

## ABSTRACT

BROWN, CHRISTEN LEANN. *Veterinary Science Professionals: An Exploratory Case Study of Women Navigating Careers as Veterinary Practice Owners.* (Under the direction of Dr. Diane Chapman.)

Although many studies have focused on women being underrepresented in science, technology, and math fields (Heilman, Wallen, Fuchs, & Tamkins, 2004; Dickhauser & Meyer, 2006), there is a gap in exploring the experiences and beliefs of women in the veterinary science profession, which was once male-dominated and has shifted to become highly feminized. The rising feminization of veterinary science was noticed as far back as 1962 when the University of California at Davis initially became aware of the rising number of female veterinary students. However, the desire for practice ownership decreased for women, showing only 38% of established female veterinarians desired to own a practice, while 61% of males still wanted practice ownership (Anonymous, 2012). Contrarily, in other fields of study, women entrepreneurs are responsible for substantial progress in terms of business education, corporate experience, and business expertise. Even with such advances in understanding women business owners and their progress over time, veterinary science continues to graduate and enroll more women than men, but there are significantly fewer women practice owners than men.

This study addressed the feminization of veterinary science and the gap in literature focusing on the perceptions of women veterinary practice owners by utilizing a feminist lens and the Possible Selves framework (Markus & Nurius, 1986) to examine how women veterinarians form views of themselves as practice owners and thereby enabling them to navigate through their careers within veterinary science. Each woman veterinarians' experiences surrounding their careers in veterinary practice ownership, depicted their successful navigation of their careers through the utilization of experiences and qualities

found as underlying support for five major themes including: being self-driven and a desire for autonomy, an animal upbringing, experiences with mentors and other practices, hurdles of doubt, finances, and business knowledge, and awareness of gender within their career choices. . Additionally, this study discovered some women veterinarian practice owners obtained their professional achievements and strong Possible Selves by highlighting a gender specific characteristic of empathy to better themselves as practice owners.

This study aids existing theory by confirming assertions that gender, in some way, impacts the construction of possible selves (Markus & Nurius, 1986; Lips, 2004, 2007), but more importantly gives further understanding of how these women persevered to practice ownership. Additionally, this study provides recommendations for future research and educational practices.

Veterinary Science Professionals: An Exploratory Case Study of Women Navigating Careers  
as Veterinary Practice Owners

by  
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## **Chapter 1: Overview of the Problem**

Although many studies have focused on women being underrepresented in science, technology, and math fields (Heilman, Wallen, Fuchs, & Tamkins, 2004; Dickhauser & Meyer, 2006), there is a gap in exploring the experiences and beliefs of women in the veterinary science profession, which was once male-dominated and has shifted to become highly feminized. Much of the research on women in veterinary science has been focused on the feminization of the profession and salaries disparities (Irvine & Vermilya, 2010). Veterinary science has undergone a significant increase in the number of women studying and practicing in the profession. The rising feminization of veterinary science was noticed as far back as 1962 when the University of California at Davis initially became aware of the rising number of female veterinary students. Additionally, in 1998, 73 of the 108 first year students were women (Irvine & Vermilya, 2010). In 1970 through 1971, women composed only 8% of practicing veterinarians and during the 1980s, the number of women veterinarians increased by 288% (American Veterinary Medical Association, 1999). This trend continued with an additional 78% increase in the number of women veterinarians between 1990 and 1998. By 2008, women represented 50% of practicing veterinarians (AVMA, 2008) and the national graduating class of 2012 veterinary students was 79% female and 20% male. This represented the highest level of feminization among the medical professions (Irvine & Vermilya, 2010). Despite the increasing number of women in veterinary science, there are still fewer women veterinarians who own their own practice. An American study revealed that the majority of veterinary students asked about practice ownership were interested in owning a practice (86% men and 71% women) (Anonymous, 2012). However, the study

indicated that over time, the desire for practice ownership decreased for women, showing only 38% of established female veterinarians desired to own a practice, while 61% of males still wanted practice ownership (Anonymous, 2012). The number of women veterinarians owning practices continues to increase every year, however these are only slight increases and continue to lag behind male veterinarian practice owners (Anonymous, 2012).

In other fields of study, women entrepreneurs are responsible for substantial progress in terms of business education, corporate experience, and business expertise. Increasing numbers of women are starting businesses in growing industries such as financial services, biotechnology, and software (Winn, 2004). Even with the growth of women business owners and attempts to close the gender gap among entrepreneurs in rapidly growing industries, there are still a smaller number of women veterinarians who own a practice or are self-employed when compared to male veterinarians who own their own practice. Winn (2004) believes the decision to start or own a business falls within a complex process incorporating interests, personality, role models, skills, and opportunities. Other studies have reported that an individual's career choice stems from the evolution of people and families over a lifetime (Sonnenfeld & Kotter, 1982). Bowen and Hisrich (1986) described education, work history, and family history as primary career choice influences. With consideration to gender, scholars have discovered women seek entrepreneurship for flexibility, autonomy, satisfaction, personal growth, income, and prestige (Goffee and Scase, 1985; Orhan and Scott, 2001; Scott 1986; Winn, 2004). Even with such advances in understanding women business owners and their progress over time, veterinary science continues to graduate and

enroll more women than men, but there are significantly fewer women practice owners than men.

With decreased women veterinarian practice owners, more women are employed by men and have resulting wage disparities in comparison to equally-experienced male veterinarians (Klein, 2002). The historical and monetary status of women in an industrial or professional climate is not equal to that of men. No matter the class a mother, daughter, or wife was in, her male counterpart received preferential treatment (Klein, 2002). Furthermore, Klein (2002) stated the status of women in the market-place and the science professions has improved over the past century, but women are still fighting for equal ranks among men. Most low-paying jobs continue to be primarily composed of females and have less potential to earn more income (Klein, 2002). Even with the efforts to socially encourage women into this profession and promote equality among genders, there is still a salary gap related to gender (Macejko, 2009). According to the National Committee on Pay Equity, for every dollar a man earns, a woman earns 77.8 cents and with veterinary science the pay disparity is even larger (National Committee on Pay Equity, 2014). This income gap is still an issue no matter if an individual owns their practice or their years' experience. Dr. Felsted from the National Commission of Veterinary Economic Issues claimed that there is not one piece a data alone that explains this disparity and "I don't think we 100 percent know why the disparity exists and just looking at the raw data like this doesn't show the whole story," she says. "In veterinary science, it's just been in the last 10 years that women have come into the profession in droves" (Macejko, 2009).

There has been concern with the continual feminization of the veterinary profession and the potential for males to exclude this profession as a career choice with increasing frequency, as is the case with nursing (Lofstedt, 2003). Studies performed in the United States provide evidence that feminization has affected the economic standing of the profession (Lofstedt, 2003; Slater & Slater, 2000; Smith, 2002). These studies indicated that veterinary incomes of women in the United States and Canada are behind those of men, and the income of men in the profession is already lower than desired. This is indicative of feminization in the profession since in the United States women continue to accept lower salaries than men (Lofstedt, 2003). With these concerns over the wage disparity among men and women in veterinary science and the resulting outlook on the profession, there have been studies focused on young women's achievements and pursuit of math and science (Tullos, 2011; Sonnert, 1996; Buck et al., 2006). Additionally, there are governmental efforts surrounding the need to examine women in science, technology, and math. Such research includes the global committee of "Women in Science, Engineering, and Medicine" (NRC, 2014), which is supported by the National Science Foundation, and university level programs such as "Centers of Women, Science, and Technology" (Georgia Tech, 2014).

Given this, it is important to understand the career choices of women veterinarian graduates and why more are not opening their own practices. This study contributed to ongoing research aiming to expose gender inequalities in science, technology, engineering, and math (STEM) by exploring any gender barriers experienced by women veterinarians, who own their own practice, and thereby expanding the literature on women entrepreneurship, and increasing women ownership. This chapter provided background

information and context for the issue under study, while highlighting the specific research problem and the guiding research questions. This chapter also discussed the theoretical framework aligning this study and how this framework fits with my assumptions as a researcher.

### **Statement of the Problem**

The problem addressed by this study surrounds the feminization of veterinary science and the gap in literature focusing on the perceptions of women veterinary practice owners. It is well known that the number of women veterinarians outweighs that of men and continues to increase (Heath & Niethe, 2001); however there is little information available on the outcomes of this gender shift and lack of practice ownership among women veterinarians (Heath & Niethe, 2001; Brown & Silverman, 1999). This is a problem that needs to be explored since this profession continues to produce more women veterinarians than men and therefore unlike other science dominated professions, has overcome gender underrepresentation. Additionally, both genders are greatly increasing their human capital, but women veterinarians continue to lack behind men in practice ownership and salary (Macejko, 2009; Klein, 2002). Through this study, the perceptions of women veterinarian practice owners adds to the gap in literature surrounding why women veterinarians choose to own their own practice.

### **Statement of Purpose and Research Questions**

The purpose of this study was to utilize a feminist lens and the Possible Selves framework (Markus & Nurius, 1986) to examine how women veterinarians form views of themselves as practice owners and thereby enabling them to navigate through their careers

within veterinary science. By purposefully exploring the experiences of these women and views of self, this study revealed factors that shape a woman's possible self and ultimately their decisions about practice ownership and self-employment. There are efforts involved to encourage women into this profession, but there has been no study focused on exploring how women veterinarians who own their practice identify themselves or how they made their career choices. This study focused on how women veterinarian practice owners describe their experiences navigating their professional environments. Table 1 below, showcases different definitions of feminization in efforts to capture the meaning of the term utilized in this study. Such explanation is necessary given the diverse application of the term feminization.

### **Research Questions**

The following questions guided my inquiry:

1. How do women veterinarians who own their own practice, navigate their career choices?
2. What barriers do women veterinarian practice owners describe?
3. How do women veterinarians perceive their gender as playing a role in their career choices or decisions?

The answers to these questions helped to understand how some women are able to see and believe in the success of their own self-identity and contribute to the understanding of how specific experiences shape women's career choices in veterinary science.



Table 1

*Definitions of Feminization*

Feminize	To give a feminine quality to (Merriam-Webster, 2014)
Feminization of the labor force	A massive increase in the employment of women in a given professional area, while also underlying qualitative characteristics of the phenomenon (Morini, 2007)
Feminization of an occupation	Refers to a woman's disproportionate entry into customarily male occupations and the tendency for wages in those occupations to diminish (Cohn, 1985; Reskin & Roos, 1990)  The transformation of a previously or historically male-dominated field into one defined as a female occupation (Richardson & Hatcher, 1983)

**Significance of the Study**

This study explored the Possible Selves framework (Markus & Nurius, 1986) in relation to women veterinarians' lived experiences as an influencing aspect of practice ownership and gender influences. Popular culture has embraced the notion that men and women are equals, but there is still gendered effects in the veterinary profession which result in salary differences no matter experience level or practice ownership (Vogel, Wester, Heesacker, & Madon, 2003; Macejko, 2009). Despite gender barriers women have increasingly managed to create and foster views fitting for professional careers in veterinary science. By exploring their views of self, essential information surrounding how some

women persist through personal, social, and professional challenges were uncovered. With fewer women practice owners, wages have become stagnant and significantly less than men due to the resulting career choice to be employed by male practice owners. The education and investment in human capital is not being fully utilized for women veterinarian graduates and therefore it is imperative to explore these issues aiding in practice ownership among men and women veterinarians. With such investments and the increasing numbers of women entrepreneurs in other fields, it is important to investigate why women veterinarians differ in entrepreneurial career choices. Furthermore, policymakers have been concerned about barriers facing women business owners and entrepreneurs. Since women's involvement in the global economy has increased along with the number of single families headed by single mothers; women's economic status becomes not only an economic issue, but also a social concern (Jalbert, 2000; MONEE, 1999; Schlogl, 2004; US Census Bureau, 2003).

The significance of this study lies within the issue that fewer women veterinarians own practices (Klein, 2002). This study explored the experiences of women veterinarians that they believe have contributed to their decisions to open their own practices. In efforts to understand their experiences and views of self, exploring current women veterinary practice owner's career choices and pathways provided insights into their possible selves and professional identities. This can help create more opportunities for women veterinarians to own their own practices.

## **Theoretical Framework**

### **Possible Selves**

Lips (2007) argued that women construct views and beliefs, which guide or direct their behaviors and interests. Furthermore, women's gendered life experiences can influence or constrain their understanding of career options and ultimately limited their career choices (Gottfredson, 1981). However, some women have altered their gender identities and modified their views of self, to encompass more nontraditional career choices such as veterinary science. This section discusses the Possible Selves framework (Markus & Nurius, 1986) as a lens to merge concepts surrounding gender and women's career development in veterinary science.

Feminist theory provides an alternative framework to analyze issues surrounding equal opportunity for women in science (Rosser, 1998). In efforts to understand and challenge science's gender structure, gender symbolism, and the construction of individual gender, feminist theory aims to uncover social and historical underpinnings, which exclude women from science pathways (Harding, 1986). More specifically, the feminist standpoint theory highlights how gender is further categorized due to the societal construction of knowledge which results in differing experiences for men and women (Harding, 1986).

### **Feminist Research**

Feminist research has made considerable contributions to science over the past two decades. Much of the early research was focused on the lack of girls in advanced science classes and later in science careers (Brickhouse, 2011). Additionally, such research understood that the workforce continued to function as though scientists have no familial

responsibilities and those that rank families as a priority are excluded (Keller, 1985). This research provided scholars with an initial, critical, and equity-focused standpoint, but did not address epistemology and therefore left traditional conceptions of knowledge unquestioned (Brickhouse, 2011). Scientific knowledge is gendered and cannot produce cultural-free and gender-neutral due to its infusion with cultural meanings of gender (Keller, 1985). Therefore by utilizing a feminist standpoint, critical views of the epistemology behind women in science careers will reveal dualisms between masculinity and femininity, culture and nature, objectivity and subjectivity, and reason and emotion (Keller, 1985). Such dualisms are of particular interest for this research since the culturally defined values associated with masculinity are also those used to define science. Additionally, scientific was not only culturally defined as masculine, but as the opposite of feminine (Brickhouse, 2001).

There are multiple ways to study and understand the issue surrounding women in veterinary science. The Psychoanalytic feminism explores how gender identities may lead more men than women to potential careers in science (Chodorow, 1978; Dinnerstein, 1977; Harding, 1986). Researcher Keller (1982, 1985) discussed this theory in efforts to show that science is a masculine profession that excludes women and causes women to exclude themselves from similar fields. Science only has been described as a masculine for more reasons than just having more men. Rosser (1998) suggested that the choice of experimental topics, the use of male subjects for experimentation, the way data are interpreted and analyzed, and the practice and applications of science support the masculine trend of the field. Furthermore, Keller (1982, 1985) explained that due to science being categorized by usage of the scientific method, it stresses objectivity, rationality, distance, and autonomy of

the researcher from the study; and individuals who embody such traits are more likely to become scientist. Due to such social and gendered constructions, it is suggested that most individuals in the Western culture who will be comfortable as a scientist are male (Keller, 1985). This theory further discussed how social and gender roles form and encourage males to be independent, distant, and autonomous when compared to females who are molded to be more dependent, intimate, and less individualized than their fellow female counterparts (Rosser, 1998).

### **Social Role Theory**

Social role theory is among the most influential explanations of gender stereotypes and originated with an attempt to understand the causes of sex differences and similarities in social behavior (Eagly, Wood, & Diekmann, 2000; Eagly, 1987). This theory explains that one reason gender stereotypes exist is that men and women act in accordance with their social roles, which are divided within and among gender differences (Eagly, 1987). Men and women therefore act and behave in gender-typed ways because their social roles are associated with different expectations and skills (Vogel, et al., 2003). Such different roles performed by women and men support gender stereotypes by placing different social depends on gender roles (Vogel, et al., 2003).

Several authors understood the need for gender focused research in science, but I feel there were still barriers for women in science that were not fully captured with the above frameworks (Lips, 2007; Markus & Nurius, 1986; Tullos, 2011) . The conceptual framework utilized in this study involves the Possible Selves framework (Markus & Nurius, 1986) and is framed by a feminist perspective standpoint which asserts women's experience should be

studied separately from those of men. Possible selves' theory encompasses both the psychological and sociological factors in efforts to offer a critical analysis of issues surrounding women in science (Lips, 2007; Markus & Nurius, 1986). Furthermore, the Possible Selves' theory provided a method to understand and analyze how women link meanings with processes based on internal and external messages about careers, goals, and gender (Tullos, 2011; Markus & Nurius, 1986). Additionally, a feminist standpoint allowed for the separate exploration of the career experiences of women in the overly feminized profession of veterinary science.

While all of the previously discussed frameworks for women in science are important and helpful in understanding a woman's perspective, context, and potential careers; the Possible Selves' theory is better able to examine women's veterinary experience. Researcher Tullos (2011) utilized the Possible Selves' theory to examine women scientist self-images. One of her key findings discussed how gender did not seem to be a barrier for the women scientist she interviewed. However, the women interviewed described they were educators who teach science rather than as a scientist (Tullos, 2011). This indicates an internal disconnect with their self-image and their profession. Tullos (2011) later stated that male's in similar science careers called themselves scientist that teach. Therefore, this showcases a need to utilize a framework which emphasizes not only gender and social or societal affects, but one that examines the internal process occurring in women and creating their possible selves. The social role and gender theory (Eagly, 1987) captures gender stereotypes and reinforced or expected behaviors. However, there is less emphasis placed on the internal processes resulting from such influences and is more focused on gender. The psychoanalytic

feminism theory also focused on gender and results occurring in women. Both alternative theories touch on metallization and internal factors, but show them as directly linked to gender; whereas with more current literature, there evidence has shown that women view gender less as a barrier (Tullos, 2011). Therefore, a better understanding of the internal processes, pathways, and choices women develop provides more information for the current issues women in science face. Additionally, psychoanalytic theory has less empirical evidence to support the underlying psychological determinants and explanations (Bussey & Bandora, 1999).

The Possible Selves' theory (Markus & Nurius, 1986) works best for my research focused on understanding how women veterinarians view themselves and as a method to understand career development for women. Research has indicated that the effect of self-concept and social context interactions, guide an individual's academic and occupational future (Lips, 2004). Therefore, it is important to utilize a theory that places extreme weight on the mental image women veterinarians use as a guide for their life. Due to socially constructed concepts about femininity, conflict in women's views of possible selves in science professions occur (Lips, 2004). Since the veterinary profession has become increasingly feminized, the understanding of how gender, cultural influences, and gender stereotypes affects possible selves or the potential as a woman to thrive in a science profession is a key. The Possible Selves' theory (Markus & Nurius, 1986), combined with a feminist standpoint, offers a new way to understand how women veterinarians perceive their beliefs about work.

