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A Summarization of the Gender Dynamics within  
the Field of Veterinary Medicine

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## Introduction

The field of veterinary medicine has experienced a historic, rapid feminization while in many ways remaining stereotypically masculine in the favored attitudes and actions among practicing veterinarians. The speed of this shift has generated interest in how the field of veterinary medicine and the people who work within it will be affected by this demographic change. Presently, women make up approximately half of the practitioners in the field and ~80% of the students in veterinary medicine programs (Buchanan & Wallace, 2020). In comparison to other health professions, veterinary medicine is now the most feminized of any medical field, and such a large change has encouraged more research into how the field and its employees will be affected (Irvine & Vermilya, 2010). The purpose of this essay is to explore how the social environment of veterinary medicine has shifted because of its rapid feminization, and how this shift has affected female veterinarians and students regarding their experiences with gender discrimination and gender bias within the field. This will be done by summarizing the literature utilizing research articles which have studied this problem via statistical analyses, interviews, surveys, and additional resources.

## History

A key part in understanding the true extent of this shift in feminization is to first understand the history of veterinary medicine and its practitioners. Veterinary medicine did not begin as a profession held with the high prestige that it is today. In earlier times, around the 1800s, animal doctors typically had no formal training or licensing (Irvine & Vermilya, 2010).

Often these animal doctors came from unrelated backgrounds such as failed blacksmiths or perhaps farmers hoping to fix their injured animals. The majority of animal doctoring was based on caring for livestock or horses, particularly dealing with castrations of livestock, a practice that was once seen as inappropriate for women to witness, let alone perform. Additionally, veterinary practices of the past would not be considered humane these days as anesthesia and local anesthetics were not yet common practice. Due to this, men believed that women did not possess the correct personality traits to maintain the necessary unsentimental attitudes for treating animals in the inhumane ways that they once employed.

During the 1890s, male veterinarians who were legitimately trained began working to improve the status of their profession while also ensuring that women were dissuaded from working in their field. One direct quote from a veterinary school of the past stated that, “We do not encourage women to enroll in the curriculum in veterinary medicine. In fact, we try to discourage them, our reason being that we must refuse admission to many worthy young men, and to accept a young woman with the chances that she will not remain in the profession and to deny admission to a young man, does not seem logical” (Irvine & Vermilya, 2010, p.60). Similar sexist ideas existed across the world and any woman who did enter veterinary school around this time was typically barred from receiving comprehensive training in many areas of the field, such as surgery or large animal medicine. This left female veterinary students at the time lacking in education, and as a consequence, they were much less likely to secure a career in veterinary medicine. For a better understanding of the numbers of female veterinarians within the United States from 1960-1961, there were around 19,000 practicing veterinarians, and of them, less than 5% were women.

The increase in the number of female veterinarians was ultimately due to the growth in pet populations resulting in a greater need for veterinarians. To put this increased pet population into perspective, it was reported that, “In 2009, 62 percent of U.S. households included pets, compared to 56 percent in 1988, the first-year data were collected. This represents over 72 million dogs, and nearly 82 million cats” (Irvine & Vermilya, 2010, p.62). This need for new veterinarians caused by the quickly growing numbers of household pets led to a number of changes being made as the need for funding and new teaching facilities grew as well. Many of these policy changes required admissions committees to act more equitably. For example, “In 1971, the Comprehensive Health Manpower Training Act (Section 799A) stipulated that the federal government could not make loans or grants to veterinary schools unless they received assurances that there would be no gender discrimination in admissions” (Irvine & Vermilya, 2010, p.61). This forced veterinary schools to accept more women as they were greatly in need of funding to improve and replace old facilities. The Higher Education Act of 1973 also prohibited sex discrimination in federally assisted education programs, as well as amended the 1964 Civil Rights Act to include women. Due to these changes, “Between 1980 and 1990, the number of practicing female veterinarians increased 288 percent. It increased an additional 78 percent between 1990 and 1998” (Irvine & Vermilya, 2010, p.57). From that point on, the number of female veterinarians and veterinary students continued to increase exponentially until, “In 2008, the gender distribution among applicants to veterinary medical schools was 79 percent female and 20 percent male”, a number that remains quite similar today (Irvine & Vermilya, 2010, p.58).

