A dairy farm woman's identity is multifaceted, which reflects all of her various roles on the farm and in her life. They described their identity development, highlighting their family and freedom as key factors to their primary, onfarm identity development. A dairy farm woman's identity development appeared to be as multifaceted as her identity. This was a reflection of not only the various roles she has on her farm, but also a reflection of all of the pieces that make up who she is to herself and the world around her. The participants in this study also discussed their education: formal learning, informal learning, incidental learning, transfer of skills, and mentorship's influence on their primary, on-farm identity development. To dairy farm women, learning (education) did play a role in her primary, on-farm identity

development; transfer of skills, and incidental learning had the greatest impact on their identity development.

Interpretations and Findings

The findings from this interpretative phenomenological study of dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development emerged from the lived experiences described by the 10 participants. I identified three themes as the result if the data analysis: identity, identity development, and education.

Identity

In general, farm women occupy multiple essential positions on their farm and tend to identify themselves with numerous identities that reflect their contributions in various areas (i.e., farm, household, family, workplace, and community; Kallioniemi & Kymalainen, 2012; Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Schwartzberg, 2010; Tutor-Marcom, Bruce, & Geer, 2014). The dairy farm women in this study mirrored this in their difficulty in identifying their primary, on-farm identity. They viewed themselves not only as wives, mothers, grandmothers, and aunts but also as caregivers, veterinarians, gardeners, bakers, and bookkeepers. The majority of the participants in this study identified their primary, on-farm identity as laborer. Pearson (1979) had similar results in which most participants defined themselves as farm helpers, contributing as laborers. There have been some reported cases where farm women downplay their actual involvement on the farm (Sachs, 1996). Sachs (1996) believed that this occurred because farm women hold multiple roles on the farm and because they are

flexible and willing to fill-in as needed. The Wayne County, PA dairy farm women in this study did not downplay their actual involvement on the farm. These dairy farm women percieved that they are equal to or in partnership with the men on their farms.

Brasier, Sachs et al. (2014) identified six possible identities for farm women: Farmer or primary operator, farm entrepreneur, farm worker-apprentice, farm business partner, farm wife-domestic partner, and worker-professional. Brasier, Sachs et al., described each of these possible identities in their quantitative research. Brasier, Sachs et al., defined the farmer or primary operator as the person who is in charge of the labor and decisions on the farm; the farm entrepreneur is the individual who not only makes decisions about the farm but also the one who looks at other possible farm business activities. The farm business partner shares in all areas of the farm, usually with a spouse or partner or another family member. The worker-professional identity described by Brasier, Sachs et al. primarily works off the farm and brings back to the farm income and benefits. The farm wife or domestic partner may provide on-farm labor as needed but primarily runs the household. Many of the women who participated in Brasier, Sachs et al.'s research identified themselves as farm partners. Based upon the above definitions, the majority of the dairy farm women in my study could identify themselves as farm business partners. Other identities that the participants of my study could identify themselves as are: Worker – professional and farm wife or domestic partner.

Identity Development

A dairy farm women's identity development is a multifaceted as her identity.

This is a reflection of not only the various roles she has on her farm but also a

representation of all of the pieces that make up who she is to herself and the world around her. Vesala and Vesala (2010) discovered that individuals construct multiple identities.

These identities are based on the different jobs or roles he or she maintains within society.

Jones (1997) found participants related their developing identity to their selfview, relations with others, ethnic and cultural aspects, and life events. The dairy farm women in my study related similar aspects of their identity development (i.e., relations with others and life events). Jones' findings showed identity to be fluid with multiple dimensions of the past, present, and future being incorporated into the self (p. 382). The women studied were unable to discuss their identity without referencing their family experiences. The dairy farm women in my study present their family as the core of who they are. The women in my study also showed that their identity development has multiple dimensions of the past and present being incorporated into the self. Many of the women in my study perceived at least one family member as a role model or mentor. The surprising aspect of the past, present, and future that was presented by the participants of my study was related to emotions. The emotions of pride, sadness, worry, and joy that are tied to events of the past, present and future that the participants presented represented more meaning to these women than the event itself. I did not discover any previous studies that recognized emotions as a piece of an individual's identity development.

For the dairy farm women represented in this study, their daily routine provided them with a sense of freedom that played a role in their identity development. This sense

of freedom came from the perspective that once their chores were done, they were free to do other things or from not having a boss. This finding was also a surprise to me; even though I am an insider to the dairy farm life, freedom was not a concept I related to farmers or farms in general. This sense of freedom that these women perceive is a new concept to be explored in relation to identity development as I was unable to find any previous research that discussed freedom in relation to farm women or identity development.