### **Methodology Overview**

Research which focuses on the experiences and stories of women pursuing such science based careers, specifically veterinary science, are overlooked (Kinzie, 2007). Without exploring this gap in literature, veterinary practices will continue to be dominated by male practice owners and the overrepresentation of women veterinarians will continue to aid salary disparities (Heath & Nieth, 2001). This study utilized the case study research approach in hopes to explore the perceptions of women veterinarian practice owners through a Possible Selves (Markus & Nurius, 1986) framework and a feminist lens. The rationale for utilizing qualitative research methods, specifically the case study approach stemmed from the over-utilization of existing research utilizing quantitative methods to explain why women are not pursuing STEM based positions and careers in great numbers (Blickenstaff, 2005; Cronin & Roger, 1999). The goals of the study were to provide an understanding into the personal image female veterinarians who own their own practices and how they navigated their professional careers. I obtained six participants for interviews and biographical sketches. I employed snowball sampling to obtain study participants. The study used a convenience sampling technique. Using my current professional contacts and their contacts, I selected women veterinarian practice owners. No boundaries distance boundaries were placed on the selection of veterinarian practice owners since I provided the option of phone interviews if the driving distance spans beyond 50 miles of Raleigh. Initially, open coding was utilized for analysis of interview transcriptions and was followed by coding with the Possible Selves framework (Markus & Nurius, 1986). The Possible Selves theory was chosen as the coding framework for this study, because women continue to limit their career possibilities despite



demonstrating the ability to navigate STEM related career pathways (Lips, 2007); and it is critical to understand the women who have successfully navigated such professions, like veterinary science, and explore their meaning making processes in regards to external and internal self-views and career aspirations. The Possible Selves framework (Markus & Nurius, 1986) best guided the coding process for this study by highlighting and exposing any social interactions, biases, and distortions that are formed in each individual's sociocultural and mental context. This is fundamentally important since many of these social interactions and mental distortions guide a woman's decisions making process and may also influence her possible self and career pathway (Markus & Nurius, 1986; Lips, 2007). Furthermore, by utilizing the Possible Selves framework (Markus & Nurius, 1986) to code each interview, insight into the mental mechanisms and internal processing of women veterinarians who have successfully navigated their careers and are practice owners, helped further understand their possible selves. Analysis and results are reported.

### **Limitations Overview**

This study utilized a feminist standpoint theory as a framework and places gender as the central focus for examining women veterinarians' view of self and careers. By employing this framework, other aspects including race, culture, and ethnicity, which may affect or shape the structures surrounding women veterinarian's career experiences, are beyond the aspects of this study. Finally, this study is limited by my subjectivity as a researcher. As the primary researcher, my perspectives and beliefs shape the interpretation of the study (Merriam, 1998). My interests and past experiences shape and direct the research questions. This subjectivity is further discussed in chapter three.

### **Chapter Summary**

This chapter has discussed the need for research focused on increasing opportunities for women veterinarian practice ownership and factors affecting their possible selves view throughout their career pathway. The Possible Selves framework (Markus & Nurius, 1986) provided a means to understand and explore gender and related psychological factors among women veterinarians. Most research prior to this study have focused on quantifying efforts to encourage women into predominately male oriented professions and not exploring the factors affecting women that have chosen such pathways (Markus & Nurius, 1986). Chapter two will further discuss the historical components of veterinary science, literature related to gender and veterinary science, and the Possible Selves framework (Markus & Nurius, 1986).

## **Chapter Two: Literature Review**

This chapter outlines the scholarly research used to explore the Possible Selves framework (Markus & Nurius, 1986) and career experiences of women working in veterinary science. My study focused on how women working as veterinarians develop view of themselves and how they use these views to navigate their career pathways. The following questions guided my inquiry: (1) How do women veterinarians who own their own practice, navigate their career choices? (2) What barriers do they describe? And (3) how do women veterinarians perceive their gender as playing a role in their career choices or decisions?

### **Background and Historical Context**

#### **Issues Surrounding Women in Science**

A career is defined as a lifelong process related to subjective and objective work-related aspects. Career development is further defined by a continuum of stages characterized by unique concerns, themes, and tasks (Hall, 2002). However, such traditional models of career development have been based predominately on the experiences of men (Betz & Fitzgerald, 1987; Brown & Brooks, 1996; Osipow & Fitzgerald, 1996). What is not captured in these stages and processes is the progression of women's careers, which may have a different path due to broader life contexts (O'Neil & Bilimoria, 2005). With women's underrepresentation in science and technology, in addition to their decreased appearance in top leadership positions, specific challenges arise in their career progression (O'Neil & Bilimoria, 2005). Such specific challenges facing women and their career progression have been found to include factors such as home, status, and childcare responsibilities (Ely, 1995).

Historically, science has professed to be the ideal of universalism by showing irrelevance to personal and social attributes (Gupta et al., 2005). However, through actual practice, science has been male dominated and structured in such a manner where women find themselves unwelcome (Gupta et al., 2005). Science, like other knowledge, is shaped by cultural contexts including beliefs about gender and gender roles (Brickhouse, 2001). These male dominated structures create barriers for women in the practice of science. Furthermore, careers in academia and science in Germany have discouraged women from following such career paths and in India science is considered a male enterprise (Gupta et al., 2005). Gupta et al., (2005) further stated that in the United States, while the proportion of women obtaining a bachelor's of science and engineering has almost doubled from 25% in 1966 to 47% in 1995, the percentage of women obtaining a PhD in science and engineering was only 31% in 1995. In engineering the PhD percentage is much lower at 11% (Gupta et al., 2005). Boys and girls grow up with and develop different gendered images of scientists and when women enter graduate school and college they feel a sense of unwelcome minority and discrimination to the point that they are not taken seriously (Gupta et al., 2005). Such gendered perspectives of science have created professional expectations and practices that often constrain and exclude women from the science path (Sonnert & Holton, 1995). Additional research has shown that the historical nature of science not only excludes women, but privileges the male way as superior research (Keller, 1987). Furthermore, Keller (1987) discussed the traditional male-oriented, one-directional, casual approach to science in comparison to the female-oriented approaches with emphasis multiple pathways and

intersections. The tension between these two approaches is further embedded in traditional, positivistic science (Keller, 1987; Fox, 1999).

### **The Feminization Trend**

Feminization has multiple meanings as previously mentioned in *Table 1*. Feminization may refer to the rising rate of women in the labor force and resulting gender alterations to the composition of the workforce (Jenson, Hagen, & Reddy, 1988). Additionally, the feminization of a job or occupation describes a woman's disproportionate influx into historically male represented professions (Cohn, 1985; Reskin & Roos, 1990) and for such occupations to reflect a tendency for diminishing wages (Pfeffer & Davis-Blake, 1987). In this study, I adopted the views of Cohn (1985), Reskin and Roos (1990), Pfeffer and Davis-Blake (1987) to discuss the feminization trend found in the previously male dominated profession of veterinary science and the resulting wage outcomes related to this trend.

Researchers have identified possible explanations to understand the increased attractiveness to the veterinary profession for women and the decline in male interest. The explanations identified for the feminization of the profession highlight the efforts put forth to eliminate discrimination during admissions based on gender; improvement in chemical restraint for large animals; an increased number of female role models in general and those participating in physically demanding aspects of the profession; and the caring or nurturing image of veterinarians portrayed in books and television (Slater & Slater, 2000; Smith, 2002). To further demonstrate the effect and impact of initial role models on perspective women veterinarians, the Australian Veterinary Journal (1934) stated: "Miss Cust, with that

determination and courage which is evidenced in her letter, ventured into the field of veterinary science long before it was possible for women to be admitted as members of the Royal College of Veterinary Surgeons, and it was largely due to her perseverance and that of others like her that at last, in 1919, women became eligible for admission to the Royal College” (Legg, 1934). Also, female students have reported being influenced by female friends, more frequently than men reported feeling encouraged by a female veterinarian they knew (Andberg, Follett, & Hendel, 1979). Additionally, there are proposed explanations for the decreased number of males in veterinary science. These explanations include males being less willing to enter careers with low or stagnant incomes; the loss of autonomy usually associated with the veterinary profession where there are less practice owners relative to employed veterinarians; and the “trend effect” described as an effect proceeding an increase in women pursuing a career path or profession (claiming to decrease the profession prestige as for males) (Slater & Slater, 2000; Smith, 2002).

Furthermore, an Australian study focused on veterinary students and recent graduates described similar factors influencing the selection of veterinary science for both genders, with some differences (Heath, 1996). The factors found to be more important to males in deciding to study veterinary science were the desire to have no supervision and the financial attractiveness of the profession. While the factors more important to women in choosing a veterinary science career included a love for animals, the portrayed image of veterinarians, and interest as a child surrounding living things, and the scientific study of disease (Heath, 1996). Additionally, women appear not to place high income as a top expectation and express satisfaction with lower salaries than men (Felsted & Volk, 2000). Also, it has been suggested

that women do not place salaries or objective measurements as a criteria judge for the satisfaction of their career. Other subjective criteria, such as colleague relationships, weight more heavy with their career satisfaction (Lofstedt, 2003).

### **Challenges for Women Pursuing Veterinary Degrees**

In higher education there is an assumption that women can pursue their career goals through a work environment structured around men (Bailyn, 2003). Additionally, there is an understanding that if women are able to follow the male structure and succeed, then they will receive the same rewards and opportunities as men (Bailyn, 2003). However, women entering science careers continually face barriers that attempt to discourage such pathway (Sonnert, 1999). In academia, it is less likely that women will achieve the same type of entry-level position and career growth as men (Ginther & Kahn, 2006). Ginther and Kahn further support this claim with the example that women scientists in higher education are less likely to begin a tenure track position than their male counterparts.

An additional challenge facing women in academia positions includes the continued existence of a salary gap. Women in academia and science face progressive salary gaps and can expect to earn less than men along the same path (Graziano, 2007). This gap in salary at the full professor level cannot be explained by observable characteristics of the scientist (Ginther & Kahn, 2006). Therefore, the implication is that gender causes the salary gap rather than job performance of leadership positions in academia. Furthermore, Graziano

(2007) suggested that women leave such leadership positions in academia due to strong incentives elsewhere. She suggested the primary reason that women leave is that higher paying, more interesting, and more family oriented positions exist. Additionally, there is research to suggest that women leave such careers due to their slow progress toward promotion, a reduced opportunity for leadership, and a lack of support for their research (Settles et al., 2007).

In her public address at the Beijing conference for women, U.S. Secretary of State Madeleine Albright stated that women need not just fair treatment and equal opportunity, but also power in science arenas (Erwin, Lazarus, MacLachlan, & Tobias, 2003). This “power” was claimed to “move mountains” and change existing institutions and arrangements so women will excel and gain equivalency in positions, recognition, and pay (Erwin et al., 2003). Some argue that power will come to women in science when they achieve critical mass at an institution or in a specific area of study. However, Sonnert and Holton (1995) reported that biology has been at numerical parity for over a decade and other fields including chemical sciences, mathematics, earth and space sciences had also showed numerical mass and had seen little improvement in power. Although, critical mass is a necessary condition to achieve equal access to power in science, it may still not be enough to overcome the sexism and racism that are embedded into the professional life (Erwin et al., 2003).

### **Women Entrepreneurs**

Entrepreneurs are typically defined as organization creators and Brockhaus (1987) found that sixty percent of entrepreneurs decide to start a business before figuring out what



type of business they want to start. This supports further research inquiries into entrepreneurs due to such doubt placed on the role of creative inspiration or a “vision” as a motivating factor (Brockhaus, 1987). Women entrepreneurs are at the forefront of the service sector and are changing the face of the modern business. However, the business world remains primarily a man’s domain (Winn, 2004). In 2002, women owned less than one third of U.S. businesses which correlated to 6.2 million women owned businesses. Women entrepreneurs have made substantial gains in regards to business education, corporate expertise, and technical knowledge; and increasing numbers of women are starting businesses in rapidly growing industries including financial services, biotechnology, and software (Winn, 2004). Despite this growth, women-owned businesses tend to be smaller than those owned by men, in terms of size, employees, and revenue. In 2004, women were majority shareholders in thirty percent of U.S privately owned businesses and claimed fifty percent of the shares for another eighteen percent of business; however they only received five percent of all venture capital investments (Brush, Carter, Gatewood, Greene, & Hart, 2004). Additionally, women in other western countries follow a similar trend, but women in transition economies still lag behind men-owned businesses (Ruminska-Zimney, 2002). Such data indicate men outpacing women in entrepreneurship by two to one, despite evidence that women absorbed disproportionately large employment cuts and suffered from fewer job opportunities (Ruminska-Zimney, 2002).

The decision to become an entrepreneur is a complex process that involves one’s personality, interests, life-time role models, skills, and opportunities (Winn, 2004). Additionally, numerous other researchers have added possible influences to this process

including the evolution of people, their families and their careers over their life (Sonnenfeld & Kotter, 1982). Bowen and Hisrich (1986) included education, work history, and family history in this career decision. For men, career decisions are assumed to be an integral part of their lives, while women separate personal and career goals (Fernandez, 1981). Researchers equate this to more women describing the choice as between a family and a career, rather envisioning a path that includes their career and family (Winn, 2004). Business ownership seems to incorporate all the ingredients for women who desire a career and a family.

Research shows, women who seek entrepreneurship want flexibility, autonomy, satisfaction, personal growth, income, and prestige (Goffee & Scase, 1985; Orhan & Scott, 2001; Scott, 1986; Winn, 2004). Furthermore, researchers have shown women, like their male counterparts, choose to own a business because of an idea or an innovation. Others choose this route due unsatisfying employment experiences such as frustration with demanding and inflexible work environments (Hewlett, 2002), failure to break through the “glass ceiling” (Glaser & Smalley, 1999; Weiler & Bernasek, 2001), the belief that working in a large corporation will not accommodate their personal situations or professional goals (Moore & Buttner, 1997), to fulfill the need to join or start partnerships as part of a team or family business (Still & Timms, 2000), or from unemployment (Goffee & Scase, 1985; Shannon, 2003).

In addition to various factors influencing such a complex career decision, Stevenson (1986) acknowledges the need to understand differences held by men and women pertaining to family values and achievement, which also influence such decisions. For men, the decision to own a business follows a logical progression by replicating a business they have prior

knowledge to; as compared to women who gain their first management experience in their own business while have prior work experience in more traditional fields (Menzies, Diochon, & Gasse, 2004). Additionally, self-report surveys have shown that men choose career decisions based on income, risk-taking, and control, while women desire careers that provide personal satisfaction, intellectual growth, and independence. Furthermore, women typically rate their family higher in importance than their career when compared to men (Konrad & Langton, 1991; Brenner, Pringle, & Greenhaus, 1991; Neider, 1987). However, Moore (1990) asserted that “modern” women are more career focused, rather than family focused, like men. Furthermore, women entrepreneurs seek self-fulfillment, the opportunity to take risks, and to develop their own methods for doing work (Brenner et al., 1991).

### **Entrepreneurial Attitudes, Behaviors, and Competencies**

Due to the wide array of competencies involved in being an entrepreneur, this is not an individual who is narrowly specialized or wedded to one way of doing things (Winn, 2004). Wheelen and Hunger (2002) described an entrepreneur as someone who has the ability to identify potential venture options better than others, a sense of urgency that makes them action oriented, detailed industry knowledge and physical stamina to make their work their life, and access to outside help to supplement their skills, knowledge, and abilities. Other studies include factors surrounding motivation, inner strength, the desire to take risks, boldness to challenge the status quo, and impulsive reactors to environmental stimuli (Brenner et al., 1991; Brockhaus, 1987; Scott, 1986; Waddell, 1983; Hyatt, 2004). However, entrepreneurs perceive themselves as risk avoiders, whom engage in strategic thinking and challenge themselves (Hyatt, 2004). Successful women entrepreneurs stress the need for

tenacity and determination to bypass the stress involved in owning a business (Moore, 1990). Brodsky (1993) found that entrepreneurs tend to be less trusting and have higher control needs than managers. “Entrepreneurs see themselves as in need of control and intolerant of limits imposed by others, and seek to define their own work environments and parameters. Although managers view corporate environments as safe and supportive, entrepreneurs consider them confining” (Brodsky, 1993, p. 341). While both men and women agree financial, marketing, and management skills are vital to entrepreneurship success, the business owner themselves does not need to have all of the skills, they just need to be found within the organization (Winn, 2004).

### **Entrepreneur Roadblocks**

Researchers have found two of the biggest hurdles faced by women entrepreneurs revolve around funding and family support (Winn, 2004). Despite a woman’s education, corporate experience, and technical experience equity lenders and venture capitalists still have lingering concerns over a woman’s commitment to their career endeavor, their qualifications for leadership, and their ability to obtain vital resources (Carter & Anderson, 2001; Thornhill & Amitt, 2003). Brush et al. (2004) believed this funding gap represents a market failure and inhibits women from achieving entrepreneurial success. Furthermore, even by approaching this career choice with open mindedness and objectivity, women still suffer from gender specific barriers (Winn, 2004). Weiler and Bernasek (2001) found gender discrimination from supplier systems such as preferential treatment in delivery timing and orders. Hart et al. (1995) found that being “known” was just as important as “knowing” in efforts to efficiently and effectively find economic resources. Additionally, women

entrepreneurs are often excluded from trade and business associations, and established networks; which can have a negative impact on their access to information, training opportunities, credit, business partners, and market entry. In transition economies, such gender based privatization resulted in redistribution of public assets in favor of men. Traditional views of women's roles in society create a less favorable social perception and climate towards women, leaving them with less collateral and resources (Carr & Chen, 2004). While career opportunities for women have changed, family role models have remained stagnant; even with the increasing numbers of stay-at-home dads, the father's job is still seen as having more prestige and money (Winn, 2004). As a result of the impact of family obligations and gender barriers, being older, male, and married showed positive correlations to successful entrepreneurship (OECD, 1991). Therefore, it seems for men, work and family are complimentary and for women they present a dilemma (Paukert, 1991).

### **Possible Selves and Career Choices**

As stated above, the entrepreneurial career choice is complex and in an attempt to study a gender specific profession a significant theoretical framework is vital to look into women's academic and career choices in relation to their views of self. The Possible Selves meaning can be utilized to understand the problem of why there is a tendency for men and women to sort themselves or allow them to be sorted into different occupations (Lips, 2007; Markus & Nurius, 1986). Discussions surrounding women's tendency to segregate into certain career paths include empirical studies focused on self-efficacy related to math studies (Betz & Hackett, 2006), gender schemas (Valian, 1998; Weisgram & Bigler, 2006), gender role congruity (Evans & Diekmann, 2009), and Possible Selves (Markus & Nurius, 1986).

Lips (2007) continued to examine the large amount of research demonstrating how student's current academic view of themselves affect the way they experience their education, their academic performance, and their possible aspirations. For example, among university students viewing themselves as proficient in math and science, this found to predict in-lab math tests, science course enrollment, confidence with career possibilities in math, technology, and science, drive to enroll in more math and science courses, and the amount of math and science courses taken subsequently (Lips, 2005). Additionally, women college students focused in math curriculum have associated the major as masculine and have issues linking math with their own self views (Nosek, Banaji, & Greenwald, 2002). Similar research conclusions have pushed educators to rely on a positive current self-view for women in math and science.

Traditional career research has been situated in either psychological or sociological theories (Tullos, 2011). Psychological frameworks look at career choice, orientation, or self-efficacy and sociological frameworks are focused on career patterns and pathways (O'Neil & Bilimoria, 2005). The Possible Selves framework is a social-psychological construct describing how a woman's image of her future self-guides her career choices (Packard & Nguyen, 2003). For example, some research has shown that even women who are in science or engineering concentrations, lose their confidence in their self as they near graduation (Hartman & Hartman, 2002; Ivie & Stowe, 2002). These women may be finding it increasingly difficult to picture themselves as a scientist or engineer as graduation approaches and this doubt could be due to changes in the image of their possible selves (Lips, 2007). Additionally, female students in male dominated areas of study anticipate and imagine

more sex discrimination, which forces them to think more about changing their concentration than do their counterparts in more traditionally gendered fields (Steele, James, & Barnett, 2002). The Possible Selves' framework (Markus & Nurius, 1986) supports this research and defines such issues facing women in science as an interpretation of experiences in their sociocultural environment (Tullos, 2011). Furthermore, this framework is a social psychological theory understanding how and why women develop certain future career images (Packard & Nguyen, 2003).