#### Gender Discrimination Despite the Feminization Shift

A sociological article studying work satisfaction in the veterinary field noted that “While increased participation of women in male-dominated occupations may be interpreted as an indicator of progress, the shift of a profession from male dominated to numerically gender balanced does not necessarily equate to positive consequences for women and may even enhance disadvantages for women” (Buchanan & Wallace, 2020, p.119). This concept is very important to discuss because many people associate the shift in feminization to equate with a reduction of gender discrimination in veterinary communities. But something to note is that it is not only the gender demographics of an organization that create gender inequalities but also the policies, practices, culture, and interactions between people that contribute to discrimination as well (Irvine & Vermilya, 2010). So, as more women enter the field of veterinary medicine, they may find it to already be gendered masculine, and the effect of such an experience is what this paper will go on to describe. It is also important to recognize that other minority groups, beyond those who identify as female, may also be faced with similar or even more pronounced gender discrimination. However, this paper will be focused specifically on the experiences of female veterinarians and veterinary students within the field.

Female veterinarians still encounter many of the same problems that women experience in other career fields. Such experiences include the existence of a pay gap, underrepresentation in leadership roles, different treatment by colleagues and clients, discrimination based on parenthood status, and many other aspects of the job that ultimately lead to differences in work satisfaction and engagement due to a simple difference of gender. The results of a survey done by Begeny & Ryan on gender discrimination stated that, “...female vets experience significantly more overt gender discrimination than male vets, and less frequently experience being treated in a positive manner by their colleagues; namely, in ways that show recognition and appreciation

for their professional skills, qualities and knowledge” (2018, p.4). These differences in behavior toward male versus female veterinarians leads to women being less sought out by coworkers for advice or guidance, as well as being called upon less to utilize their skills or knowledge (Begeny & Ryan, 2018). These experiences are ultimately a key part of increasing job satisfaction, decreasing burnout and lead to increased confidence and career ambitions. If female veterinarians experience such things less than their male counterparts, then it becomes clear why their job satisfaction and happiness with their positions seem to be much lower than that of men.

In the same paper, authors Begeny & Ryan (2018) describe a survey they created and used to measure how managers might compare a female veterinarian to a male counterpart of equal qualifications. The set up of this experiment was designed so that everyone in the study was shown the exact same performance evaluation, except for the fact that one version was for a vet named “Mark” and the other version was for a vet named “Elizabeth”. Just to emphasize, everything else detailing their qualifications on the evaluation was exactly the same other than their names. The researchers also included a question in this survey in which they asked for the respondents’ opinion on if gender discrimination existed in veterinary medicine. Interestingly, they found that of “those who believed female vets no longer experience discrimination – 44% of respondents – offered ‘Mark’ a significantly higher salary than ‘Elizabeth’ ranging from £1,100 to £3,300 more. Those who most strongly endorsed this belief showed the strongest pay disparity” (Begeny & Ryan, 2018, p.7). It is also important to note that even those who were indifferent in their opinion on the discrimination issue tended to pay Mark more. This research article reflects one of the most common issues regarding discrimination: salary discrimination based on gender. When one believes that women no longer face discrimination, this leads to a lack of awareness in the subtle ways in which discrimination toward women typically manifests,

meaning someone who does not believe in an issue is much less likely to stop and consider their behavior and the potentially discriminatory rationale for their decisions. Therefore, it is still very important to ensure the recognition of gender discrimination throughout the veterinary fields and the facets in which it presents itself.

### The Pay Gap

The pay gap exists in almost all occupations, and although there have been decreases in the size of it since the 1900s, women in the 2000s still make about “80% of the median annual salary of men among full-time workers in the United States” (Buchanan & Wallace, 2020, p.116). The pay gap in the veterinary field is a topic that requires more research as there are many factors affecting the difference in salary between male and female veterinarians. For example, a study found that in private practice, male respondents to a survey made a mean compensation of \$93,866 while female respondents made \$92,472 (Bain, 2021). Yet, in public or corporate practices, the mean compensation for male respondents was \$59,958 and for women it was \$79,059. The authors who published this data do not discuss what may have led to this variation in salary between the sexes or why the public practices seem to pay female veterinarians more in this case. It is possible that the variation in salary amounts exists based on the fields of medicine and their corresponding gendered makeups. For instance, in large animal practice specifically, studies have found that private practitioners work longer hours, have the greatest on-call responsibility, and women in this field still earn less than men even after adjusting for relevant covariates (Wayne et al., 2020). This discrepancy in salary may be due to large animal practices being the field in which female veterinarians experience the most gender bias. This is due to the historical trends associated with large animal care as was discussed in the

history of vet medicine description and because large animal owners tend to be the most reluctant in working with female veterinarians.