Education

Prior to this study, there was a limited number of studies on education's influence on identity development. To the dairy farm women in this study, learning (education) played a role in her primary, on-farm identity development. However, she might not have perceived learning as a piece of her identity development because the majority of learning that impacted their identity development did not occur in a classroom. Incidental learning and transfer of skills were the top two forms of learning that dairy farm women in this study perceived as having an influence on their primary, on-farm identity development. Informal learning also had some influence on identity development for these women but one that was not really perceived by the participants.

Glover (2012) defined formal learning, informal learning and incidental learning as part of a research study on rural resilience and Heggem (2014) discussed transfer of skills as part of research completed on the tractor gene. Previous research has shown education and learning are important pieces to farm women's ability to be successful in the farm business. Glover discovered "lifelong learning was a key factor in determining

the success and resilience of the business (p. 366). Given these previous findings it was not a stretch to see how incidental learning could be perceived as playing a key role in a dairy farm women's primary, on-farm identity development; along with transfer of skills, since Leckie (2010) found that a great deal of the information and expertise that is needed for farming is transferred across generations. Glover (2012) reported farmers tend to draw from the knowledge they have gained in the past or from others. The dairy farm women in my study appear to draw these forms of education (incidental learning and transfer of skills) into themselves thus adding to the development of their primary, on-farm identity.

Because there has been very little research on the influence of education on women's primary identity development, this study contributes to the field by manifesting the perceptions of dairy farm women. In this study, I explored the unique, lived experiences of 10 Wayne County, PA dairy farm women. The participants shared their perceptions of previous learning's influence on their primary, on-farm identity development, along with other factors that influence their identity development. In addition to this scholarly contribution, this study adds to the field of agriculture by presenting the dairy farm women's movement away from the typical agrarian view of farm women. As previously mentioned, there has not been research dedicated to previous learning's (education's) influence on dairy farm women's primary, on-farm identity development.

Earlier in this dissertation, I shared that I was raised on an active Wayne County,

PA dairy farm and held many on-farm responsibilities until 1997. I also shared that I had

worked as a field technician for an agri-business for eight years; I resigned from the position in January of 2015. I knew most of the participant's professionally through my previous position as a field technician and personally having known many of them since childhood growing up in the Wayne County dairy community. Having had this exposure, I wondered how they identified themselves on the farm and if education (previous learning) impacted who they are. Through this study, I was able to offer a unique insight by speaking directly to the experts, dairy farm women. The voice of each of the dairy farm women has been heard using their comments and perspectives of previous learning and its influence on their primary, on-farm identity development.

Theoretical framework

Feminist standpoint theory which evolved from the endeavors of Harding, Smith, and Hartsock (Cohen & Crabtree, 2006) informed all areas of my research, as well as my meaning making during the analysis process. Feminist standpoint theorists use a perspective that focuses on women's everyday life (Cohen & Crabtree, 2006; Intemann, 2010; Sachs, 1996). Researchers using this theory emphasize the connections between expansive social configurations, such as education and unique varieties of comprehensions, such as identity (Harding, 1991; Sachs, 1996).

The participants in this study discussed numerous aspects of their everyday life that impacted their primary, on-farm identity development. I focused on making connections between what these women do every day, their primary, on-farm identity and their perceptions of previous learning. I also worked to follow Jones (1997) who focused on women presenting their identity in their own words. Jones thought this was the best

way to understand how women solidify identity, as well as examine the differences between each woman. By providing a voice to each of the participants in this study I was able to present the similarities and differences of these Wayne County, PA dairy farm women while examining their perceptions of previous learning's influence on their primary, on-farm identity development.

Limitations of the Study

A limitation of this study stemmed from the participant sample since it was restricted to Wayne County, PA dairy farm women. In order to ease this, I interviewed participants until I reached saturation, where no new themes emerged. The knowledge I gained in this study pertained to rural Wayne County, PA; and the dairy farm women who expressed their unique experiences in that context. Therefore it will be up to the reader to make transferences to other populations.

A second limitation of this study was the potential for researcher bias. Having been raised since childhood as a member of the Wayne County, PA dairy community, there was potential for these experiences to impede the interview and data analysis process. Through continual conscious reflection of my experiences (journaling, peer review, and frequent contact with my dissertation chair) I was able to compose an understanding of Wayne County, PA dairy farm women's perceptions of previous learning and its influence on their primary, on-farm identity development.