A possible self is further defined as the construction and regard of potential endeavors defined and maintained by an individual's self-knowledge and beliefs (Markus & Nurius, 1986). Researchers Lee and Oyserman (2007) described a guiding assumption of the Possible Selves theory (Markus & Nurius, 1986) as an assortment of possible self-images that an individual develops under specific contexts, which influences her beliefs about what is possible. This description is further emphasized as a group of comprised roles and identities "psychologically accessible and personally meaningful" and therefore, represents "both culturally determined and self-constructed aspects of the self" (Rossiter, 2004, 139). These views of a possible self are centered in social roles and classifications with the inclusion of past experiences and personal evaluation (Meara, Day, Chalk, & Phelps, 1995). Therefore, a women's possible self is defined by internal views of their reality and social views upheld by standards set for women (Tullos, 2011).

Furthermore, possible selves are individually derived from the past and include images of the self in the future (Markus & Nurius, 1986). These self-representations are different from the current selves but are also intimately connected to them. For example,

possible future selves are not just any non-specific imagined role or view. They are an inclusion of specific individual hopes, fears, and fantasies (Markus & Nurius, 1986). These possible selves are individualized, personal, and social. Additionally, many of these possible selves are formed from previous social comparisons and interactions which are then internalized into an individual's own thoughts, feelings, characteristics, and behaviors (Markus & Nurius, 1986). Markus and Nurius (1986) continued to describe how an individual is free to create numerous varieties of possible selves, but the starting point for all selves stems from individually salient categories surrounding sociocultural and historical content provided by models, images, and symbols from one's social experiences. A possible self is a cognitive approach, revealing self-schemas (Markus & Nurius, 1986). The collection of possible selves and self-schemas can include "the good selves (the ones we remember fondly), the bad selves (the ones we would just as soon forget), the hoped-for selves, the feared selves, the not-me selves, the ideal selves, the ought selves... They can vary dramatically in their degree of affective, cognitive, and behavioral elaboration" (Markus & Nurius, 1986, p. 957).

### **Why Possible Selves Works**

The Possible Selves theory (Markus & Nurius, 1986) would provide more insight into each individual woman in veterinary science and how they managed to conquer a previously male-dominated and hard science based profession. This framework supports an individual's career pathway development through five primary ways (Meara et al., 1995). First, possible selves are personal images which internally place the individual in the center of career choices. For example, utilizing this framework to understand women veterinarian's



possible selves will provide clues for how these women internally and externally choose this profession. Secondly, possible selves provide alternative or multiple future goals (Meara et al., 1995). This aspect of the theory will help decipher the methodology women veterinarians used to select the career goals and pathway in a science driven focus. The third way possible selves explain and support career development is by examining emotions that either direct or push away certain career goals (Meara et al., 1995). This is an important factor in understanding what emotions face women in veterinary science and how they either embrace or ignore particular ones. The fourth aspect of possible selves and career development embodies encouraging images of achievement (Meara et al., 1995). For example, understanding what images women veterinarians imagined, where they came from, and what they embodied will give insight into potential teaching and training tools to encourage other women to continue or pursue science professions. Lastly, possible selves will potentially provide action steps or strategies used by the individual for the achievement of career goals (Meara et al., 1995). Additionally, this aspect of the Possible Selves theory (Markus & Nurius, 1986) will provide access to successful action steps and career maps taken by women veterinarians to achieve a foot-hold in masculine, science professions. This could ultimately be an addition to curriculum in science concentrations, as a focus to retain and produce more mentally strong women with positive self-images for the future. Furthermore, the social role and gender theory describes gender conceptions and role behavior as products of a large network of social influences operating in the societal realm of the everyday life. Thus this theory mainly favors and focuses on the societal and social dimensions of gender issues (Bussey & Bandura, 1999). The Possible Selves theory (Markus & Nurius, 1986) best

encompasses biological, psychological, and societal dimension of gender differentiation; while offering a way to understand women throughout their lives instead of primarily early childhood, like most gender development theories (Bussey & Bandura, 1999). For example, a large portion of the psychoanalytic theory stemmed from the origin of gender differences and focused on young girl and boy development into gendered roles and a family focus (Chodorow, 1994) instead of men and women in later life stages still facing gender issues in their profession.

It has been reported by Zeldin, Britner, and Pajares (2007) that women have lower self-efficacy scores for non-traditional female careers. There is a persistent belief that men perform better at math and science and this belief affects women's perception for their own ability in similar fields, even though there is no empirical evidences to suggest men are better in these areas (Correll, 2001). Furthermore, Chalk, Meara, Day, and Davis (2005) suggested that men and women select careers based on traditional gender roles and women's perceived career goals and achievements are lower than their ability level demonstrates. Therefore, by utilizing the Possible Selves framework (Markus & Nurius, 1986) the focus is placed on understanding women veterinarian's possible self (past, current, and future) and best captures the internalization of issues surrounding women in science. Additionally, this framework is best for research focused on women veterinarians, because this profession is majority female, which is opposite of most science professions. The other two frameworks are concerned with underrepresentation due to gender.

Additionally, the Possible Selves framework (Markus & Nurius, 1986) allows for understanding of how and why women veterinarians came to the profession by adding a

dimension of insight into the exploration of new possibilities by adult learners (Rossiter, 2007). Since veterinarians are adult learners, the inclusion of steps involved in their transformative learning process is very important. A step in transformative learning involves the “exploration of options for new roles, relationships, and actions” (Mezirow, 2000, 22). As individuals explore courses of action they formulate goals for themselves and the Possible Selves framework (Markus & Nurius, 1986) draws attention to the importance of the exploration of these life stages and the resulting transformations and transitions (Rossiter, 2007).

### **A Feminist Lens**

The selection of a feminist lens and the Possible Selves framework (Markus & Nurius, 1986) was guided by my understanding of gender influences and perspectives which remain in the science profession (Jorgenson, 2002). The feminist research of Hartsock (1981) and Harding (1991) mainly addressed the historical understanding of a woman’s role in science and offered me a structure to understand the differences between what science professions claim to be and what they really are for the participants of this study. Furthermore, it is understood that women in science professions have different experiences than those of men; and STEM professions have evolved based on a culture that privileges the experiences of men (Keller, 1985). By using a feminist lens for this research project, the perspective, experiences, and self-views from women who have successfully navigated veterinary science to the profession level of practice ownership, were discovered and explored.

### Chapter Summary

Today, both men and women are increasingly violating traditional gender role norms as they choose roles that were previously dominated by the opposite gender. For example, male homemakers and female leaders are continuing to change traditionally gender linked professions. (Harrison & Lynch, 2005). Both current and past research focusing on an individual's self, highlight the tendency to distort information or events and therefore alter or sustain a prevailing self-view (Greenwald, 1980). For women in science, there are many issues surrounding social, gender, societal, and internalized images that affect their future. The Possible Selves theory (Markus & Nurius, 1986) proved to be best in analyzing women and science by understanding the intersection of all elements facing women in veterinary science professions. Additionally, the Possible Selves theory can facilitate optimism and the belief that change is possible due to the understanding that the self is mutable (Markus & Nurius, 1986). By allowing individuals to feel good about them and obtain higher self-confidence, personal striving and aspects of the possible self, will increase the chances to fulfill self enhancement goals (Oyserman, Bybee, Terry, & Hart-Johnson, 2004). In this sense, the Possible Selves theory can regulate behavior and serve as a guide or roadmap connecting the present to the future (Oyserman et al., 2004; Markus & Nurius, 1986).

Additionally, the more an individual is able to connect with their plans, goals, and specific strategies through their possible selves, the more likely their actions will be carried out (Markus & Nurius, 1986). The Possible Selves theory provides equal importance to gender, society, and the metallization processes occurring; while paying particular attention to the internalization and altering of images of their possible selves and how they affect

possible futures (Markus & Nurius, 1986). For women veterinarians, this is important due to the fact that the field has becoming increasingly feminized and normally the opposite occurs with science driven career pathways (Tullos, 2011). The continual underrepresentation of women in science driven professions is fueled by constant gender and social pressure to maintain stereotypical behaviors and roles. Women who are able to perceive such roles as a domain in which they belong and can prosper in, are able to negotiate and successfully navigate and obtain their desired position. It is important for future women to learn from these women. Therefore, the Possible Selves theory (Markus & Nurius, 1986) enhances how we understand the experiences of women veterinarians in a feminized, science drive career pathway, why they chose the profession, and how they figured out how to successfully navigate veterinary science, considering the researched issues and barriers reported to face women in science (Kinzie, 2007).

### **Chapter Three: Methodology**

#### **Overview of Methods**

Although many studies have focused on women being underrepresented in science, technology, and math fields, there is a gap in exploring the experiences and beliefs of women in a previously male-dominated profession in reference to their pursuits of a science based career of veterinary science (Heath & Neithe, 2001; Brown & Silverman, 1999). Therefore, much of the research on women in veterinary science has been focused on the feminization of the profession and salaries. This study utilized a qualitative case study research design along with the Possible Selves framework (Markus & Nurius, 1986) in hopes to explore the perceptions of women veterinarians who own their own practices. The collection and analysis of the women's stories expands the literature with further understanding how these women navigated their professional careers. The following questions guided my inquiry:

- (1) How do women veterinarians who own their own practice, navigate their career choices?
- (2) What barriers do women veterinarian practice owners describe? And (3) how do women veterinarians perceive their gender as playing a role in their career choices or decisions?

In an effort to answer these questions, I moved forward from existing research focused on the feminization of the profession and salaries; and toward views of self that enable women to persist in their professional roles towards practice ownership. Such exploration in this area contributed to the gap in literature surrounding the perceptions and beliefs of women veterinarians. Women practice owners were the focus of this study, because they have demonstrated a level of high success in a previously male-dominated profession and have master the skills required to overcome gender bias and ownership. I

argued that a woman's successes as a practice owner in the veterinary profession is not only influenced by social and structural factors, but also by internal meanings and self-views that emerge. This chapter provides a description of my research methodology by discussing the rationale for a qualitative methodology, the rationale for a case study approach, and details on data collection, data analysis, limitations of the study, researcher subjectivity, and veracity and trustworthiness.

### **Rationale for Qualitative Approach**

For this study a qualitative approach was best utilized to study the lived experiences of women veterinarians who chose to own their own practices. Existing literature has mainly focused on illuminating the feminization trend of veterinary science or used quantitative methods to explain show differences in career choices among men and women (Blickenstaff, 2005; Cronin & Rogers, 1999). Therefore, there is a need for a qualitative approach which moves beyond existing quantitative literature focusing on why women are not choosing career positions in STEM professions (Blickenstaff, 2005; Cronin & Roger, 1999). Such research attempting to understand and explore the experiences of women in veterinary science has been overshadowed by quantitative findings (Kinzie, 2007). Therefore, this study addressed the gap in literature by using a qualitative methodology to explore the career experiences and possible selves of women practice owners in veterinary science.

Qualitative methodologies allow the researcher to explore and understand social processes related to the construction of identity groups among people (Creswell, 2007). As discussed in chapter two, there are connections between gender identity and career choices among women (Faulkner, 2007). Therefore, a qualitative approach offered a chance to

explore how women create meaning from their life experiences and how that is conveyed into their career choices within veterinary science. Furthermore, Creswell (2007) described how qualitative studies provide rich detail fundamental to understanding the experiences of people from their point of views.

### **Rational for Case Study Approach**

Case study research involves the study of a case within a real-life setting (Yin, 2003). Yin (2003) further described case studies as being complicated due to multiple views on the parameters of this approach, but there is communal agreement that case study research strives to explore and depict a setting with a goal to advance its understanding. Some qualitative researchers view this approach slightly different. Stake (2005) stated case study research is not a methodology, but a choice of what is to be studied, while others view it as an inquiry strategy or comprehensive research methodology (Denzin & Lincoln, 2005; Merriam, 1998; Yin, 2003). The case study research approach is a qualitative research process in which the investigator examines real-life, contemporary bounded system, over time by use of detailed and in-depth data collection through multiple sources of information (Patton, 2002). Additionally, the system of analysis may be multiple cases or a single case. This approach has been used often in the social science setting, due to its increased awareness of psychology, medicine, law, and political science (Patton, 2002).

Researchers Hamel, Dufour, and Fortin (1993) traced the beginnings of social science case study research back through anthropology and sociology. Patton (2002) described how today, the case study researcher has a wide array of texts and methodologies to choose from. For example, Yin (2003) utilized both qualitative and quantitative approaches to case study



research development. There are several defining characteristics to the case study approach. First, case study research starts with identifying a specific case (Patton, 2002). There are different possibilities for what may constitute a case. A case may be an individual, small group, partnership, or an organization. However, a case may be less concrete as in a community, a relationship, a decision process, or a specific project (Yin, 2003). Ultimately, the goal is to define a case that can be bounded or described by parameters, such as place and time. Usually, these cases are current, occurring in real-life and in progress so researchers can gather accurate information irrelevant to time (Patton, 2002). Second, there is importance in knowing and understanding the intent for conducting case study research. The intent of case study research can be for the illustration of a unique case or a case that needs to be described and detailed. Stake (1995) called such cases intrinsic cases. On the other hand, a case may be used to understand a certain problem, issue, or concern and the need for a better understanding of the issues. This is called an instrumental case (Stake, 1995). Third, a well-constructed qualitative case study presents an in-depth understanding of the case. In order for this to be accomplished, multiple forms of qualitative data must be utilized. Such data includes interviews, observations, documents, and audiovisual materials. Only examining one source of data is typically not adequate to develop appropriate understanding of the case (Patton, 2002). Fourth, a good case study approach involves a description of the case. This applies to both intrinsic and instrumental case studies. Additionally, this description of the case allows for identification of themes, issues, or specific situations to each case (Patton, 2002). Furthermore, such themes and issues may be organized chronologically for comparison of similarities and differences across cases (Patton, 2002). Finally, Patton (2002)

described that case study research approaches often end with conclusions pertaining to the overall meaning of the cases. Such conclusions are referred to as “assertions” (Stake, 1995) or “patterns” and “explanations” (Yin, 2003).

Given the stated purpose of this study, collecting the experiences from women veterinarians on their professional career experiences was an appropriate approach to explore women’s possible selves as related to gender and professional identity. By selecting women veterinarians who are practice owners as a bound case to study, the data yielded rich detail from an originally male-dominated profession, but now largely feminized. Furthermore, each individual was analyzed as a case separately and then compared to the others for analysis of similarities and differences.

### **Data Collection**

#### **Participant Selection**

I selected six female veterinarians who own their own practice; purposefully selecting based on gender and “snowball” or “chain” techniques (Creswell, 2007) beginning with professional contacts I already have and their personal connections. Such techniques as the “snowball” method rely on the use of professional networks to identify participants who meet the researcher’s set needs (Miles & Huberman, 1994). The goal of this study was to focus on women veterinarian practice owners rather than women veterinarians who are not practice owners. This is due to the veterinary science field being highly feminized, but lagging behind other science-based professions in terms of ownership among women (Winn, 2004; Heath & Neithe, 2001; Brown & Silverman, 1999). Additionally, this population provided more expansive insight and exploration into women veterinarian practice owner’s career

navigation and how they overcame any potential barriers that may exist. Beginning with my own contacts and prior connections, I sent out emails requesting participation in the study or referrals to potential participants. These participants are veterinarians who own their own practice and were not bound by veterinary school or practice specialization. However, this study was bound by location to only include the United States due to differences in culture and income. Every potential participant received a detailed invitation to the study, including a discussion of the purpose, time involved, and the scope of their involvement. If email invitations were not reciprocated and further participant involvement was required I utilized the North Carolina Veterinary Medical Association website for a primary point of contact and email any individuals offered for the study (Appendix B).

The criteria for participant selection were that the women are veterinarians who own a practice. Variations in age, race, type of practice, and cultural background were not used as criteria for participant selection. Selecting the participants in an attempt to gain variation in previously stated characteristics may have resulted in limited participants (Table 2).

Table 2

*Process for Participant Selection*

Prior to study	Performed pilot interview with a professional colleague who is a woman veterinarian practice owner
To gain participants for the study	Utilized my professional network in veterinary science for potential participants and contacts
	Utilized the snowball effect from professional contacts and friends
Potential participants	Participants were emailed the study invitation and once accepted, the informed consent was sent out and interviews were scheduled

**Pilot Interview**

Before beginning this study, I conducted a pilot interview with a woman veterinarian who fits into the research criteria, but will not be included in the actual study. The purpose of this interview was to practice my interviewing techniques, test my recording protocols, and refine the structure and content of my interview questions. The interview was conducted in person at her practice and I followed the interview guide (Appendix C) to insure the questions were applicable and to practice my interviewing technique. As the interview was conducted, I took notes for future reference on any potential issues related to the study protocol and structure. After the interview, I analyzed my findings pertaining to any issues with the interview protocol and any comments from the pilot participant. This involved reviewing my notes taken during the interview and relating them with the methodology and purpose of the study mentioned previously. This was performed in efforts to ensure the

interview protocol was reflective of the study's purpose and created the best method to gain insight into women veterinarian practice owners' possible selves. After analyzing the pilot study, I found the interview protocol and biographical sketch provided significant exploration of the possible self-identities as my pilot participant navigated through her career and provided a broad painting of her experiences throughout her professional journey.

Additionally, there were no changes made to the structure of the study as a result of the pilot interview. This pilot interview primarily served as a means to confirm the study structure and to refine my interview skills.

### **Participant Interviews**

After the confirmation of each participant in the study, I emailed the informed consent form to each participant and ask for it to be reviewed and signed prior to moving forward with the study (Appendix A). As each informed consent form was received, I responded by working with each participant to schedule interviews. Once a participant scheduled an interview, I emailed the biographical timeline sketch and asked for its completion prior to the scheduled interview (Appendix D) as a method to increase their reflection process on their career pathway and professional choices (Atkinson, 1998). This document was sent out to each participant via email and prior to the interview. After receiving each biological sketch, I emailed or called each participant to schedule time for an interview. Each practice owner was asked to participate in one 60 minute semi-structured interview regarding their professional and life experiences as a woman veterinarian practice owner. To allow for a convenient interview process, I offered to conduct and record the interviews either in person or over the telephone, using a digital recording device (Table 4).

I closed each interview by asking each participant if they had anything else to add and gave them an overview of my data collection process. Additionally, I informed the participant of the future schedule for the study.

### **Data Analysis**

Following each interview, I reviewed my notes along with each participant's biographical timeline, and with the interview recording. Then I began transcribing each interview by playing back the electronic recording multiple times and typing the interview. For the purpose of this case study, the data collected was in the form of transcribed text from digitally recorded interviews and biographical timeline sketches. I waited until all interviews and biographical sketches were completed before starting the transcription process in efforts to avoid premature conclusions about the data. To effectively manage the large amount of data I obtained, I continuously reviewed the purpose of the study and the guiding research questions. This was in an effort to maintain the focus of the study and remain unbiased as I analyzed the data.