So how is it that in a career in which women make up the majority of the demographic that they are still experiencing a substantial pay gap which favors men in their profession? There is a common problem called the paradox of the contented female worker that is used as an explanation for this (Buchanan & Wallace, 2020). This paradox states that despite the pay gap, women's overall work satisfaction is not usually lower than that of their male colleagues causing the belief that women are satisfied with making less. This leads many to believe that there is little to no incentive for the status quo to change. But this equal satisfaction issue tends to exist because veterinary students or practitioners are unaware of the gender disparities that exist in their earnings. One female veterinarian was quoted saying, "We're happier making less until we find out we're making less; then, we're not so happy" (Bristol, 2011, p.330). So, education systems and changes in curriculum could be an important fix to this issue; for example, there should be courses with dedicated lessons that teach more about salary expectations for future veterinarians as they learn about practice management and the business side of veterinary medicine.

Another explanation is regarding female veterinarians who own their own practices (Bristol, 2011). In general, women tend to manage differently than men and this point will be detailed and discussed further in this paper. But the prominent issue with practice ownership is that the primary reason for different salaries between male and female practice owners appears to be due to these different managerial styles. Female practice owners tend to set lower prices for services, discount prices for clients more often, reinvest more earnings into the practices, and they sometimes pay workers more in comparison to their male counterparts. These different

behaviors result in female practice owners having an overall smaller salary and the practices may, as a result, bring in less money. It has also been found by Neill et al. (2021) that the mean income difference among the top 25% of earners in veterinary medicine is one of the greatest pay gaps in the veterinary field with there being almost \$100,000 difference found between male and female earnings. The volume of this difference is explained by the fact that of all the veterinarians that earn anywhere greater than \$120,000, around half of these are practice owners and 70% of male veterinarians are practice owners compared to only 44% of female veterinarians owning a practice. Therefore, not only do the different managerial styles of female and male practice owners contribute to a difference in their mean income salaries, but the fact that the majority of practice owners are male veterinarians who are also some of the top earners in the veterinary medicine field explains the significant differences in female versus male earnings.

Another contributor to the pay gap is simply the difference in behavior and values that women have when compared to men. For example, women are found to have less of a sense of entitlement compared to men (Bristol, 2011). This is demonstrated in studies where women are asked to decide their own pay. The women who partook in this study estimated their future salaries so that, "...at the end of a 30-year career, men would be earning \$41,152 more than women and men would have earned a total of \$600,330 more during their career than women" (Bristol, 2011, p.331). To make this divide even clearer, if these female and male veterinarians all earned what they predicted for themselves, the women would have to work a total of 34 years extra to make what men would in a 30-year career. The issue of women underestimating their value is a critical issue now and in the future of the veterinary field. If women expect to receive lower salaries, along with charging less for services, this may lead to overall lower earnings for

the field of veterinary medicine. These trends also put female veterinarians in greater financial risk because not only are they dealing with earning less income but also with the debt created during veterinary school.

### The Effects of Maternal Status on Female Veterinarians

Women in veterinary medicine often find their decisions regarding motherhood and its endeavors to be greatly affected by their jobs and the stress that accompanies working in an academically strenuous career. In the general work force “A majority (51%) of working women in the United States say that having children has ‘made it harder for them to advance’ in their career compared to 16% of men” (Wayne et al., 2020, p.2). The same paper studying motherhood in veterinarians found that, “A majority of the sample (906, 83.7%) reported that their career had ‘definitely’ or ‘maybe’ affected the timing of their children” (Wayne et al., 2020, p.4). Female veterinarians often delay having children until they are done with schooling and have found a steady position for work. But this, along with the accompanying stressors of working in veterinary medicine, have led to concerns within the veterinary community regarding the effects that veterinary careers have on women hoping or trying to become mothers. The study by Wayne et al. said that based on the number of respondents who experienced at least one miscarriage, they found the rate of miscarriage to be 8-20% larger than nationally reported rates (Wayne et al., 2020). Similarly, women in the veterinary field showed increased use of fertility treatments, described as 17.6% of respondents compared to the national rates of 12%; and there were also notably increased rates of self-reported post-partum depression. These statistics highlight how female veterinarians are experiencing increased rates of miscarriage, fertility treatments, and potentially even post-partum depression. The explanation for these differences has not been concretely identified but it may be due to the high stress levels that veterinarians experience, or