Recommendations

Most of the previous research focused on farm women's identity rather than how farm women's primary, on-farm identity is developed. The influence of education on

farm women's primary, on-farm identity development was identified as a gap in the literature. Brasier, Sachs et al. (2014) identified six possible identities for farm women. Jones (1997) explored identity development with women college students. As for previous research on farm women and education most studies focused on educational needs (Barbercheck et al., 2009; Brasier, Barbercheck et al., 2009). There was no research discovered that explored education's influence on identity development with dairy farm women from their perspective. This study contributed to filling the gap by examining the unique, lived experiences of 10 Wayne County, PA dairy farm women and their perceptions of education's influence on their primary, on-farm identity development. Recommendations for future research include:

- 1. Analyzing the identity development of farm women in other demographic areas and also outside of the United States. Women farming in other areas may offer additional insight into how farm women develop their primary, on-farm identity and education's influence on that identity.
- 2. Analyzing education's influence on primary, on-farm identity development among a more diverse population. All of the dairy farm women in this study were Caucasian. A more diverse population would provide a cultural perspective on education's influence on primary, on-farm identity development.
- 3. Since a sense of freedom and emotions were an influence on dairy farm women's identity development, future studies should expand on how other farm women perceive these concepts with regard to their identity development. I would suggest that future researchers approach these concepts through a qualitative study in order to gain an

understanding of how other farm women perceive these concepts in relation to their identity development.

Implications

With this study, Wayne County, PA dairy farm women's voices are now heard in regard to their primary, on-farm identity and education's role in that identity's development. The understanding gained from this study can provide policy makers and educators within the dairy industry the knowledge to alter the way that information is provided to farm women (Farmer-Bowers, 2010). The finding from this study begin a conversation on how previous learning influences identity development in dairy farm women, a previously unexplored area. With this clarification of education's influence on dairy farm women's identity development there should be an impact on dairy farm women's educational opportunities; such as developing educational curriculums that are farm women specific or gender neutral. Agricultural educators should assess the way that they currently deliver their programs, looking at the form of education they are using and possibly changing to another style. For instance, if they are presenting their programs in a formal education style (classroom), they may find reworking the program to a more informal style or even to a transfer of skills style could bring more farm women in for educational events. For example, rather than having a classroom course about raising health calves, an educator could present the same information to farm women by conducting the learning session on an active farm and provide opportunities for the participants to try out the information presented in real time with hands on activities. Agricultural educators who change their program delivery style to a transfer of skills

style should also change the educational environment to on-farm educational events rather than a classroom setting. By making these changes agricultural educators will be beginning to recognize that farm women have their own talents, needs, and viewpoints that do not fit into the traditional agrarian viewpoint that has been the controlling factor in agricultural educational programs. The results of this IPA research should assist in moving Wayne County, PA beyond the agrarian ideology.

The aim or goal of feminist research is to shed light on any bias or injustice, or both in the treatment of women in different social settings and institutions. Another goal of feminist research is to fill in the gaps in our understanding of women (Brandth, 2002; Cohen & Crabtree, 2006; Sachs, 1996). Feminist standpoint theory provided the framework for this IPA study. Feminist standpoint theory evolved from the endeavors of Harding, Smith, and Hartsock (Cohen & Crabtree, 2006). Feminist standpoint theorists use a perspective that focuses on women's everyday life (Cohen & Crabtree, 2006; Intemann, 2010; Sachs, 1996). The use of standpoints does not reflect a comprehensive view of all members of a specific group. The participants in this study provided their own perspective of education's role in their primary, on-farm identity development, which has moved beyond the agrarian ideology.

The nature of agrarian ideology tends to oppose the interests and activities of women to some extent. The agrarian standpoint assumes that dairy farm women's onfarm identity is not as valued as the male farmer and may be conveyed both socially and academically to society and institutions. Agrarian ideology continues to be evident in Wayne County, PA's institutional and societal structure. The participants in this study

presented their perceptions of being equal to or in partnership with the male farmer. This finding implies that the dairy farm women in Wayne County, PA are already moving beyond agrarian ideology within their community (society) yet the County's agricultural institutions, such as Cooperative extension remain fixed within the agrarian viewpoint. The results of this research can provide agricultural institutions with another (feminist) viewpoint of dairy farm women based upon the perspective of dairy farm women's everyday life as it has been presented by the participants in this study.

Conclusion

Previous research indicated an understanding of the role of education in farm women's primary, on-farm identity development could improve agricultural education programming (Trauger, Sachs, Barbercheck, Kiernan, Brasier, & Findesis, 2008). Prior to this study, there had been little research that focused on how farm women's identities are developed. There had been no research that focused on education's role in dairy farm women's primary, on-farm identity development. This was the problem I sought to address in this study.