### **Coding the Data**

The interviews and biographical sketches were coded using open coding for the first pass and then coded using the Possible Selves framework (Markus & Nurius, 1986). There are three steps involved in this analysis. Initially, I began with the first line of the first interview and coded line by line to identify potentially useful concepts. At this point, it was important to mark key phrases and name concepts (Strauss & Corbin, 1998). This is a process of fragmenting data into conceptual components (Charmaz, 2002). During this phase, I pulled examples of concepts together and compared how they related to one another. This is

referred to as axial coding and is an important part of ensuring that impressions about the concepts are recorded and given descriptive names (Charmaz, 2002). Additionally, constant comparison among concepts and interview data forced myself to think about each theme. Secondly, I kept running notes about each identified concept and identified hypothesis about how each may be related (Charmaz, 2002). These memos or field notes included hunches or insights which were created on the fly about concepts. As stated by Kathy Charmaz (2000, p. 517) “memo writing is the intermediate step between coding and the first draft of the completed analysis.” The final step was focused on refining and building themes. As coding themes emerge, the next step is to link them to the Possible Selves framework (Markus & Nurius, 1986).

This data analysis framework utilized the constant comparative method and negative case analysis to generate themes from the participant interviews. This allowed for themes to emerge and existing or new connections to be made to the Possible Selves framework (Markus & Nurius, 1986) and women veterinarian practice owners.

After coding the data, I organized the codes to identify themes and patterns surrounding the interpretation of women’s common experiences as veterinarians. Since the purpose of this study was to explore the experiences and possible selves of women veterinarian practice owners, I utilized the participants’ words to showcase their career and life pathway.

### **Veracity and Trustworthiness**

As a researcher, I am responsible for abiding by ethical guidelines surrounding research with human participants. During the study, I continuously confirmed that I was following guidelines stated by the Institutional Review Board (IRB) and my study submission. Also, prior to interviewing each participant, I reviewed the informed consent (Appendix A) process with and receive their signature before collecting any data. I maintained the confidentiality of the participants by randomly assigning them pseudonyms and storing data in ways that are non-identifiable to the participants. I was transparent as possible in regards to my subjectivity and utilize member checking to allow participants to have a voice in my interpretation of the data. By utilizing member checking techniques and gaining approval or confirmation from participants, this further strengthens this study's credibility (Patton, 2002). Additionally, I consulted with my academic advisor to discuss and challenge my assumptions and discuss my thought process.

### **Researcher Subjectivity**

As a researcher I am aware of potential personal bias that may interfere with the study and continuously maintained objectivity by reminding myself of the purpose of the study and opening stating my background to all participants. However, since most research stems from an individual's passion and interest; it should be known that I am female and have a large background in science majors and professions. Additionally, I have numerous professional connections with individuals working in the veterinary profession and professional colleagues who are connected with a large veterinary school in the Southeast. My future interests revolve around science, research, and academia. Given this, it is understandable that



I have an interest in women veterinarians and will strive to provide an objective research study for that profession.

### **Limitations of the Study**

This study utilized the case study approach and this method of qualitative research required additional time to ensure I was proficient in the required data collection methods. Being that the focus of this study was on women veterinarian practice owners, I did not include information pertaining to demographics, age, culture, or race. Furthermore, my study involved interview techniques which rely on the participant's recollection and memory of the past, which may result in less detailed information (Patton, 2002).

Finally, this study was limited by my subjectivity as a researcher. As the primary researcher, my perspectives and beliefs shape the interpretation of the study (Merriam, 1998). My interests and past experiences shape and direct the research questions. As an example, I chose to utilize the social role and gender theory in efforts to highlight the dynamics gender play in women's perception of leadership.

### **Chapter Summary**

This study utilized an exploratory case study approach to understand the experiences and possible selves of women veterinarians who are practice owners. In an attempt to aid the gap in literature, this research focused on how gender influences and shapes a woman's career choice in veterinary science. The case study methodology allowed for participant's voices to be heard through interviews, as a means to understand their possible selves view and any barriers experienced as they navigated their careers. The exploration of the women

veterinarians who own their own practice, provided insight for future women pursuing similar career goals and literature to aid salary disparities pertaining to gender.

### **Chapter Four: Findings**

To explore how women veterinarian practice owners create possible self-identities used to navigate through their careers within veterinary medicine, I designed an exploratory case study which utilized interview techniques guided by three research questions: (1) How do women veterinarians who own their own practice, navigate their career choices, (2) What barriers do women veterinarian practice owners describe, and (3) How do women veterinarians perceive their gender as playing a role in their career choices or decisions?

The data highlighting these findings were obtained from six women who were asked to participate and share their insights of how they navigated their careers as veterinary practice owners. Semi-structured interviews, either in person or over the phone, were the primary data collection method for this study. Additionally, each woman was asked to complete a biographical sketch timeline to help prompt memories related to significant events along their career pathways. The interviews were designed to obtain information pertaining to each woman's created identity and ability to navigate their chosen careers. Interview recordings were transcribed and analyzed by way of open coding and then coding with the Possible Selves framework as outlined in Chapter Three.

All of the women were veterinarians who own their own practice. For the purpose of this study the six women were referred to as pseudonyms Katie, Terry, Mary, Fran, Gina, and Sally. Individualistic elements responsible for shaping each participant's experiences and Possible Selves are presented in each biographical timeline sketch. While each participant had unique experiences along their career journeys as veterinary practice owners; they also shared some commonalities as women working and navigating through a historically male-

dominated profession. Furthermore, in efforts to provide a clear understanding of each interview, *Table 3* shows how the interviews were conducted and reveals the participant's pseudonyms. As mentioned previously in Chapter 3, interviews were conducted either in-person or over the telephone as a result of the participants request.

In general, the participant's biographical timelines followed a progression from childhood and family experiences, then moving into educational and school related experiences, and then ending with career experiences and events. Direct excerpts from each participant's timeline are presented below. Quotes from participant interview transcriptions will follow the biographical timeline sketches to in this chapter to support the findings. To further examine the findings of this study, the Possible Selves framework and a feminist lens are discussed in this chapter as a means to understand and relate common themes which were revealed from the participant's career experiences.

Table 3

*Participant Interview and Pseudonyms*

Interview conducted via:	Participant Pseudonym
Interview 1 via in-person	Katie
Interview 2 via telephone	Terry
Interview 3 via telephone	Mary
Interview 4 via telephone	Fran
Interview 5 via telephone	Gina
Interview 6 via telephone	Sally

**Biographical Timeline Sketch Data**

The following section provides the data obtained from each participants biographical timeline sketch. After receiving each participant's informed consent, each individual was emailed a copy of the biographical timeline sketch and asked to complete and return the sketch prior to their scheduled interview. The biographical timeline sketches were either emailed back to me or handed to me prior to the interviews. The following table reveals each participant's timeline sketch (Table 4).

Table 4

*Participant Biographical Timeline Sketch Data*

Participant Name	Age 0-12 years	Age 13-17 years	Age 18 +
Katie	Farm, prime tobacco, garden, sense of family, unconditional love, hatch eggs, school importance, grandmother passed away and was a strong woman, always around animals, teaches, nutrition, faith	Father died, tractor flat tire, helped mom, loss of animals, castrating pigs, mother putting 6 kids through school "role model"	Suture practice, coursework remaining to be completed, far from home (borrowed money from grandmother to fly home), watch successful men, male veterinarians and animal abuse, mental understanding, mentors
Terry	Always wanted to be a veterinarian, had parents that were supportive of my interests, both parents had science backgrounds, owned a variety of pets	Owned a horse, worked for a DVM	Attended Cornell undergraduate, worked on a dairy farm

Table 4 Continued

<p>Mary</p>	<p>When I was as young as 5, I dissected chickens as I helped prepare them for cooking. I came from a family of mostly men and a large population of dentists. I also had a repore with dogs, cats and horses. I had the opportunity to pet sit in the neighborhood even before I was in Jr. High School. I also got a horse at the age of 12 and he was literally my best friend up until I went college. I knew that my occupation needed to be in medicine, but my avocation was with animals. I also helped the local farrier locally when he was shoeing distraught horses. Animals seemed to be the world in which I was most comfortable.</p>	<p>I was a rider with the local hunt club. I also got the opportunity to observe at the University of Pennsylvania Large Animal Hospital during the summers of high school. I moved from observing to doing treatments and bandage changes and nursing care of very expensive race horses at the University. And my parents at this point became totally committed to me becoming a veterinarian.</p>	<p>I was determined to get the appropriate grades to be admitted into Veterinary School. I did a lot of research and trips and interviews to a number of Veterinary Schools. I got a job, established residency, graduated in 5 more quarters, got a job in an Immunology Lab just waiting for an acceptance into Vet School. But I found a practice in (town omitted) NC where I was in mixed practice with a large number of vets with a variety of experiences.</p>
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Table 4 Continued

Fran	Age 4- got my first puppy and went with my mom to all of her veterinary appointments. I just knew from the very first moment that it was what I wanted to do with my life. Truly never really considered anything else. Age 12- same dog was diagnosed with a brain tumor and had to go to vet school for diagnosis	Age 16...dog had to be put to sleep ...I was the one that took her to the vet and made all of the decisions regarding her care. Later that year, volunteered ~40hours a week for a small animal veterinarian. Dr. (name omitted) took me under her wing and really mentored me- she practiced at her home (separate building). Age 17, got my first job as a kennel attendant at my vet's office and got to learn all of the ins and outs of a larger practice.	During my college years I didn't actually work for a vet but worked for multiple professors that were all guiding me on the path to veterinary medicine While applying to vet school I worked at an emergency clinic and met my mentor as she was starting as a young doctor - she made me want to be as good a vet as she was and I worked very hard to come even close. I can honestly say that
Gina	Grandparents owned a dairy, showed registered Holstein cattle, dairy judging, dairy quiz bowl	Same as 0-12 years	BS Animal Science at NCSU, dairy science club, animal science club, Alpha Zeta
Sally	I was raised on a small hobby farm and had continued contact with pet and livestock animals, also had very few children my age with which to interact, so I interacted mostly with my pets	No significant events	Realized that I really liked problem solving and investigation of cause/effect, pursued other career and desires always came back around to people, pets, and livestock



### **Emerging Common Themes**

This study explored the Possible Selves of women veterinarian practice owners along their professional pathways by focusing on three research questions: (1) How do women veterinarians who own their own practice, navigate their career choices, (2) What barriers do women veterinarian practice owners describe, and (3) How do women veterinarians perceive their gender as playing a role in their career choices or decisions? The findings discussed and presented in this chapter were obtained through analysis of the data collected using the Possible Selves theory and a feminist standpoint lens. In answer to Question 1, the findings indicated that women veterinarian practice owners navigate their careers by enhancing desires of autonomy, control, and independence. Such attributes primarily obtained through strong and driven self's, the direction of mentors or experiences with other practices, and having been surrounded by animals early on in life. In answer to Question 2, the findings showed some personal doubts of self, financial issues, juggling family, and a lack of business knowledge as barriers faced along their pathway as women veterinary practice owners. Furthermore, in answer to Question 3, the data highlighted some women veterinarians feel gender has played a role in their career choice or decisions either through loan obtainment issues or increased empathy and understanding of client-animal relationships and family. While other women veterinary practice owners believe gender has not played a role in their career choice and decisions.

For this study, I analyzed the biographical timeline sketches in conjunction with the interview data in efforts to have a complete picture of each participant's professional

pathway and journey. As described previously, the biographical timeline sketches were utilized to gain data, but also help prepare the participants for their interviews and their reflection on their careers. Therefore, it is understandable that each biographical timeline should be analyzed with each corresponding interview. The biographical timeline sketches from six diverse women veterinarian practice owners highlighted in the previous sections showcased common experiences that molded their views of self as well as their career journeys. While each woman practice owner has her own description of experiences along their career pathways, collectively their interviews and biographical sketches revealed common themes. By way of close and focused listening to and reading of interview recordings, corresponding transcripts, and biographical timeline sketches, I have identified five themes pertaining to the individual cases: (a) self driven and a desire for autonomy, (b) experience with mentors and other practices, (c) animal upbringing, (d) hurdles of doubt, finances, and business knowledge, e) gender awareness in career choice. In order to expand on each theme and depict what each embodies as the possible self of each individual developed, I have discussed quotations from each participant pertaining to each theme from each interview. The aggregate themes are written in first person in efforts to highlight what emerged through analysis of each interview. Furthermore, utilizing the participants own words allows for personal examples of how their views of self shaped their career paths. Each quotation in the aggregate of themes was chosen because they explicitly depict the experiences of several participants in an effort to enhance our understanding of the women's common experiences along their career pathways. The six participants' cases collective emerged an understanding of the necessary Possible Selves which were created to

accomplish and navigate careers through veterinary science practice ownership. This identity may have been created with help from independent and motivated personalities, representative of highly motivated women pursuing autonomy and control. Additionally, growing up with animal influences and highly supportive families, in addition to taking advantage of experiences from mentors and other practices, have nourished and molded each participant's career pathway. Despite experiencing hurdles surrounding self-doubt, business knowledge, and gender related experiences; these women continued to develop their skills and knowledge to persist in practice ownership.

The following sections describe experiences of the participants which shaped their possible selves and therefore affected their professional journey. Such noted experiences were taken from the aggregate of findings in chapter four. It is important to understand that the findings do not represent all participants equally and even though the findings form common themes, each woman's experience has uniquely shaped their possible selves and professional identity. Additionally, any distinctions to common themes are described throughout the chapter. Finally, this section of the chapter concludes with a discussion of surrounding the research questions and a summary of key findings.

### **Self Driven and a Desire for Autonomy**

The first theme, which emerged during this study, surrounds the self driven nature of the participants and their desires for autonomy along their professional pathway as a women veterinarian practice owner.

#### **Katie:**

I honestly don't know any different. So it was really was just a normal progression to from self taking care of animals and killing and death and dying and what does and doesn't work; to really getting a professional title that you could legally do the things you were already doing on your own animals to begin with.

...Um my grandmother lived to be 99 and she just was so big on you being self-sufficient and self-reliant, not to say that you can't accept help from others, but don't expect handouts...

The above quotes display how Katie utilized her independent upbringing and strong personality to convey her confidence in skills pertaining to her life involving animal care. She was able to harness the experiences she developed as she grew and nonchalantly mold them into a profession. She also remembered lessons passed down to her from family, stressing the power and need for her to be self-reliant and sufficient. Additionally, Katie understood that she had the desired traits and field knowledge brought forth through such daily experiences and was driven to obtain the required professional title as a means to professionally showcase and utilize her goals.

I think that women have such a hard time with self-esteem and self-image, um I just have been very blessed...I call it a vertebrate, a strong backbone person. Yes I have my own self-doubts, but of when and where I can, I always try to be, such as today, to be encouraging and be a positive influence by sharing my experiences. I try never to be too busy to possibly build up somebody else and help them to be successful in their own way, as I feel others have laid the way for me.

Katie is aware of possible self-image issues haunting women and discussed her independent and strong personality as a means to acknowledge such worries as a means of motivation to be strong and progress towards her goals. She describes and even names her Possible Self as “a strong backbone person” and a “vertebrate.” This also highlights the importance of understanding the numerous facets surrounding women in veterinary science and the need to employ them, as Katie did, to help encourage other women to find their strong Possible Selves along their career journey. As Katie described, she tries to help build up other women’s confidence as other individuals have done for her. This supports an empowered and autonomous view of self by displaying her self-confidence in her profession and through her abilities to teach and help others along a similar path, as an effort to make hurdles of independence less daunting.

I think that there’s a lady and her name is Corey Tim Boone...she has an analogy that I’ve always kinda thought as the way your life is... On the backside, like the current moment you are in is like all those knots and all those threads and we get tied up in those knots and in those threads and she said that there’s a big picture that we

just have to have faith to believe. And there is a big plan and you just gotta have the faith to believe that this is where it's going and have patience and calm and endure this.

Katie continues further by remembering an analogy she utilizes to stay strong through her daily life and along her professional pathway. She relates the analogy pertaining to needle point, to moments and hardships that individuals may get broking down with in life. Katie utilized self-driven attributes and further described her faith in the "big picture" and thereby her Possible Self by efforts involving patience and endurance.

... after my father passed away, I was the, I don't want to say man of the house, but I was the one that my mother called on for everything. So I knew that out of this all, for example if your tractor had a flat tire and you are mowing the fields you couldn't just sit there and boo hoo, you could do all you want to boo hoo, but once you get beyond that...okay, what are you gonna do? You got a tool box [references head] what are you gonna do with it?

To further support the theme of a self-driven nature and desire for autonomy, Katie described personal experiences with her family that required her to be strong and a primary care taker for family members. Also, she credits her independent personality to experiences gained from growing up on a farm and having to be your own means to an end. Katie highlighted a specific example with a flat tire where she overcame frustration and feelings of personal disempowerment. Rather than being helpless and depending on someone else to fix

her problem, she taught herself physically how to handle such circumstances and mentally how to overcome them through a self-reliant nature.

... owning your own business is just a natural progression cuz I refuse to be pulled into that model of how business is supposed to be run. So to me it was almost like, okay sink or swim. Do you condone this behavior? Do you condone these financial irregularities? It's gonna be hard and are you willing loss your sense of self-preservation? If it's the right thing, you need to get over it, if you're gonna run your business by the way other people think of you...you need to think about yourself.

Katie described her choice to become a veterinary practice owner as a result of non-congruence with standards set forth by other practice owners. She surpassed risks involving self-preservation instincts to obtain the professional status required to create her own set of practice standards. As previously discussed in her earlier interview quotations, Katie utilized her desire for autonomy by way of a strong Possible Self to obtain veterinary practice ownership.

**Terry:**

I mean I wrote off for applications for a lot of different schools and they were like "you're from Connecticut...no you can't even apply." I think it was a hurdle...it is what it is type of thing, so I don't know if I felt self-discouraged, it was just like this is what it is and I have to somehow accomplish it.

Terry described issues surrounding logistics to obtain admittance to veterinary school as hurdles she encountered early in her pathway. However, she viewed potential hurdles, such as this instance, as an experience that she needs to push through to accomplish her professional goals. This further supports a self-driven and autonomous nature by displaying Terry's ability to surpass early hurdles as something that she can and will move beyond.

And just running a small business, a business of any kind...you know let alone one in veterinary medicine, there are hurdles every day, but that's part of what makes it interesting, challenging, and rewarding. It just, you either want to do that or you don't. So I guess in terms of what made me think I could be a veterinarian, I never thought that I couldn't. This is what I want to do and I'm going to figure out a way to do it. And quite honestly I feel quite lucky, because I had a clear path...and I was going to do absolutely everything in my power to give myself the best opportunity of getting in.

Furthermore, Terry discussed that owning a veterinary practice involves daily challenges and hurdles, but rather than being personally and mentally discouraged by this, Terry described these aspects as what makes her profession interesting and rewarding. She relishes and thrives with puzzles pertaining to veterinary science and prefers this over daily monotony or routine. This professional strength is possible by means of a self-driven Possible Self. Terry further described her devotion to her profession early through having a "clear path" and utilizing everything within her to accomplish her goal.



And then in terms of being a practice owner...I guess I just wanted to have some control...some control over the direction of the practice and that kinda thing as opposed to maybe just working for somebody else constantly...I was a very dedicated and hardworking associate, and I was like okay, If I'm going to be doing this I would just assume be working for myself as opposed to just working for somebody else.

Terry discussed her drive towards veterinary practice ownership as a method to obtain control and autonomy. She further described her dedication and hard work as support to understand why she believed she could own a practice and ultimately showcased an independent and self-driven Possible Self. Terry stated she would rather work for herself than work with less control and for someone else. Therefore, Terry was able to acknowledge and understand her strengths as a woman veterinarian and turn her independent personality into a mechanism to help envision herself as a practice owner.