simply that female veterinarians are waiting until they are older to have children. No matter the reason, these findings demonstrate the need for improved support programs for female veterinarians entering parenthood.

Veterinary mothers also face challenges in their careers because their experiences regarding familial support and work-life interactions tend to be different than any male colleagues'. Due to societal values and expectations, women typically take care of the majority of the household work and childcare in their relationships despite working in demanding professions (Buchanan & Wallace, 2020). Mothers especially do more housework consistently compared to fathers, regardless of their work status or education level. As a result, veterinarians who are mothers have to balance greater amounts of work-life interference than male veterinarians, as they still tend to take on more childcare and housework. It has also been found that married veterinarian men typically report "more spousal support in terms of their partner's contributions to housework than married women" (Buchanan & Wallace, 2020, p.126). So, female veterinarians may struggle more with stress and work satisfaction because they have more to deal with in regard to their work-life balance than male veterinarians. It has actually been quantified that work-home interference is one of the main predictors for female veterinarian's work satisfaction and cynicism by Mastenbroek et al. in their research studying burnout and engagement in veterinary professionals (2014).

### Communication Differences Based on Gender

The existence of gender discrimination in veterinary medicine brings about the question of how female veterinarians behave differently than male veterinarians, and how they are treated differently because of their gender. Many female veterinarians note that they tend to go to greater lengths than their male counterparts to appear professional in order to ensure that they are treated

with the proper amount of respect from clients and coworkers (Irvine & Vermilya, 2010). Some female veterinarians attempt to manage impressions more by wearing items that more clearly identify themselves as a doctor, such as a white lab jacket or doctor's coat. Other female veterinarians who would typically introduce themselves just by their first name might only introduce themselves as doctor in order to be taken seriously. There are specific fields in veterinary medicine where these impression management techniques are taken much more seriously. For example, women in large animal medicine specifically struggle to be treated professionally and taken seriously by large animal, farm and ranch owners. As stated previously in the history of veterinarians, large animal medicine has always been the most sexist field in veterinary medicine, and some female veterinarians still have their services refused because of their gender (Irvine & Vermilya, 2010). Due to this, female veterinarians working with large animal clientele are the most likely to adopt a "tough girl" persona and avoid typical female characteristics so that they will be treated in a more professional manner by their clients. Consequently, it seems that as women become students or practitioners in veterinary medicine, many of them are more frequently distancing themselves from stereotypically feminine characteristics with the purpose of trying to achieve greater success and respect.

These changes in behaviors present with their own issues, other than the fact that they should be unnecessary. As veterinary medicine has become more feminized, the veterinary field is presented with the chance to become more human-patient centered and to put a greater focus on patient-client relationships (San Miguel et al., 2014). This is due to the communication differences between men and women. A research article studying the differences between patient-client interactions with male versus female veterinarians found that, "In general, male conversation is task oriented with displays of power, status, or competition, whereas female

conversation is relationship oriented with emotional content, partnership building, self-revealing information, and attention to feelings of others” (Shaw et al., 2012, p. 81). In office settings women tend to have a more transformational style of leadership in which they work on gaining trust, empowering coworkers, and providing mentorship. This is opposed to men who tend to have a more transactional style of leadership in which they prefer systems of rewards and corrections (Shaw et al., 2012). Since female veterinarians tend to have more relationship-oriented conversations with their clients, it is possible that the client will provide more lifestyle-social information regarding themselves and their pet, which could include important information regarding the patient’s situation. The female style of communication also opens up the possibility to improve the workplace environment through a human-centered approach. This could be integrated by providing more support and mentorship for new staff members or colleagues as well as assisting veterinary medical students in their transition from college to the more difficult professional career. A paper describing the idea of human-centered medicine does a wonderful job summarizing how it may affect the field of animal medicine by saying, “We do not suggest that veterinarians move away from this focus on animals; however, we do contend that the veterinary profession could be advanced by embracing a concept of human-centered veterinary medicine that incorporates both human-centered outcomes (ie, the societal impacts of the profession) and human-centered systems (ie, how relationships among veterinarians and between veterinarians and animal owners affect animal health and well-being)” (San Miguel et al., 2014, p.375).