In this study, I described the phenomenon of how education plays a role in dairy farm women's primary, on-farm identity development. I described the lived experiences of 10 Wayne County, PA dairy farm women to understand how their previous learning (education) has influenced their primary, on-farm identity development. Through this study, I was able to give a voice to these dairy farm women, who described their primary, on-farm identity and factors that influenced that identities development, including previous learning. The findings from this interpretive phenomenological study of

understanding the perceptions of dairy farm women emerged from the lived experiences described by the participants. Three themes emerged from the data analysis: identity, identity development, and education. The participants in this study described their primary, on-farm identity. These identities included laborer, mom, boss, and business woman. The participants also described factors that influenced their primary, on-farm identity development. These factors included family, a sense of freedom and emotions. The participants described several forms of education that influenced their primary, on-farm identity development. These educational forms included formal learning, informal learning, incidental learning, and transfer of skills.

Wayne County, PA dairy farm women are a strong group of women who are sure of who they are and how previous learning has added to their identity. Each of the participants in this study vary in their backgrounds and dairy farming style, yet they all agree that education and lifelong learning are important to who they are and who they will continue to be. These lived experiences of Wayne County, PA dairy farm women cannot be taught in a classroom or in an agricultural education event. However, it could be of great benefit for agricultural educators and policy makers to understand these identity development factors and incorporate these findings into the development of specific trainings and information presentations for women farmers.

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Appendix A: Recruiting Script - Telephone

Hello, this is Amy Spangenberg. I hope that you remember that while I was working as your field technician I was also attending Walden University as a doctoral student in the Educational Psychology department. I am conducting research on education and identity development with dairy farm women. I am calling to invite you to participate in this research because you are a woman living on an active dairy farm in Wayne County. Participation in this research involves an interview about your life on the farm. The interview will take approximately an hour and a half to two and a half hours. If you agree to participate in this research I would like to mail you an Informed Consent form to review, sign and return in a self-addressed stamped envelope. When I receive the signed consent form, I will contact you to schedule a date and time for the interview. I will be asking you to decide where you would like to complete the interview; a library, a restaurant or any other neutral, private place.

If you have any further questions about this research, I can be reached at 570-798-**** or amy.spangenberg@waldenu.edu. Thank you for taking the time to speak with me today.

Appendix B: Interview Protocol

Date: Location:

Interviewer:

Interviewee: Pseudonym:

Age: Employment:

Highest Level of Education:

I would like to start by thanking you for agreeing to take time out of your day to participate in this study. Your participation will not only assist me in completing my doctoral degree, it will also add to the existing body of knowledge related to dairy farm women's identity. This interview will take approximately an hour and a half to two and a half hours to complete. If you feel that you need a break as we work our way through the questions, please feel free to ask for one at any time. You may think that I know the answers to some of these questions but I do not know the answers from your perspective. If it is all right with you I would like to record this interview, as well as take notes.

- 1. Tell me about where you grew up?
- 2. As a child what did you see yourself doing when you grew up?

2a. Who influenced you?

- 3. What were your thoughts about school (education) when you were growing up?
- 4. How did you come to dairy farming? (For women not raised on a farm).

4a. How long have you lived on a farm?

- 5. Thinking back over the last month, please describe a typical day for you on the farm.
- 5a. Would your day be different in a different season? If so, how?
 - 6. It sounds like you do many different things on the farm. I am curious how you would label the "hats" you wear. For example, a physician may wear the hat of a diagnostician, a counselor or a dietician depending upon the needs of the patient at any given time. What "hats" do you wear?
 - 7. Of all of the hats you have identified, is there one that you would consider your main "hat"? If so, why?
 - 8. Tell me how you came to know how to be (main hat)?
 - Tell me about any courses or trainings that you have completed, for example, Cooperative Extension classes.
- 9a. How did those educational experiences impact your work on the farm?
 - 10. Thinking back over the years of experience that you have had on the farm, what do you believe was the biggest influence on your main "hat" that you wear on the farm?

Those are all of the questions I have for you today. I would like you to have the opportunity to review the transcript from our interview. This transcript review should take 1 to 1 ½ hours of your time. Would this be agreeable to you? If so, I will mail or email you the transcript for your review and then ask that you return the transcript to me

in a self-addressed, stamped envelope (if mailed) with any changes or questions you have after you have reviewed the transcript. I may also wish to contact you in the future if I need clarification or have any further questions. Would this be agreeable to you? Thank you again for your time.