**Mary:**

You know I was very motivated to do what I wanted to do and I think when you are a kid you kinda flounder with "well what am I going to do with the rest of my life" and they're not driven ...I mean from the minute I can even remember back, I was planning that my whole life.

Motivation and a self-driven nature are the driving force to accomplish personal goals. Mary's understanding of herself being very motivated and independent support this

theme and further depicts how she was able to accomplish her career goal. She knew she was driven and desired to create and obtain her own direction in life.

...every day is different, every day I learn something, every day...you know every day challenges you with something you haven't seen before or haven't seen in a while, but every day is a challenge. It's just stimulating and one of the cool things about owning your own practice, is that you get new people in that are younger than you...they're kinda fresh off the academia trail and you know they teach you knew things and new ways to do stuff. And I think that's the key of being a business owner ...it's really about being driven.

Mary further discussed her self-driven nature by describing the ever-changing climate of veterinary science and the unforeseen challenges each day brings. This specifically illuminates her independent personality and strong Possible Self by discovering her personal strength to flourish from challenges which she faces daily. Mary discussed not only having the ability to overcome such challenges and puzzles, but to enjoy them. She also uses new veterinarians working at her practice and techniques they bring to the profession, as an opportunity to learn and grow; rather than displaying discomfort and fear of change or ideas. Such reactions to innovation and the flexibility to continue to learn, supports her self-driven and autonomous Possible Self.

I also did relief work...but I really like owning my own practice and I think it comes back to that independent nature that we all have. Um...I know I don't do it better than anybody, but I really like doing it my way and when I own my own practice I can.

And that's real important to me. Things like how I want it done, things like client communication, and how I want to establish veterinary protocol for things like vaccine protocols, medical treatments...but to me that is the most rewarding part of owning your own practice...is being independent enough to not have to be there when there is something else important that you need to do.

Mary stated directly that she is aware of her independent nature and credits it to her desires to own her own practice. She supports this by describing a need for control in her professional environment and standards. Mary attempted other forms of work in the veterinary profession and through these opportunities of working for veterinarians; she discovered her personal strength and Possible Self revolving around a belief that she could and desired to accomplish practice ownership. Furthermore, she understood this professional goal was a chance to allow her independent Possible Self to thrive and not as an effort to be better than someone else. This finding from Mary supports the self-driven and autonomous theme by highlighting her ability to showcase her strengths in veterinary science without a focus on comparison to others.

**Fran:**

I mean the rewarding things are...it's the sense of accomplishment for getting it done and for getting to a level I feel happy with. You know I feel like I provide really good care for my clients and my patients and I'm very proud of that.

Fran holds her Possible Self to specific standards relating to professional accomplishment among her practice, clients, and patients. She derives a sense of appeasement from accomplishing daily challenges in a manner that depicts her passion for veterinary practice ownership. Fran feeds her self-driven personality by giving everything she can daily.

...you know the biggest challenge to ownership was just making it happen and you know kinda the....you know getting the contractor and getting...I mean all of the stuff it took to get this place up and running um...was just...it felt insurmountable sometimes. And you know even for the first year there would be things...like we haven't done that, I don't know what that is...um and so you tried so hard to be prepared and plan for everything, but you know nobody teaches that. Nobody teaches everything you need to know to make this happen.

Fran further discussed challenges with practice ownership and the courage to “make it happen.” She remembered worries and doubts surrounding an “insurmountable” level of necessary knowledge and experience pertaining to her career goals. However, Fran embodied and utilized a strong Possible Self to recognize all the experiences one must teach themselves along an independent path and persevered to accomplish her goals as a veterinary practice owner.

**Gina:**

Um... you know being new...I'm not nearly as busy as the practices that are here that have been established for 20 or 30 years. So at sometimes that can be frustrating, but at the same time I have to think where were they 20 years ago?

Gina described discouragements pertaining to doubt and worry that she became subject to after becoming a veterinary practice owner. However, by understanding the years of experience other veterinary practice owners have prior to her, she is quick to dismiss such doubts and realizes everyone starts somewhere and they probably experienced similar frustrations during the beginnings of their professional pathway. This supports the self-driven theme related to strong Possible Selves by uncovering her ability to trace where her personal hurdles stem from and derive a means to continue with her career goals.

I...I don't like the same thing every day. Um...so yeah I do something different every day. I'm outside, I get to go from farm to farm, interact with the farmers...I just love that life style...So the flexibility of being on the road and being able to come and go from farm to farm, I really enjoy.

Furthermore, Gina described her desire to have unpredictable days and the flexibility to structure her days and practice routines as she prefers. She also values autonomy in her professional identity and Possible Self. This is supportive of a strong and independent nature which helped strengthen her image of her Possible Self and her ability to obtain veterinary practice ownership.

**Sally:**

I've just kinda always done...had the kind of personality that I could do whatever I wanted to do. Um....you know I had experience from my last job so I feel I was medically able to do it. My business abilities are probably not as good as they should be, but um...you know, I'm not really the kind of person that keeps doing things I don't want to do if I can't do them.

Sally described her awareness of her independent and self-driven personality. Also, she has confidence in her veterinary knowledge and experiences, while understanding areas related to business abilities that may cause hurdles along her professional pathway. This recognition of strengths and weakness displays the power within her Possible Self to continue with her goal of veterinary practice ownership.

I mean every day is either successes or failures...it was nice to be able to open my own place. You know, I know that I'm responsible for it, but again I can do things the way I want without having to deal with somebody else's' wants and desires.

Sally further discusses the challenges she faces everyday as a practice owner by stating the day is "either successes or failures." By knowing each day may not be predictable or positive, she has learned to push past any challenges she may face and continues to strengthen her Possible Self. She values the responsibility that comes with practice ownership and the ability to focus on her goals and desires rather than someone else's. This

finding supports the first theme by highlighting her self-driven personality and her desire for autonomy.

All of the participants revealed strong examples and memories displaying internal stamina and strength which significantly aided in the development of empowered Possible Selves. Such memories and examples helped formulate the first theme pertaining to being self-driven and a desire for autonomy. For example, Katie's extensive experiences growing up on a farm and the necessity for a self-driven attitude as she learned to rely on herself as a means to support the farm and her family gives a very clear picture of her self-driven Possible Self. Also, Terry referenced academic hardships during veterinary school admittance as a discouragement along her journey, but further revealed her desire to have control of the direction of her practice and the internal reward she felt by progressing through and desiring daily challenges. Additionally, Mary described moments along her professional journey where she expressed her desire for control and the value of daily challenges. Furthermore, Fran displayed her self-driven Possible Self by describing the need to overcome the initial fear of opening a practice and to achieve what you desire. Gina and Sally also described their professional goals as veterinary practice owners as unwavering and encompassing desires of control and independence found in their profession. All of these referenced memories, in addition to those previously discussed, highlighted descriptive characteristics pertaining to being self-driven and a desire to be self-regulating, in control, and autonomous.

### **Experience with Mentors and Other Practices**

The second theme discovered involves experiences with mentors and other practices along the participant's professional pathway as a women veterinarian practice owner.

**Katie:**

Um, my father had a degree in animal nutrition. He had a PhD from Cornell. My mother had her Masters in human nutrition and...they therefore were unique mentors that the science behind the things we were doing on the animals. They were great mentors from the get-go. Encouraging me and supporting me to be a woman that would be self-supportive, but to find your passion and go after it with great intensity. It doesn't mean it's gonna be easy, but I would say that's kinda where it started.

Katie supported the second theme of experience with mentors and other practices by describing how supportive and influential her parents were as mentors to her professional career goals. She further reveals the unique chance to utilize guidance from both her father and mother's educational background as it pertains to science and animals. This provided her with a network of strong support stemming from individuals who successfully navigated their own professional goals; and therefore giving her examples of professional success through self-reliance and determination. Katie discussed her parents influence on her to ultimately identify her passion and be self-determined to obtain it. The mentorship she gained from her parent's guidance was extremely vital to her Possible Self-image as a veterinary practice owner.



...there was this woman, every Sunday who came to church and...just looked like the society belle. Well I found out, as I started to watch her, she was one of the first women that graduated from pharmacy school at UNC Chapel Hill and she owned her own pharmacy... and I have to say, I applauded [her] so many times. What type of strength it must have taken to believe in herself, to go and start a pharmacy. So I have to say she absolutely is one that I've always really thought about. She didn't take away from her strengths as a lady, but she had an incredible brain and she used it.

Furthermore, Katie remembered a woman from her church that instilled very feminine qualities in addition to successfully navigating pharmacy school as one of the first female graduates. Katie referenced this woman as a mentor due to how she wove herself into society and the strength she embodied to become a woman business owner. Importantly, Katie realized the mentor she found in this woman acknowledged and utilized her strengths as a woman in addition to successfully obtaining her professional goals by way of her immense knowledge and background in science.

**Mary:**

I mean I dissected things when I was three. And then I went to the large animal facility at the University of Pennsylvania and I was helping the surgeons on these really expensive horses for like 3-4 years and that's what I wanted to do.

Mary discussed her natural instincts to explore science and animals from an early age, but really illuminated the importance of mentorships from surgeons at a large animal facility.

These experiences at other practices along with the guidance and knowledge from other surgeons, proved to be memorable experiences that molded Mary's image of her Possible Self as a veterinary practice owner.

**Fran:**

Um, I'd say probably one of the biggest would be the summer I was sixteen and I volunteered with a vet in Pennsylvania. It was very small practice and um they were very homey and down-to-earth...and she let me do everything with her. So yeah I got to go in and through and see her talking to clients and she let me see surgeries and so I got to see all of the behind the scenes and that, I mean it was good and bad...and I think that more than anything made me feel that that was what I wanted to do... So watching them helped me realize that they were all in the same boat I was, that it wasn't just me, it was that everybody who comes through vet school feels the same way. Um, so I think that helped a lot and helped teach me how to be the vet that I wanted to be.

Fran further supported the theme pertaining to mentors and experiences with other veterinary practices by describing the summer she volunteered with a female veterinarian. She conveyed her hands-on experiences and her appeasement with being given the opportunity to work with an experienced veterinarian. Fran referenced these experiences and what she gained from a mentor, as empowering her to understand that what she professionally desired and was obtainable for her. Additionally, Fran utilized other veterinarians as mentors and further grew her Possible Self-image as a veterinary practice

owner, by realizing other veterinarians go through similar hurdles and issues. This allowed her to overcome doubts and discouragements she encountered along her pathway as a veterinary practice owner.

I guess the big thing would be I did emergency for eight years after I graduated and I did relief work all over the place, during that time, so I got to see a lot of different practices and you know, got to see a lot of what I liked about the way they did things and what I hated about the way they did things. I quickly came to find out that I have very definite ideas about how I want my practice run...and I don't do very well, basically having to follow the rules of somebody else...so...I think that more than anything is probably the biggest...wakeup call I had, that if I was going to keep doing daytime practice; I was going to have to do it myself.

Fran described the importance of her experiences at other practices and how she gained knowledge of what she liked about how they did things and what she would change. This experience was vital to creating her Possible Self-image as a practice owner, by allowing her to explore other practice operations and to spark questions and ideas of how she could improve or add to the profession as a practice owner herself.

**Gina:**

Um...one year I had a mentor. I had somebody to kinda teach me how to be a vet...um learn how to run a practice, that sort of thing...And the job that I took was a horrible, horrible, horrible job. Um, I was there for less than six months and the day I

left was the best day of the job...kinda thing. Um...I learned more of what not to do as a veterinarian than who to be a veterinarian there. Um and the guy that I worked for was one of those that showed more of a liability than anything...didn't know how to run a business...it was bad all around.

Gina referenced the experiences and guidance she gained by having a mentor during her professional pathway as a veterinary practice owner. She valued the knowledge that her mentor passed on pertaining to how to run a practice. Also, she gained experience with her first position and uncovered a desire to improve and control the standards of veterinary science by way of her own practice. Therefore, Gina's positive experiences with a mentor and her broadened knowledge of other veterinary practice standards aided in her creation of a Possible Self-image as a practice owner and further support the second theme of mentorship and experiences with other practices.

I think the experiences I got where I was in school and you know my fourth year of vet school where I was spending time with practitioners...those were times where probably some of the best times. I got to see...you know...all the way across the country how different farms are managed, how different practices are run. Um so I've kinda been able to bring all of that here...to try and build a practice that I think is beneficial to the farmers here and to help them be more profitable with their herd.

Furthermore, Gina highlights the benefit of having experiences with different practitioners and mentors. Through these opportunities she gain invaluable knowledge on how veterinary practices are build and maintained. Such knowledge was then utilized to mold

her practice, while trying to employ varying influences gained through her mentors and experiences at their practices.

As for the development of the second theme surrounding experiences with mentors and other practices; the majority of the participants expressed value from previous experiences while working or volunteering at other practices. Katie further depicted her gratitude for the supportive, mentor role which her parents played as they taught her to be a self-supportive woman and the science behind animals. She also had detailed memories of a female mentor from her childhood, who impacted her Possible Self by providing evidence that a woman could achieve her professional goals. Additionally, Mary and Gina discussed positive impacts on their professional pathways from experiences with other practices where they gained knowledge to structure their practice and ideas of what not to do as a practice owner. Furthermore, Fran referenced to a pivotal summer where she volunteered with a small practice and the invaluable experiences she gained from working alongside a female veterinarian. Each of these participants mentioned and discussed previously, illustrated moments along their professional pathway where they gained knowledge and valuable direction from experiences with other practices and mentors.

### **Animal Upbringing**

The third theme uncovered during this study pertains to experiences with an animal upbringing along the participant's professional pathway as a women veterinarian practice owner.

**Katie:**

Um, I grew up in town [omitted town name], but we had about an 800 acre farm [omitted county] and um the purpose being...that being around animals, helping animals, taking care of animals has been my whole life.

Katie supports the third theme pertaining to influences from an animal upbringing on her Possible Self-image as a veterinary practice owner, by discussing the large farm she grew up on and the daily factors surrounding animals. She described being around animals and taking care of them as experiences and opportunities she has been given throughout her whole life. The knowledge obtained through her farm and related experiences helped strengthen her Possible Self in veterinary practice ownership.

...my father did not believe in us doing intramurals. He said "if you have that kind of energy, you need to be working on the farm." So we were picking up and hatching eggs. I was castrating liters of pigs. My father's idea of intramurals was how many liters of pigs my brothers and I could competitively neuter by lunch time. And it was horrible. I thought that was cruel and mean, but I tell you it really does teach a work ethic. And I am very grateful for it, but at the time, it was the threads, it was the knots that made it seem like it was a very mean thing to do for your children.

Katie continued to discuss her animal upbringing throughout her whole life and further revealed her father's devotion and dedication to that life. She remembered the animal care responsibilities of her family farm; while understanding this resulted in sacrifices which

limited her time for other interests as a child, but later revealing the gratitude for a matured sense of dedication to her professional Possible Self and work ethic.

**Terry:**

...my parents...were definitely not animal oriented...um that's probably the best way to put it. But I think that they realized early on that's my passion and so they allowed me to have a variety of different animals. I mean from dogs and cats to rabbits and hamsters and gerbils and genie pigs and fish....just all kinds of different animals and I would take care of them and maybe research some about them or whatever it is, to learn how to care for them; and really I've always loved horses...non-the-less they allowed me to pursue the animal interest thing.

Terry supported the third theme surrounding influences from having an animal upbringing on her Possible Self by depicting the array of animals she cared for and the time she took to research different aspects of their lives as she grew up. Through these experiences with animals and the responsibility to care for them and learn about them, she fostered her passion and Possible Self-image of a veterinary practice owner.

**Fran:**

Um, so when we got our first dog and when I went to the first puppy visit with her...I was hooked on what they did and I never changed my mind.

Fran described that she first understood her passion to become a veterinarian when she attended her first pet's veterinary visit. This sparked her interest in the profession and began her early experiences with caring for animals.

**Gina:**

Well my grandparents have a dairy farm, so I grew up with cows. So I knew I wanted to do something with cattle. Um...so I grew up showing cows, doing dairy judging um...all kinds of stuff and we had holstens. Um...so that's what led to animal science.

Gina referenced her animal upbringing through her family dairy farm and the experiences she gained caring for cattle. Her Possible Self-image developed early through her passion to professionally work with cattle. This finding supports the theme surrounding influences of an animal upbringing by mapping her progression from growing up with cattle, to a passion of working with them, which resulted in early work experiences and ultimately owning a veterinary practice focused on cattle medicine and care.

**Sally:**

Um...I grew up...on a farm kinda environment. Um you know and kinda rural so you have a relationship with your pets...you know "my pets are like my friends." So...it was just a lot of contact with animals.

Sally further supports the theme of having an animal upbringing as an influence on her Possible Self-image as a veterinary practice owner. She also described a farm-like and



rural environment that she grew up in as being important to the development of her professional identity. She equates early experiences with animals as a support for the bonds she now personally and professionally has with animals. Sally conveyed having contact with animals as a child and growing up with animal experiences surrounding her as being impactful on her professional pathway as a veterinary practice owner.

During the creation of the third theme surrounding an animal upbringing, all but one participant had revealed positive memories and experiences from their childhood involving growing up around and with animals. Katie recalled memories involving daily chores on the family farm and experiences gained from animal self-care. Also, Terry described how her family supported the wide array of animals she obtained in her youth and the accompanying inquisitive nature which resulted from taking care of them. Fran referenced memories of her first dog's veterinary visit as the origins of her initial creation of a veterinarian practice owner Possible Self. Gina described her family farm and experiences judging cattle as imperative to her professional pathway and Sally detailed her understanding of the impact her rural, farm-like upbringing had on her bond with animals. Furthermore, Mary did not specifically describe animals during her professional and individual growth, but she referenced her strong bond with animals. Through the participants accounts of their professional journey into veterinary practice ownership, the influence of animals along their lives positively impacted the formation of their Possible Self-image.

### **Hurdles of Doubt, Finances, and Business Knowledge**

The fourth theme discovered through analysis during this study presents hurdles of doubt, finances, and business knowledge experienced along the participant's professional pathway as a women veterinarian practice owner.

**Katie:**

Um, there is always the financial challenge with the education to cure this disease doesn't match the finances of the clients ability to afford it. That's always a challenge ...I think the second challenge is that too much of education is built on get them in, crank them out, that there's got to be a performance cap. If you're gonna spend this much money on an educational degree, you're gonna be a veterinarian for example, there's got to be the job that matches that cost. So we are seeing a whole bunch of people that are on medications for depression and anxiety, because the reality is your debt to earnings ratio should be one. I mean you're gonna cheapen the profession and you're gonna drive people to do things for survival that they never would have thought that they were doing. Be it selling drugs or narcotics out of the back door, be it that they are being paid on a percentage and they're going to ask you to do other unnecessary testing on your animals...its unconscious-ible, that you are so shallow in your short time needs financially, that you're endangering the health of the long term financial stability of these kids that can't buy a house, they can't buy into a practice... And they're gonna be slaves to somebody. They're either gonna be slaves to the bank to pay it off or they're gonna get working for someone who's horrible and they're

gonna have to do what they say because their jobs in danger. Because you can't owe this kind of money without being a slave to something and that was never what the veterinary profession was meant to be.