#### The Overall Effect on Work Satisfaction

After detailing multiple areas in which veterinarians experience gender discrimination, the question remains regarding its overall effect on women within the field. As mentioned early

on, work engagement plays an enormous role in the perceived work satisfaction of veterinarians. Some specific examples important in job satisfaction include healthy relationships with colleagues, intellectual challenges, work hours, work-life balance, professional support, and much more. Female veterinarians can trend toward decreased job satisfaction when these different areas of work engagement are affected because of gender discrimination, which is quite common. This paper discussed just a few ways this happens including work-life balance and intellectual challenges. A paper written by Mastebroek et al. (2014) found that among other factors, male gender was "...associated with fewer signs of distress, anxiety and depression" (p.1). A trend in male responses found that they felt less exhausted and more engaged compared to women respondents; and this exhaustion was most contributed to by the lack of decision latitude and opportunities for professional development. Therefore, as female veterinarians' experiences in the veterinary field fail to inspire and promote work satisfaction, they will tend to experience burnout in greater rates than male veterinarians. For a better understanding of these effects, Mastebroek et al. (2014) also found that, "...one in seven young veterinary professionals suffers from burnout within the first 10 years after graduation. Problems are even worse in females in their first five years after graduation, where one in five meets the criteria for burnout" (p.5). To conclude, female veterinarians tend to experience slightly greater job demands than their male counterparts as well as moderately lower job and personal resources (Mastebroek et al., 2014). To decrease the effects which many veterinarians are feeling because of discrimination, there is a need for greater mental health support, improved education regarding salary expectations and growth, more flexibility for mothers, and an overall improved understanding of the extent to which gender discrimination is still present in the veterinary field.

### Conclusion

Given the rapid feminization of veterinary medicine and its complex impact on gender dynamics within this field, it is clear that this demographic shift has profound implications for both female practitioners and veterinary medicine students, particularly in terms of how they will experience gender discrimination and bias. One of the greatest concerns that results from this rapid feminization is the thought that gender discrimination stopped being an issue after the influx of female practitioners. While the gender composition did change, the veterinary field still experiences persistent forms of bias and discrimination that greatly affect women's experiences within this field of medicine. The long-standing gender stereotypes that remain within the veterinary field cause disparities in pay, social expectations, career advancement opportunities, work-life balance, as well as overall work satisfaction.

Thus, understanding the intersection between increasing female representation and the ongoing struggles for gender equity in veterinary medicine is crucial. With the knowledge that comes from this understanding, the areas that could be improved upon can be addressed and corrected. For example, women entering the field as new veterinarians, or even veterinary students, need to have improved structures for mental health support. Any medical field education and career is rigorous and demanding, without the addition of gender discrimination; therefore, programs such as peer mentorship or community building are vital in helping women through the challenges that they face. A paper by Dr. Marie Quicksall discusses the benefits of inclusive mentorship on increasing representation and retention of BIPOC individuals (Quicksall, 2024). She discusses how mentorship can improve the sense of belonging in underrepresented groups, including BIPOC and women, which would overall improve mental health. Peer mentorship has the potential to create a network of guidance and camaraderie, where

female veterinarians can share experiences, strategies for overcoming bias, and resources for career advancement.

Another important area for improvement is that of business and salary education. As discussed with the pay gap issue, many women in veterinary medicine do not even know that they are experiencing a salary discrepancy compared to their male counterparts. Therefore, veterinary schools should ensure that they have courses designed to teach students about the correct salary expectations and salary growth expectations that they should have while searching and interviewing for jobs. In addition, female veterinary practice owners demonstrate some differences in managerial techniques that may affect their income. So, it may also be useful for veterinary schools to teach courses regarding business and practice ownership. By acknowledging and addressing these key areas, veterinary medicine will take important steps in ensuring gender equity by not only increasing female representation but also by fostering an environment in which female veterinarians have the ability to thrive professionally and personally.

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