Katie supports the fourth theme pertaining to hurdles of doubt, finances, and business knowledge by stressing the enormous challenges surrounding financial issues within the veterinary business and the difficulty associated with providing advanced care at an affordable cost. Such financial issues result in necessary individual choices pertaining to the standards of their practice and their Possible Selves image. This challenge poses a threat to alter an individual's Possible Self and may ultimately redirect their professional career choice away from veterinary science or practice ownership. Additionally, Katie discussed financial challenges involving the cost of veterinary school and the projected salary of a non-practice owning veterinarian. She further stresses this issue by explaining a cyclic rotation of veterinarians who are financially forced to perpetually work for others and often have a depleted strong Possible Self-image or feel trapped in their profession. Such financial challenges referenced by Katie may result in unexpected bouts of self-doubt surrounding the goals of practice ownership in the veterinary profession.

**Mary:**

Um. Money. Money was very hard to come. The next biggest hurdle was, you know, affording both of us. You know we both needed to make a living and when you open something they say that it takes about five years for you to become independent enough to pay your own salary, but with two of us being there, it may have been ten

years before you were supposed to do that. So both of us had other jobs. Um...like one or two days a week or Saturdays we'd work for other veterinarians just to make money in the very beginning and that was probably two or three years that we did that.

Mary further discussed financial issues surrounding owning a veterinary practice and the efforts she utilized to obtain her professional pathway and pursue her career goals. She employed her strong Possible Selves traits to overcome financial hurdles and pushed herself to obtain additional employment in efforts to eventually gain financial independence in her desired professional pathway.

You know...when you do, you don't go into business school. They really didn't teach you very much about that, so we've just kinda been you know a work in progress with how do you run a business...doing taxes...doing payroll, inventory, hiring people, firing people, training; you know that's' not what they teach you in vet school. So there are a lot of parts of owning a business that are not just being a veterinarian.

Mary continues to elaborate on additional challenges surrounding a lack of business knowledge and the need to teach one's self to be a veterinary practice owner. This finding depicts hurdles that may change the course of women pursuing a career in veterinarian practice ownership by attempting to develop personal doubt and cracks among individual's Possible Selves. Also, this portrays the necessary ability to surpass daily hurdles surrounding ownership by way of the strength found in an individual's Possible Self-image and unwavering future career goals as a veterinary practice owner.

**Fran:**

Um...and that was really hard and to be honest some of the biggest discouragements were actually when I was in vet school. It felt very overwhelming and I felt I would never be able to do what I needed to do and there was too much to know and I just...and I wasn't going to be good enough or smart enough to handle it. Um...and vet school was just the most discouraging thing that I have ever done. I was feeling like, if I could actually become a veterinarian. Um...and part of it is, because of the cases you are dealing with are usually so messed up...usually referral cases, but part of it that they make it seem like you have to know everything there is to know, verses looking things up and...

Fran further referenced hurdles of self-doubt which mainly developed during veterinary school. She discussed pressures surrounding academics and the idea that individual's need to have knowledge of everything possible. Fran explicitly mentioned such hurdles forced her to question her Possible Self-image as a veterinarian and created discouragements pertaining to her intellectual and personal courage to obtain her future professional pathway. Through these periods of self-doubt and wavering Possible Self, Fran's insight illuminates some of the challenges facing women veterinarians striving for practice ownership and the potential destruction of a strong Possible Self.

...I think undermining my confidence and my ability. I wanted to be a good vet. You know I didn't just want to be a vet. I wanted to be good at it and it wasn't just academic. It was just in general feeling like there was no way that could

happen...because there was just too much to know. I don't know, it's kinda hard to put my finger on it...it's just...how you feel, like, like looking at a case feeling "I don't even know how to start or where to start" and feeling like everybody else in the world would know what to do and the reality is, that's not the truth...So I think it was even more so, just feeling like...I wasn't good enough mentally...not even just as far as academics, but truthfully as far as intelligence, I was not gonna be good enough to do this. I was not going to be able to provide the care that they needed, because I wasn't going to know enough.

Additionally, Fran elaborated on hurdles of doubt she experienced and how they affected her sense of confidence in whom she is and who she could be. Such hurdles forced her to question whether she could become a veterinarian and resulted in her judging her abilities by comparison to others in her field. Fran also described having a Possible Self where she envisioned becoming a "good" veterinarian as part of her nature and depicted the high standards she held herself to during this time; which is a key to maintaining a strong Possible Self, but may have created supplemental stress and ultimately self-doubt when she felt she was lacking the advancement of her career goals.

My dad was an accountant and I was definitely raised very logical um...very business oriented um...and so I do think that makes me different than a lot of veterinarians whether they are men or women. Um...in general I think a lot of veterinarians are really bad business people, because that's not what their background is.

Fran continued to discuss hurdles due to a lack of business knowledge during the development of veterinarian's careers. She highlighted the positive influence of her father being an accountant as an aid to her ability to maintain a Possible Self in efforts to aid her along her professional pathway as a veterinary practice owner. Without such positive and logical business guidance during the navigation of her professional pathway, Fran stressed issues pertaining to business knowledge and veterinarians.

**Gina:**

We don't really get any business training in vet school. Um and there's days that I go out on a large animal call and I drive the mixed animal clinic where everybody takes everything to...and I see all three trucks sitting in the parking lot; so I know that they're not doing any large animal stuff...so that's encouraging that it's not just me that is slow. Um...so I would say the biggest thing is that when you work for yourself and you're new, and the phone doesn't ring for a couple of days...um you start to wonder "did I do something, did I piss somebody off..." Um you know...what's going on now.

Gina referenced the fourth theme surrounding hurdles of self-doubt, finances, and business knowledge by referencing the lack of business training obtained in veterinary school and momentary times of self-doubt in her Possible Self as a veterinary practice owner. She continues to describe this enormous challenge as affecting her during her progress as a veterinary practice owner. This hurdle of self-doubt forced a lack confidence in her professional abilities and resulted in the comparison of her practice to others as a measure of

success. These self-questioning outcomes of similar hurdles may pose a threat to the success of women veterinarian practice owner's Possible Selves.

The fourth theme was titled in response to the participant memories involving hurdles of doubt, finances, and business knowledge. Katie recalled issues surrounding financial challenges pertaining to her journey and practice; while referencing gaps in business knowledge which alluded to personal doubt in her professional pathway. Mary also stressed financial challenges and a lack in business knowledge as hurdles which resulted in doubt pertaining to her Possible Self-image. Additionally, Fran vividly discussed pivotal moments in veterinary school where academics caused her to severely doubt and undermine her confidence. She also described the necessity for increased business knowledge for veterinarians. Furthermore, Gina referenced days where she questioned why her practice was slow which reflected self-doubt and resulted in a comparison of her practice to others. Also, she supported the other participant's desire for more business knowledge. As discussed previously, the majority of the participants reflected memories of financial doubt and a lack of business knowledge which led to self-doubt in their Possible Selves as veterinarian practice owners.

### **Gender Awareness in Career Choice**

The fifth and final theme developed during this study highlights an understanding and awareness of gender along the participant's professional pathway as a women veterinarian practice owner.



**Katie:**

So my father died when I was seventeen and my mother was left with six children to put through college. And she worked...I probably was her strong arm, because I saw in my own life how many men would take advantage of a widowed woman... And I just felt, you know, it was very unfair. We had a gentleman that had ten acres that adjoined us on our farm and he fenced it in hoping just by fencing it in and us not noticing it, basically over a period of time he could actually take possession of it and felt no remorse when he was called on it...and I think that um what she taught me was...no body's gonna be spared from adversity.

Katie supported the fifth theme focusing on gender awareness in her career choice by remembering a specific example from growing up with her mother and the struggles her mother encountered related to gender. She referenced a male neighbor who attempted to take farm land from them and chose this opportunity when her mother was the sole support system for the farm and family. Also, she discussed the lack of concern or regret the male individual conveyed when her family tried to regain control of their land. These experiences early on affected the created of Katie's Possible Self by expanding her understanding of hardships facing women and provided small preparation for any potential gender related issues in the navigation of her future professional pathway as a female veterinarian practice owner.

Women are very guilty of having little demons saying you're not smart enough, you're not good enough, you can't do this and then you listen to skeptics, at that time

it was men saying you can't do this, you physically can't restrain this, the odds of you getting into veterinary school are much harder than you getting into medical school. I think that women have such a hard time with self-esteem and self-image... Yes I have my own self-doubts...

Additionally, Katie described her awareness of being a woman in her profession and the accompanying self-depreciation resulting from internal and external doubt on her Possible Self as a veterinarian. She stressed that these issues face women pursuing veterinary science careers and often plagues their views of self-confidence and ability to become successful veterinarian practice owners. Katie's ability to understand how her gender may create moments of self-doubt and negative disruptions in her Possible Self, allow for her to successfully navigate her professional pathway.

And probably one of the best professional ideas that I had someone to ever give me was that women are sooooo, they have such a confidence issue. It's a man's world we're told and you'll have to claw your way through. I don't think we need to claw our way through. I think we need to work together and so the first day I showed up for a job...A female doctor [name omitted] gave me the most valuable life lesson. She says "don't be a guy." She says "come into this room dressed like a woman, dressed for success." And she says "no one will ever ask you when's the doctor coming into the room?" And I think that's where we fail so much...we want to be like one of the guys and we don't need to be one of the guys. We have so many of our own strengths we should embrace them and nurture them and I just don't know that

that's what always taught in education...I think we work against ourselves rather than being there for the moment with the strengths that a woman has uniquely.

Furthermore, Katie described influential advice she was given from a woman veterinarian practice owner when she was interviewing for a position early in her career. She continues to describe her understanding and awareness of the negative images or self-doubts haunting one's confidence level, commonly found within the internal struggles facing women navigating their professional pathways. This is illuminated more by her ability to take the awareness of gender in her profession and bring out the strengths that embody women as unique and strong, as an aid in the creation of her Possible Self-image as a veterinarian practice owner. Katie discussed the need for an understanding and collaboration of the strengths found in both women and men. This finding describes a key awareness and internal ability to utilize and embrace the strengths of being a woman in the veterinary profession.

And that, I think we are too complacent, because once again, those little gremlins, those little demons in us...most veterinarians are introverts and we're taught "oh well we're just not smart enough to run the business little lady." Um, and there's incredible strength in women to be leaders they just haven't gotten smart enough and brave enough to recognize it.

Katie described doubts facing women attempting to become veterinarian practice owners, both internal and external. She continues to stress the need to be aware of the strengths women bring to leadership and business opportunities and feels the key to a strong

Possible Self and successful career navigation is by recognizing the beneficial qualities and strengths found in women.

**Terry:**

I was a female in a male practice. There weren't any other female veterinarians at the time. There were three male partners, so they weren't really interested in having another partner at the time. There was just a whole lot of stuff that was going on and then when it comes down to having a family and having children...you know there are hurdles every day. No, I mean I think surrounding yourself with good people is important and I think now with a lot more women out in the workforce, hopefully it will be a little bit more easier for some other women to come along and to decide what they wanted or at least see different ways things can be done or how other people that they can talk to about it.

Terry further supported the fifth theme pertaining to gender awareness in her career choice by discussing her experiences as the only female veterinarian in a male owned practice. She described internal feelings of being excluded from the potential to progress her career within a male dominated veterinary practice. Additionally, she feels with the expansion of women into predominately male-oriented professions, women may be more inclined to create Possible Selves for previously unimagined professions. A key factor described by Terry discussed the need for supportive individuals along a woman's professional pathway and the hope that current women in veterinary science may inspire

other women to achieve similar career goals and may depict how to be aware of and combat potential gender influences in veterinary practice ownership.

**Mary:**

We were...you know I opened my practice...25 years ago and I will tell you the way we got a loan finally...Women in business were a minority and we claimed that and should be able to apply as a minority. And you know we did demographics and like term papers on how many pets per family and you know how many families are in the area and how many people were...and you know when we first got out a loan, even though we were the minority and got it, my partner and I both had to our fathers co-sign for us. You know...they wouldn't have asked a man to do that. So you know to get through those years and to get to that point, we were told no a lot...no we can't give you a loan you're two women. It was two women opening a business and to a banker that was a huge hurdle.

Mary further supported the fifth theme of gender awareness in her career choice by describing the difficulties she encountered when attempting to take out a loan and open a veterinary practice. She expressed internal emotions related to gender awareness and an understanding of the disparities facing women pursuing veterinary practice ownership, which fueled the creation of her knowledge pertaining various treatments of men and women in her profession. Such abilities pertaining to gender awareness described by Mary shows the importance of managing gender disparities and the ability to continue maintaining individual strengths embodying women veterinarian practice owner's Possible Self.

**Fran:**

I would say one of the big things is I think in general...I have a tendency to be probably a little more empathic and um...to understand I am single and do not have children and so I am more empathic to the people and owners out there who very much view pets as their children. Um...and...I think that matters, becoming more and more of a norm, you know for people...um...for people who don't have children or whose children are grown and now this is their replacement and I think as a woman I can understand that, I can feel that bond.

Fran described her ability to recognize and understand personal strengths related to being a woman in veterinary science. She referenced traits found in her Possible Self as opportunities to embrace the feminine quality of empathy and utilize this to better her Possible Self as a veterinarian practice owner. This is a key summation of how woman can effectively understand the value of their gender and showcase specific strengths in their Possible Self as they navigate their professional pathway.

**Gina:**

Um I mean you get a lot of "oh she's a girl...oh you're small, how can you handle all of this." Um...I had, when I was in school I rode with a vet in northern Virginia and I think if I had planned on going back there, being a woman would have influenced where I ended up a little bit more...You know, most of the practices I went to, they

were very careful where they sent me that day, because some of their clients did not want a woman on their farm ever, but here I don't really see any of that.

Gina referenced previous experiences where she was professionally questioned in her abilities as a veterinarian practice owner due to her gender and also described memories from working within a male-oriented climate where she would have been unwelcomed if she chose to pursue her profession in that area. Additionally, she felt gender could have played enormous influences on where she worked as a veterinarian and, as a result, potentially negatively constrain her Possible Self-image as a veterinarian practice owner.

The fifth theme was developed based on a majority of participants describing experiences where they understood and saw how gender impacted their professional journey as women veterinarian practice owners. Katie reflected on experiences after her father passed away and resulting negative gender influences in her life. She further detailed her understanding of mental demons, self-esteem issues, and personal self-doubts related to being female in a prehistorically male-dominated profession. Terry supported similar memories by describing gender related issues surrounding her inability to claim partnership with male practice owners. Also, Mary reflected on discouragements she faced while attempting to obtain a loan and described her understanding of how being female created more financial challenges. Furthermore, Gina detailed memories focused on being unwelcome on a farm due to being a woman and instances where her ability as a veterinarian practice owner was questioned. Fran also depicted an understanding of the impact gender had on her professional pathway, but furthered this knowledge by embracing feminine

characteristics as positive influences her professional performance and abilities. The important finding with this theme pertained to the participant's abilities to become aware of gender issues along their professional pathway and mold them into positive characteristics or impersonal challenges to overcome. These participants reflected an awareness and understanding of being female, but relayed gender as secondary to their professional Possible Selves. This distinction of gender being an individual characteristic, rather than an avenue for career change or miss-direction, led to the titling of the fifth theme as "gender awareness in career choice."

### **Discussion of Research Questions**

The following sections addresses the three research question of this study: (1) How do women veterinarians who own their own practice, navigate their career choices, (2) What barriers do women veterinarian practice owners describe, and (3) How do women veterinarians perceive their gender as playing a role in their career choices or decisions? The findings discussed and presented were obtained through analysis of the data collected using the Possible Selves theory and a feminist standpoint lens.

#### **Research Question 1 Discussion**

The first research question in this study focused on exploring: How do women veterinarians who own their own practice, navigate their career choices? This question was answered through the first three themes that emerged, which includes: being self driven and desiring autonomy, experiences with mentors and other practices, and having an animal



upbringing. The data pertaining to this research question was analyzed by coding the participants' interviews and biographical timeline sketches for themes related to the Possible Selves framework (Markus & Nurius, 1986) and a feminist standpoint lens.

All of the women in this study were self-driven, desired control, and knew early that they strived for autonomy. This is supportive of research stating the pursuit of opportunities in math and science are related to one's perception of their ability (Correll, 2001; Jacobs, 2005); the participant's driven and motivated personalities may have contributed to their ability to create successful possible selves in effort to become veterinary practice owners. Katie discussed numerous experiences of self-care on her family farm and the driven or motivated personality which developed from these experiences. Additionally, all of the participants described a desire for flexibility and control over their daily routines. For example, Mary, Gina, and Sally described the enjoyment of having a variety of puzzles and challenges on a daily basis. These participants valued flexibility throughout their day and as a means to create their own possible selves related to their profession. Furthermore, Mary supports these factors related to why she went into practice ownership in which "...it comes back to that independent nature that we all have...I really like to do it my way."

Additionally, all of the participants had the mindset of once they set out to accomplish a goal, it would be achieved given a matter of time. Katie described this as "a normal progression" from her daily life growing up. Terry discussed facing and ultimately succeeding academic discouragements due to the location of veterinary schools and her application state. She stated "...it is what it is type of thing, so I don't know if I feel self-

discouraged, it was just like this is what it is and I have to somehow accomplish it.” She continued to illuminate her autonomous possible self by describing veterinary medicine as having “...hurdles every day, but that’s part of what makes it interesting, challenging, and rewarding.” These responses from Terry reveal how strong and unbreakable her view of self is and how that helped her navigate her professional pathway.

Fran and Mary developed their professional goals starting from the day they got their first pet and strived continuously for their goals without ever wanted to do anything else. This theme is most widely represented by the participants and shows how they thrived and continue to persist in their professions. Mary stated 30 years later she still doesn’t know anything else she would rather do and “...every day I learn something new...every day challenges you with something you haven’t seen before or haven’t seen in a while, but every day is a challenge...it’s just stimulating and one of the cool things about owning your own practice.” However, Gina did not start out with the desire to attend veterinary school. She was very self-driven and autonomous throughout her professional development, but only developed a desire for veterinary school and practice ownership during her undergraduate years.

The next theme which emerged focused on experience with mentors and other practices and is used to answer the first research question. Katie, Mary, Fran, and Gina all described the value of mentors and experiences with other practices as influences along their professional pathway. Katie discussed a strong educational background in her family which resulted family mentoring and helped support and foster her passion. She also remembered a female mentor who was one of the first women to graduate from pharmacy school and who

owned her own practice. She set forth an image of accomplishment and provided Katie with an understanding of "...what type of strength it must have taken to believe in herself...it didn't take away from her strengths as a lady, but she had an incredible brain and she used it."

Furthermore, Mary described a female practice owner who mentored her during her teenage years and as an adult seeing intern doctors and forming the realization that "...they were all in the same boat I was, that it wasn't just me, it was that everybody that comes through vet school feels the same way." Also, Gina described how mentors aided to develop her passion during her fourth year in vet school.

Mary, Fran, and Gina also discussed the benefit of working at different practices and how these experiences help mold an understanding of what they wanted in their practice. For example Fran mentioned that such experiences at other practices aided her to "...find out that I have very definite ideas about how I want my practice to run" and Gina mentioned this enabled her to see "...all the way across the country how different farms are managed, how different practices are run" and she brings all that into the creation of her own practice.

Research aligns with similar mentor and family support by stressing the benefit for women to have supportive parents who do not doubt their academic or professional choices (Adaya & Kaiser, 2005). Additionally, Pizzolato (2007) suggested support from mentors and experiences fostering the idea of new possibilities are significant influences in a women's career pathway and persistence in the field of math and science. From a Possible Self's standpoint, the mentors which assisted with this women and their supportive family

environments, along with their experiences among other practices, helped provide opportunities to view themselves as successful (Oyserman et al., 2004).

Lastly, the third theme which emerged focused on an animal upbringing and its influence on answering how women veterinarians who own their own practice, navigate their career choices. All of the women mentioned and described a strong animal influence growing up; either by means of a family farm, family pets, or a desire to help animals. In all of the participants' experiences, the animal influence and upbringing was fostered in their early years of childhood.

Such experiences are indicative with research which harnesses women's interest in science to their firsthand understanding of how it impacts their lives (Weisgram & Bigler, 2006). Furthermore, additional research suggests this connection with woman and science is a key to continuing women's involvement in science (Rosser, 1998). These animal influences help foster and teach foundational experiences which the women needed to create strong possible selves and confidence to achieve practice ownership

### **Research Question 2 Discussion**

The second research question addressed in this study attempted to understand: What barriers do women veterinarian practice owners describe? This question was addressed through the emergence of the fourth theme pertaining to hurdles of self-doubt, finances, and business knowledge. The data for surrounding this research question was analyzed by coding biographical timeline sketches and interview for each participant, in regards to the Possible Selves framework (Markus & Nurius, 1986) and a feminist standpoint lens. Some of the participants described issues and experiences surrounding self-doubt, financial hurdles, and

the need for more business knowledge related to practice ownership. Katie and Mary discussed the financial issue surrounding the cost of veterinary school and the projected earnings for veterinarians. Katie further discussed this hurdle in terms of "...you can't owe this kind of money without being a slave to something and that was never what the veterinary profession was meant to be." However Fran's hurdles primarily focused on academic self-doubt in veterinary school and doubt related to her ability as a veterinarian. She stated it was partly academic, but "...I think undermining my confidence and my ability...I wanted to be a good vet." Also, Gina experience a sense of self-doubt in her interview, which occurred early in her years as a practice owner. "I would say the biggest thing is that when you work for yourself and you're new, and the phone doesn't ring for a couple of days...you start to wonder did I do something, did I piss somebody off..." (Gina).

Additionally, both Fran and Gina described issues with the lack of business knowledge they both yearned for; which was not given as a part of veterinary school, but was discovered through the years as practice owners.

### **Research Question 3 Discussion**

The third research question in this study focused on addressing: How do women veterinarians perceive their gender as playing a role in their career choices or decisions? The fifth theme discovered in this study, involving gender awareness in veterinary science, provides answers to this research question. The data for this research question was analyzed through interviews and biographical timeline sketches. Interview data were coded for themes pertaining to the Possible Selves framework (Markus & Nurius, 1986) and a feminist standpoint lens.

Throughout the interviews, most of the women referenced their awareness of gender influences in and throughout their career pathways. Katie experienced gender manipulation early after losing her father and described a man who tried advantage of her family situation and take part of their farm land. She also discussed gender doubts pertaining to women; “Women are very guilty of having little demons saying you’re not smart enough, you’re not good enough, you can’t do this...” Katie further discussed these issues as continual esteem and self-image issues surrounding women. Knowing this, she cultivated an incredible strength through gender recognition and determination to be a leader. Terry described gender experiences when she was an adult and work for three male partners. During this time she valued the importance of good people and the persistence of women into the workforce for future professional women in veterinary science.

Furthermore, Mary discussed gender issues related to obtaining a loan for her practice and the doubt that was encroached as a result. She stated “...they wouldn’t have asked a man to do that” in response to the research they were required to do as a means to argue for their veterinary practice. Gina also described gender awareness experiences in veterinary school where, due to religious views, some practices would not allow her on their farm, because “some of their clients did not want a woman on their farm ever...” Finally, Fran’s gender awareness created a more “empathic” personality trait for herself. She feels she better understands her clients’ relationships where their pets are their children and being a women “...I can better understand that, I can feel that bond.” Sally was the only participant that did not describe any gender related experiences or a sense of gender awareness throughout her journey as a practice owner.

Such responses revealed by the participants in this study highlight strong possible selves which did not result in gender related “selves.” The women were aware of gender issues pertaining to their progression in life and along their professional pathway, but the interviews did not reflect altered possible selves due to this. This is contradictive of Tullos (2011) study where women professors of science majors viewed themselves as “educators” who teach science rather than scientists.

### **Review of Key Findings**

After the analysis and formation of the common themes which developed from the participants’ interviews, I understand and stress the support and aid from families in efforts to unconditionally foster motivation in the lives of women hoping to become veterinary practice owners. This study showed how this support along with that from mentors and related experiences, can cultivate strong and driven possible selves for women in veterinary science. This is especially important as a means to continue past any hurdles surrounding self-doubt, finances, and a gap in business experience. Additionally, one can more deeply understand the impact and influence which animals had on these individuals’ professional goals. Through the findings in this study and the experiences of the women veterinary practice owners, it is also important to understand how gender may influence this career choice. I believe the participants have shown they understand and aware of a gender influence in their career, but have managed to utilize it as a form of their possible selves and a beneficial means toward their possible selves.

Furthermore, in choosing to become practice owners, the participants have shown strong and resilient possible selves which give us a small insight into how they navigated

their career pathways and provide suggestions for women veterinarians striving to open their own practice.

### **Chapter Summary**

For the purpose of this study, I recruited six women veterinarian practice owners to share their views of self and creation of their career experiences along their pathway. The findings provided by each are presented in the form of biographical timeline sketches and interview responses. Analysis of the findings revealed five tangible themes common among their responses. However, it is vital to understand that all themes do not represent each woman equally. Additionally, the findings indicate the occurrence of gender awareness dynamics and awareness that will be discussed further in the next chapter. These findings will highlight the participants' possible selves and its influence on their pathway to veterinary practice ownership.



### **Chapter Five: Analysis and Discussion**

By combining concepts surrounding gender and women's career experiences through a feminist lens and the Possible Selves framework (Markus & Nurius, 1986), the primary goal of this study was to examine and understand how women veterinarians form views of themselves as practice owners and how they navigate through their careers within veterinary science. More specifically, the study aimed to answer three questions: (1) How do women veterinarians who own their own practice, navigate their career choices, (2) What barriers do women veterinarian practice owners describe, and (3) How do women veterinarians perceive their gender as playing a role in their career choices or decisions? In response to question 1, the findings of this study indicate women veterinary practice owners embody self-driven attributes related to independence and control, in addition to valuing aid from mentors and experiences at other practice. Additionally, having previous experiences with animals either through family farms or pets provided early experiences to help cultivate future career goals involving animals. In response to question 2, the findings revealed personal doubts, financial issues, and gaps in business knowledge as barriers or hurdles along their pathway. In response to question 3, the participants revealed a sense of gender awareness in reference to their career path.

To further examine the findings of this study, the Possible Selves framework and a feminist lens were utilized to discuss meaning found within the common themes which emerged from the participant's career experiences. The five identified themes pertaining to the individual cases include: (a) self driven and a desire for autonomy, (b) experience with mentors and other practices, (c) animal upbringing, (d) hurdles of doubt, finances, and

business knowledge, (e) gender awareness in career choice. Finally, this chapter will conclude with discussion surrounding implications for practice and research.

### **Overview of Findings**

A summative conclusion of the participants' perspectives generally described a predominately male environment pertaining to practice ownership in veterinary science. Within in this environment, these women developed and nourished a professional achievement as practice owners themselves. Instead of being discouraged or turned away from their chosen career path, the women took reference of past career experiences and fostered self motivation to achieve their desires for autonomy and professional control. Furthermore, some of the findings indicated the participants felt their possible selves were unhindered by many barriers which have limited other women. As an example, the women in this study utilized experiential resources and their drive for independence to create their possible selves, as contributing positive reflections to pursue their careers as veterinary practice owners. This is supported by the belief that the image which men and women project for what they can achieve may serve as individual motivation and direct their behavior towards that specific goal (Markus & Nurius, 1986).

However, Lips (2000) suggested that cultural messages, such as gender stereotypes, may influence one's possible self. The findings in this study highlighted gender awareness and possible gender related hurdles as having an impact throughout the participant's career pathway, but such noted experiences did not reflect alterations pertaining to the possible selves of these women practice owners. For example, the participants in this study revealed

an early understanding and desire for their career goal and were aware of gender stereotypes and barriers along the way, but did not allow their possible selves to be influenced or altered.

The next section presents a more detailed discussion pertaining to the keys that emerged and how these theme relate to literature surrounding the Possible Selves framework.

## **Discussion**

### **Theme 1: Self Driven and Desire for Autonomy**

As described in previous sections, the first theme which emerged in this study is the embodiment of being self-driven and a strong desire for autonomy. While the individuals in this study described their career progression and highlighted key experiences throughout their lifetime, the overwhelming sense of strong Possible Selves, with a drive for control and autonomy developed. O'Neil and Bilimoria (2005) described the progression of women's career as going beyond the traditional models based on men and moving towards a path with broader life contexts and experiences. The individuals in this study supported this literature and highlighted such expansive concepts pertaining to the journey of their Possible Selves. This finding suggests a more comprehensive career model should be utilized to understand how and where women derive meaning from their life experiences and therefore create a linkage between those meanings and their Possible Selves. Additionally, this theme demonstrates the professional desire and strength found within the individuals from the study and how they managed to surpass previously believed challenges facing women's career progression. Such previously researched challenges include home, status, and childcare responsibilities (Ely, 1995). While the individuals in this study described instances of similar challenges along their career pathways; they never changed their professional goals or altered

Possible Selves. This suggests that women veterinary practice owners are aware of career-specific challenges they have historically faced, but have managed to continue along their chosen professional pathway and illustrates the need for a more current understanding of how the life events affect a woman's career and Possible Selves.

Gupta et al. (2005) discussed boys and girls grow up with and create different gendered images of scientists and such images affect women negatively when they enter graduate school and college. Additionally, previous literature such gendered perspectives found in science as creating professional expectations and practices excluding women by supporting the historical nature of science (Sonnert & Holton, 1995; Keller, 1987). However, the individuals in this study focused solely on their goals and desires, which kept any negative influences away from the image of their Possible Selves. This suggests that women veterinarian practice owners perceive images of themselves and future Possible Selves differently than historically documented women professionals. Additionally, the images of their future goals and Possible Selves were not described as being negatively affected by gendered images or a feeling of being unwelcome.

Additionally, this theme challenges previous literature by Slater and Slater (2000) which described the veterinary profession as being less attractive due to a loss of autonomy. The struggle to obtain practice ownership among veterinarians is still an issue, however the women in this study chose this professional goal and envisioned their Possible Self as a practice owner in efforts to obtain control and autonomy. This finding suggests these individuals hinder previous research ideas by describing and revealing their professional goals early as a means to obtain control and independence. This highlights important and

distinguishable features pertaining to the population of women veterinary practice owners and a further understanding of their Possible Selves image while it develops through their journey toward their professional goals.

Furthermore, an interesting correlation among the decisions faced by women choosing to become entrepreneurs and those faced by women veterinarians choosing to obtain practice ownership has emerged through the first theme related to self-driven personalities and the desire for control. Literature supports these findings by describing the complex process following the decision to become an entrepreneur and an understanding of the involvement of an individual's personality, interests, life time role models, skills, and opportunities (Winn, 2004). This finding further suggests women veterinarian practice owners may have similar Possible Selves as those of women entrepreneurs and may help increase the understanding behind why the number of women veterinarian practice owners still lags behind those of women non-practice owners. This is a significant finding for future research, since women entrepreneurs in biotechnology, software, and financial services are continuing to rapidly grow (Winn, 2004). This is supported by the additions from other authors (Sonnenfeld & Kotter, 1982) as possible influences to the process of becoming an entrepreneur which include education, work history, and family history. Furthermore, this indicates the population of women veterinarian practice owners have managed to include aspects of family influences, personality, interests, educational experiences, and work history as key factors pertaining to creating their Possible Selves images. A key point also noted by the individuals in this study supports and relates to literature on entrepreneur's desire for higher control than managers. "Entrepreneurs see themselves as in need of control and

intolerant of limits imposed by others, and seek to define their own work environments and parameters” (Brodsky, 1993, p.341). These findings also suggest possibilities for future career mapping between women veterinarian practice owners and women entrepreneurs. Additional research shows women seeking entrepreneurship desire flexibility, autonomy, satisfaction, personal growth, and prestige (Goffee & Scase, 1985).

The Possible Selves literature also stated student’s current academic views for themselves affect their experiences with their education, their academic performance, and ultimately their possible aspirations (Lips, 2007). This supports the individuals’ depictions from this study pertaining to their career pathway by way of their successful educational performances and their positive image of their aspirations. Such findings may be impactful to employ during educational opportunities in students aspiring to become veterinarian practice owners. Additionally, with the aid of the Possible Selves framework, future research may further understand the social-psychological constructs of how a woman’s image of her future self, directs her future career goals (Packard & Nguyen, 2003) into veterinary practice ownership.

Overall, the first theme which emerged from the individuals in this study highlights how each woman internally and externally chose veterinary practice ownership as their career goals. This was accomplished through personal experiences aiding their internal self-drive and understanding of their own Possible Selves to realize the need for a career with independence, control, and sense of autonomy.

**Theme 2: Experience with Mentors and Other Practices**

The second theme in this study is highlighted experiences with mentors and other practices. The individuals within this study revealed experiences where they either remembered female role models throughout their career journey, female veterinarian practice owners who mentored them, or valuable experiences gained from working at other practices. This finding supports literature focused on the explanations for the feminization of veterinary science including an increased number of female role models and those participating in physically demanding aspects of the profession (Slater & Slater, 2000; Smith, 2002). Additional authors have reported female students are more often influenced by female friends and revealed they felt more encouraged by female veterinarians they knew (Andberg, Follett, & Hendel, 1979). This suggests a strong and successful female image or mentor influence aids in the formation of women veterinarian practice owners' Possible Selves. This aids the Possible Selves research with the identification of external constructs and an assortment of self-images which these individuals developed based on influences from other practices and internal and external reflection from mentors. Additional research supports this reasoning with the understanding that views of a possible self are centered in social roles and classifications including past experiences and personal evaluation (Meara, et al., 1995). Furthermore, the fourth aspect of possible selves and career development pertains to the internal and external utilization of encouraging images (Meara, et al., 1995). Throughout their career journeys to practice ownership, the individuals in this study reflected on female practice owners who helped guide them through their profession and helped create successful versions of their Possible Selves. Additionally, these individuals gained knowledge on

practice ownership from mentors and felt a connection to those who went through similar pathways and hardships.

Overall, the understanding of such positive images and experiences women veterinarian practice owners take from mentors and role models will help provide insight for teaching and training tools focused on women aiming to continue or pursue professional careers in science.

### **Theme 3: Animal Upbringing**

The third theme which was found in this study is the experience of having an animal upbringing. The individuals described experiences throughout their lives where animals helped create meaning to their personal goals and molded their future Possible Selves image. Each individual felt a desire to work with animals as a response to the external constructs they placed on their self-images. This finding is also supported in the literature as factors found important to women choosing a career in veterinary science (Heath, 1996).

Overall this finding suggests and supports the importance of animals during women veterinarian practice owner's career goals and also highlights the external and internal effect animals have on women pursuing this profession. However, the animal experience described by these individuals can range from family farms, a variety of pets, or an overall interest in animals and their well-being. This is an important aspect of the Possible Selves formation and has the potential to aid with further research on the influencing experiences of this population. Furthermore, this study reveals support to show women do not desire this profession for the "warm" and "fuzzy," but as a means to better the health of animals, protect them, and improve the science and care surrounding them.



**Theme 4: Hurdles of Doubt, Finances, and Business Knowledge**

The fourth theme which emerged is hurdles of doubt, finances, and business knowledge. The individuals described experiences where they doubted themselves as being capable practice owners. This reflection involved instances related to education, self-worth, and self-ability. There were also cases of doubt due to finances and a large portion of the participants felt they were greatly lacking in business knowledge when they began this career pathway. This supports literature describing women in science or engineering concentrations lose confidence in their ability to complete their pathways as they near closer to graduation (Hartman & Hartman, 2002; Ivie & Stowe, 2002). Additional authors suggested such women find it increasingly difficult to view themselves as a scientist or engineer and they believe this could be a result from a change in their Possible Selves (Lips, 2007). This finding suggests women veterinarian practice owners may have periods of self-doubt pertaining to their ability to successfully complete their career goals. However, these individuals have proven they have strong Possible Self-images which enabled them to overcome such periods of doubt. Additionally, this shows these women also overcame the lack of and gap of business knowledge they felt would have been extremely important when they started out. This further suggests internal and mental strength embodied by this population as a means to overcome such doubt and personal hurdles.

Overall, this finding will be a key addition to future curriculum in science concentrations for women, as a method to create mentally strong women with positive possible self-images.

**Theme 5: Gender Awareness in Career Choice**

The fifth and final finding of this study is gender awareness in the individual's career choice as a veterinarian practice owner. The individuals highlighted experiences where they became aware of gender influences and possible hurdles. However, these personal insights only described an awareness of their gender and were not reflected as gender barriers or stereotypes which hindered their Possible Selves. Such experiences either fueled a strong possible self or did not negatively affect their future self-image. Given the veterinary profession is highly feminized it may seem this is a common finding; however many women in science professions are still facing and describing gender barriers which internally affect their Possible Selves (Tullos, 2011). This finding suggests a possibility for a focus on gender research aim to expand on how women continue with a strong future self-image in previously male-dominated professions. Literature has previously discussed women approaching careers with open-mindedness and objectivity, still face and suffer from gender specific barriers (Winn, 2004). Importantly, the individuals in this study support this research, but were cautious to even use the word "barriers" as they discussed any gender related aspects. It seemed they were aware of hurdles women face and some they had, but would not enable them by calling them barriers or either felt they were part of their expected journey and therefore having this mental awareness helped protect their Possible Selves.

Additional research has shown female students in male dominated concentrations, image and anticipate more sex discrimination and therefore create impulses to change their areas of study or profession (Steele, James, & Barnett, 2002). Given the veterinary profession is currently not male-dominated, may be a factor that aided these women in more easily

overcoming and surpassing gender related issues. This finding may also suggest a change in the veterinary profession beyond just the increasing of women in the field; it may represent a change in mental stamina of these women and their abilities to fulfill their created future self-images no matter societal or personal gender influences. Since a woman's Possible Self is defined by internal views of their reality in addition to social views upheld by standards for women (Tullos, 2011) it will be important to understand such mental stamina and utilize these findings for curriculum development and training in other male-dominated professions.

### **Key Finding**

Furthermore, this study yielded a key finding pertaining to gender that was unexpected. The individuals expressed an understanding of abilities they embodied based on their gender and utilized them to better enhance their abilities as veterinary practice owners. This gender related characteristic was revealed as empathy and an understanding of the concept of family or children. These women took their understanding of being female and the role of a mother, even if they chose not to have a family, as a means to understand how their clients felt for many of their own pets. I believe this is important, because it shows a characteristic embodied in a woman that strengthens their bond with people by utilizing a specific attribute which is naturally found within them. This suggests these women have found a means to highlight a sometimes believed to be weak emotion or one which may alter a woman's career (Ely, 1995), to a quality that is desirable among the profession. Understanding the emotions women veterinarian practice owners embrace and the ones they chose to ignore is key to progress among gender play in professions (Meara et al., 1995).

Overall, this theme showcases the importance of understanding the effect of gender on the Possible Selves of women veterinarian practice owners. This finding will also aid in career development literature as a method to understanding gender constructs facing women in this profession and how they can successfully navigate such pathways with little alterations to their Possible Selves or careers.

Therefore, this study revealed women veterinarian practice owners utilized experiences gained throughout their career pathway and embodied in their Possible Selves to obtain their career goals as practice owners in a profession which was historically male dominated. These women possessed and employed their self-driven and autonomous attributes, experiences gained through work with mentors and other practices, their animal upbringing, and their gender awareness to overcome hurdles of doubt, finances, and business knowledge. Additionally, this study discovered some women veterinarian practice owners obtained their professional achievements and strong Possible Selves by highlighting a gender specific characteristic of empathy to better themselves as practice owners.

### **Limitations and Conclusions**

The goal of this study was to explore how women create possible self-identities which they utilized to navigate through their careers within veterinary medicine practice ownership. This work was intended to begin a starting point for exploration into the veterinary profession as it pertains to women practice owners and was not intended to be generalizable. Additionally, this study was limited due to the sample size of six. Even though this sample size falls in the acceptable range for case studies (Creswell, 2007) it is not meant to be transferrable. Furthermore, by employing such methodology, the individuals were

asked to be open in reflections pertaining to past experiences and their careers; which cannot be objectively confirmed. Also, given the extremely limited time available to individuals in this profession, some interviews had to be conducted over the telephone. However, this change did not alter time allotted for interviews and all individuals were given ample time to discuss and describe their experiences.

By purposefully illuminating tangible experiences communicated by these women and their related views of self, this study revealed factors that shaped women's career pathways in this profession. The themes produced from this study highlight how these women persisted through a historically male-dominated profession and have created pathways for future women veterinarians who desire to own their own practice. It is evident from this study that women striving for this profession need to embody a driven personality which is accompanied with a desire for autonomy. Additionally, these women expressed the value of mentors in addition to experiencing how other practices operate. All of the participants in the study also displayed significant memories from early animal influences. Furthermore, this study revealed these women faced hurdles pertaining to self-doubt, finances, and business knowledge. However, the women in this study did not harp on gender barriers or disadvantages; they were aware of how gender plays into our world and their career choice, but persisted with their chosen profession.

Given these women veterinary practice owners were extremely self-driven and autonomous, I believe this aided in their ability to surpass previously encountered gender hurdles and rather than being impeded by such barriers, they acknowledged them and moved on. However, they believe gender inequalities still occur in this profession and with this

study, now have an understanding of how women overcome them and form possible selves that eliminate them. Additionally, the possible selves of these women were not only strong and voided of gender barriers, but were aware of gender and almost more empowered by characteristics linked to being a woman.

Unfortunately, I do not expect gender inequalities and the evolution of their repercussions and evolving influences to disappear any time soon. Rather, I hope this societal change will occur through the presentation of novel ways to view ourselves. Through my experiences as an educator and researcher, I aspire to present these ideas through studies similar to this one; where individuals can understand their value and achieve goals that may not have been initially thought possible. Furthermore, I believe our societal influences have extreme power over how we view ourselves and how we view what is possible to achieve, but I hope this study will help unlock any negative influences and free our possible selves to achieve what we dream.

Additionally, I believe the findings from this study will contribute to current literature and practice by raising critical questions for future studies and possible implementations for practice.

### **Theoretical Contributions**

This study contributes to current literature pertaining to the Possible Selves framework and gender literature by providing a deeper understanding of women's perspectives and views of self in a historically male dominated profession. Interestingly, this study further aids existing theory by confirming assertions that gender, in some way, impacts the construction of possible selves (Markus & Nurius, 1986; Lips, 2004, 2007), but more

importantly gives further understanding of how these women persevered to practice ownership and took gender awareness as helpful educational moments towards their future. Furthermore, this contributes to entrepreneurial theory and gender, by highlighting very similar qualities embodied in these women as those found in women entrepreneurs within hard science professions (Brenner et al., 1991; Brockhaus, 1987; Scott, 1986; Waddell, 1983; Hyatt, 2004).

These contributions reveal possible recommendations for future research. My suggestions for future research are discussed below and are rooted in my belief that education is very powerful and necessary for any form of change. These suggestions will promote research to continue understanding women's' views of self in relation to how they navigate their careers.

### **Recommendation for Future Research**

**Recommendation 1.** My findings suggest women veterinary practice owners embody a strong and self-driven personality, similar to that of other women entrepreneurs. However, women entrepreneurs in numerous other professions founded in science, continue to increase in numbers (Winn, 2004). These findings raised questions about what may be different among such profession founded in science? Additionally, this may help and raise questions regarding the structure of veterinary medicine practice ownership as a profession. The differences pertaining to this profession and how clinics are structured, in addition to the increasing numbers of veterinarians, will yield interesting comparison for future research.

**Recommendation 2.** A major theme unearthed in this study illuminated the lack of business knowledge found within the participants. This gap often was associated with, either

inadvertently or knowingly, with self-doubt and financial hurdles. Such doubts and hurdles may have influenced and potentially influence women veterinarian practice owners and their possible selves. A potential avenue for future research may pertain to examining business education during veterinary school due to the need and desire communicated from the participants.

### **Recommendations for Educational Practices**

The above recommendations for future research aid in support educational practices for veterinary medicine and women desiring a career as a practice owner. I believe research can inform educational practice and in this case, foster a powerful educational environment for women to empower their possible selves during their professional pathways. Based on the perceptions of the study participants, I am describing a few recommendations for educational practice.

In efforts to disrupt gender influences on the possible selves of women pursuing veterinary practice ownership, I suggest encouraging women to be involved in leadership activities within and outside of veterinary school. This may involve not only creating such opportunities, but also believing in their importance. By involving and encouraging women into leadership activities, I believe their personalities pertaining to their possible selves will be further strengthened. This recommendation supports one of the key findings in this study which highlighted the participant's self-driven personalities and desire for autonomy as Katie discussed:

I really, I think that women have such a hard time with self-esteem and self-image, um I just have been very blessed...I believe to be, I call it a vertebrate, a strong



backbone person. Yes I have my own self-doubts, but of when and where I can, I always try to be, such as today, to be encouraging and be a positive influence by sharing my experiences. I try never to be too busy to possibly build up somebody else and help them to be successful in their own way, as I feel others have laid the way for me.

This will also help with surpassing potential gender or self-doubt hurdles.

Another educational recommendation is implementing a strong and valued mentor program. This program could present avenues for experience at other veterinary practices and foster support for future veterinary practice owners. Katie, Mary, Fran, and Gina all described the importance of having mentors and experiences at other practices as beneficial to their professional pathways and ultimately to their Possible Selves. Fran described the importance of mentors in her interview:

So watching them helped me realize that they were all in the same boat I was, that it wasn't just me, it was that everybody who comes through vet school feels the same way. Um, so I think that helped a lot and helped teach me how to be the vet that I wanted to be.

Finally, I suggest the implementation of business education into the curriculum of veterinary students. This was extremely stressed by the participants and described as a gap in the education process. Both Fran and Gina expressed issues pertaining to a lack of business knowledge and a need for that during their professional development:

Um...in general I think a lot of veterinarians are really bad business people, because that's not what their background is. Um...and so I guess I see that more of an effect versus me being a woman (Fran).

Well I...after graduation I knew that I didn't want to own a practice right away. We don't really get any business training in vet school (Gina).

This recommendation also supports the findings of this study and would help with creating a strong possible self and surpassing potential hurdles.

### **Chapter Summary**

The purpose of this study was to explore how women create and foster possible selves and furthermore, how those identities are utilized to navigate through their careers as women veterinary practice owners. By purposefully selecting the experiences of women, this study strived to reveal factors shaping and influencing their career pathways. This chapter analyzed the findings from the participants' interviews and their corresponding biographical timeline sketches. The key findings revealed answered the guiding research questions as a way to explore their possible selves and career experiences. The key themes focused on being self-driven and a desire for autonomy, an animal upbringing, and the experiences with mentors and other practices helps provide an understanding of research question (1) How do women veterinarians who own their own practice, navigate their career choices? Additionally, the revealed theme focused on hurdles of doubt, finances, and business knowledge shows an understanding for research question (2) What barriers do women veterinarian practice owners describe? Finally, this study revealed women veterinarians have a keen awareness of their

gender within their career choices which helps to understand research question (3) How do women veterinarians perceive their gender as playing a role in their career choices or decisions?

Each participants' experiences and their gender awareness surrounding their careers in veterinary practice ownership, depicted their successful navigation of their careers through the utilization of experiences and qualities found as underlying support for the themes previously discussed. Furthermore, these women employed their autonomous and self-driven identity to form strong and powerful possible selves which moved through and above any gender issues. The participants continued even further to mold and create their possible selves by being aware of gender in their profession and using that awareness to harness powerful characteristics unique to themselves. This study contributes to the existing Possible Selves theory by utilizing a feminist lens to explore a profession that seems to overcome prehistoric male domination, but still be facing consistently low numbers of women prevailing in practice ownership. My previous recommendations for future research and practice are aimed to support and foster educational and professional achievement surrounding women in veterinary practice ownership. As this study revealed, the women in this profession have successfully navigated their careers and provided some insight into how their possible selves have influenced that journey.

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**APPENDIX**

## Appendix A

**North Carolina State University  
INFORMED CONSENT FORM**

**Title of Study:** Veterinary Science Professionals: An Exploratory Case Study of Women Navigating Careers in Veterinary Science

**Principal Investigator:** Christen Brown **Faculty Sponsor:** Diane Chapman

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**We are asking you to participate in a research study.****What are some general things you should know about research studies?**

You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

**What is the purpose of this study?**

The purpose of this study is to utilize a feminist lens to justify the focus on women and the possible selves framework to examine how women veterinarians form views of themselves as practice owners enabling them to navigate through their careers within veterinary science. By purposefully highlighting the experiences of these women and views of self, this study will reveal factors that shape a woman's possible self and ultimately their decisions about practice ownership and self-employment. There is an understanding of the efforts involved to encourage women into this profession, but there has been no literature focused on exploring how women veterinarians whom own their practice view identity themselves or how they made such a career choice. This study will focus on how women veterinarian practice owners describe their experiences navigating their professional environments, while still facing obstacles.

**What will happen if you take part in the study?**

If you chose to participate in the study, your time commitment would be approximately sixty minutes over the course of one in-person interview. Additionally, I would request that you complete a brief biographical timeline worksheet as a tool to support our in person meetings.

**RISKS**

While it is not the intent of the investigator to ask intrusive questions, some participants may have a higher level of sensitivity to revealing biographic information than anticipated. The majority of the information gathered is self-disclosed and gives participants a high degree of control over what information is shared with the investigator. The interviews will ask the participants to reflect on childhood memories, to share self-perceptions and to disclose personal goals and objectives. The process of participation may instigate some feelings of discomfort or uncover past emotional pain. You are encouraged to inform the researcher at any time if you would like to withdraw from the study.

**BENEFITS**

Most of the research regarding women's participation in science careers has relied upon quantitative methodologies and focused on adolescents or college students. By focusing on the experiences of adult women currently working as veterinarians and owning their own practice, the goal of this study is to contribute to the existing body of knowledge aimed at understanding women's persistence in veterinary medicine. Additionally, it is hoped that you may benefit from the self-reflection on lived experiences throughout your life.

**CONFIDENTIALITY**

The information in the study records will be kept strictly confidential. Data will be stored securely in the researcher's private residence and there will be no association by name with your specific responses. No reference will be made in oral or written reports which could link you to the study. After the transcription, these records will be kept on my computer and the file will be password protected. I will send you a copy of the transcriptions so you can confirm comments and themes. If you would like any comments to be removed after reviewing the document, please just let me know. The data collected in this study will be published in the researcher's doctoral dissertation for North Carolina State University.

**COMPENSATION**

There will be no compensation for participation in this study.

**What if you have questions about this study?**

If you have questions at any time about the study or the procedures, you may contact the researcher, Christen Brown at [cbrown3@ncsu.edu](mailto:cbrown3@ncsu.edu) or 704-239-9210

**What if you have questions about your rights as a research participant?**

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus (919/515-4514).

**Consent To Participate**

I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.

Subject's signature \_\_\_\_\_ Date \_\_\_\_\_

Investigator's signature \_\_\_\_\_ Date \_\_\_\_\_

## Appendix B

**Proposed Text for E-mail Invitation**

Dear [Participant Name],

[Name of Personal Contact] suggested that I contact you. I'm currently a North Carolina State University student working on my dissertation research and hoped you might be interested in participating in my study. The purpose of my study is to explore how women create possible self-identities used to navigate through their careers within veterinary medicine. The study utilizes interviews and a brief biographical timeline to gather experiences from women currently working as veterinarians who own their own practice.

I am very excited about the opportunity to listen to your experiences pertaining to how you developed careers in science. My hope is that sharing your personal stories is something you too will find interesting and enjoyable.

If you chose to participate in the study, your time commitment would be approximately sixty minutes encompassing one interview in person or via telephone. Additionally, I would request that you complete a brief biographical timeline worksheet as a tool to support the reflection process for this study.

Please let me know if you are interested in participating in the study or would like to discuss the opportunity in more detail. As soon as we have confirmed a date and time for the interview, I will send you a list of proposed questions along with the biographical timeline worksheet.

If you are not interested in participating in a study at this time, I understand and thank you for reviewing my invitation.

In addition, if you know of someone who may be interested in participating, please forward this e-mail to her for consideration or send me their contact information.

Sincerely,

Christen Brown, Doctoral candidate

## Appendix C

**Interview Guide**

**Purpose of Study:** The purpose of this study is to explore how women create possible self-identities used to navigate through their careers within veterinary medicine. By purposefully highlighting the experiences of these women and views of self, this study will reveal factors that shape a woman's career paths in veterinary medicine. This study will focus on how women veterinarians describe their experiences navigating their professional environment, while still facing obstacles.

**Research Questions:**

- 1) How do women veterinarians who own their own practice, navigate their career choices?
- 2) What barriers do women veterinarian practice owners describe?
- 3) How do women veterinarians perceive their gender as playing a role in their career choices or decisions?

**Participant Selection Criteria:** The criteria for participant selection will be women veterinarians who own their own practice. Variations in age, race, and cultural background will not be used as criteria for participants. Limiting the participants in an attempt to gain variation in previously stated characteristics may result in limited participants.

**Participant Selection Procedures:** Participants will be purposefully selected based on gender and "snow ball" or "chain" techniques (Creswell, 2007) beginning with my current professional contacts and connections. Such techniques as the "snow ball" method rely on the use of professional networks to identify participants who meet the researcher's set needs (Miles & Huuberman, 1994).

**Interview Protocol:****1. Introduction**

Introduce myself as the researcher and briefly discuss my interest in this area of research.

**2. Informed Consent**

Review and sign the informed consent document. Ask if there are any concerns among the participants pertaining to the study.

**3. Interview Questions:**

When did you first know that you wanted to pursue a career in veterinary medicine?

When you think about your interest in this profession, what experience supported or encouraged you to choose this professional pathway?

What, if any discouragements have you faced?

What factors led you to believe you could successfully pursue a career in veterinary medicine?

What other careers did you consider before deciding becoming a veterinarian?

In what ways, do you believe being a veterinarian is a good fit for you?

Describe what it means to be a veterinarian.

Tell me about your experiences along your pathway to become a veterinarian.

What role, if any, has being a woman played in your choice to pursue your doctorate of veterinary medicine?

Describe the most rewarding aspects of your pathway to become a veterinarian.

Describe the most challenging aspects of pursuing this pathway?

5. End the interview

At the end of the interview, I will ask the participants if they have anything else to add. I will thank them for their participation and briefly state the data collection process for this study.



Appendix D

**Biographical Sketch Timeline**

**Purpose:** This worksheet is to promote reflection on your pathway and life journey.

**Instructions:** In the spaces provided below, describe any significant events or relationships you feel contributed (or continue to contribute) to your decision to choose a career in veterinary medicine.

*Age 0-12 years*

*Age 13-17 years*

*Age 18+*

## Appendix E

**Literature Review: Possible Selves**

<b>Authors</b>	<b>Year</b>	<b>Title</b>	<b>Purpose</b>	<b>Findings</b>
Markus & Nurius	1986	Possible Selves	To discuss Possible Selves	<p>Possible selves are the cognitive components of hopes, fears, goals, and threats, and they give the specific self-relevant form, meaning, organization, and direction to these dynamics.</p> <p>Possible selves are important, first, because they function as incentives for future behavior (i.e., they are selves to be approached or avoided) and second, because they provide an evaluative and interpretive context for the current view of self.</p>

## Appendix E Continued

Chalk, Meara, Day, & Davis	2005	Occupational Possible Selves: Fears and Aspirations of College Women	Using possible selves as a theoretical basis, this study examined self-perceptions of occupational futures by asking 98 undergraduate women to rate feminine, masculine, and neutral jobs as to how expected, feared, and ideal (or hoped for) they were.	Participants who chose a masculine occupation as their most feared job cited reasons of job demands, competition, and doubts about success. Those whose most feared job was a feminine occupation placed importance on the job's low status and others' disappointment
Chalk, Meara, Day, & Davis	1994	Possible Selves and Occupational Choices	To explore the usefulness of thinking about one's occupational future in gender-linked jobs from the perspective of "possible selves."	Women feared both the masculine and feminine jobs more than they saw these jobs as possible, and there was some indication they hoped for the masculine jobs more than they expected them.

## Appendix E Continued

Tullos	2011	Educators Who Work in Science: The Narratives of Women Negotiating Careers in Academic Science	To explore how women scientists develop views of self that enable them to negotiate careers within academic science. I framed the study using feminist standpoint theory as my theoretical foundation, and used possible selves theory as my conceptual framework.	Not unlike other women negotiating careers in academic science, they generally accepted their status as women to be an inherent part of their career pursuits and viewed workplace challenges as an opportunity to prove their competency. Seven of the eight women did not attribute their challenges to gender differences. However, the combined narratives revealed underlying conflicts between their views of self as women and as scientists resulting from their experiences in, and perceptions of, academic science environments.
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## Appendix E Continued

Erwin, Lazarus, MacLachlan, Tobias	2003	Introduction: Careers of Women in Science: Issues of Power and Control	To discuss issues facing women surrounding power and control within career choices.	Although critical mass is a necessary condition for equal access to power in science, it may not be a sufficient condition because sexism and racism are so profoundly woven into the fabric of professional life. Typically, when an underrepresented majority enters a profession, the profession itself experiences a reduction in prestige, salary, and its role as enabler
Oyserman, Bybee, Terry, & Hart-Johnson	2004	Possible selves as roadmaps	To examine Possible Selves as a method for improved academic outcomes.	With more support for the influence of self-regulation on change in behavior and academic outcomes than on affect regulation. N = 160 low-income eighth graders improved grades, spent more time doing homework, participated in class more, and were referred less to summer school when academic possible selves were plausibly self-regulatory.

## Appendix E Continued

Rossiter	2007	Possible Selves in Adult Education	What can we conclude about how the possible selves construct may be useful to adult education practitioners and scholars?	Implicit in the possible selves construct is the fact that learning stimulates and reflects changes in identity. Furthermore, it implies a view of the person as multidimensional and dynamic, rather than static and unitary, with ever unfolding potential throughout the life span.
Lips	2007	Gender and Possible Selves	To discuss Possible Selves and the relation to gender and academic choices.	Changes in gender-related expectations form both a backdrop and fertile ground for the personal transformations that can be effected through education. As the research reviewed here suggests, such transformations are likely to be effected through the possible selves that students construct.