The gender wage gap in veterinary medicine: Is clinical confidence a factor?

Short answer? No. Female veterinarians perceive themselves as highly competent medically—and still earn almost 9 percent less.

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Veterinarians are always questioning those of us in the American Veterinary Medical Association (AVMA) Economics Division about the factors that contribute to differences in salaries. Of these differences, one big topic of interest is that of the so-called gender wage gap. Many factors affect differences in income by gender, and this article discusses whether confidence in clinical skills is one of those factors.

Mark your calendar: AVMA 2015 Economic Summit

Plan to attend the AVMA’s annual Economic Summit, scheduled for Oct. 21 in Chicago. Attendees will hear about topics such as:

- The market for veterinary education (veterinary students).
- The market for veterinarians (employment of veterinarians among various types of employers).
- The market for veterinary services by animal owners.
This event will also showcase new independent research on pet owner demand, pet owner risk preferences (pet insurance and wellness plans), practice financial guidelines and the economics of zoonotic diseases. Register at avma.org.

Salary and confidence in the general U.S. population

According to the U.S. Bureau of Labor Statistics (BLS), the national median for weekly full-time job earnings in the first quarter of 2014 was $791. Women had median weekly earnings of $716, while men had $867. This simple difference represents a 17.4 percent wage gap.

One hypothesis for the wage gap is that confidence plays a role in job performance. Previous research has shown that women tend to demonstrate less confidence and less competitiveness than men. On the other hand, if a job is female-oriented, men show less confidence than women. Another study also suggests that social evaluation has more impact on confidence for women than for men and that women tend to feel they have less influence in a group. We considered that these concepts, if true for the general U.S. population, might also help explain the wage gap for veterinarians.

Salary and confidence among veterinarians

Data for this article comes from the 2015 AVMA Employment Survey. The survey, which inquired about 2014 earnings, was sent to every veterinarian who graduated one year previously and five years previously. In 2014, according to the survey, the national mean annual earnings for veterinarians who graduated in 2009 and 2013 was $74,253. Among them, women had mean annual earnings of $71,714, while men had mean annual earnings of $83,538. This difference amounts to a wage gap of 16.5 percent.

Because there are many factors other than gender that contribute to this wage gap—graduation year, age, board certification, additional degrees held, whether the respondent served an internship, practice type, hours worked per week, and region—we had to control for these before examining the factors that affect only the gender wage gap. When we controlled for these factors, the gender wage gap was reduced to 8.6 percent.
The question we posed is this: What portion of this wage gap, if any, may be explained by differences in confidence between the genders? The AVMA Employment Survey included a section on self-reported clinical competencies. We used this information to measure the respondents’ confidence in their own clinical skills. The summary statistics for those questions are shown in Table 1.

### Table 1

<table>
<thead>
<tr>
<th>Clinical competencies by gender</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical examination</td>
<td>4.08</td>
<td>4.31</td>
</tr>
<tr>
<td>History taking</td>
<td>4.13</td>
<td>4.40</td>
</tr>
<tr>
<td>Diagnosis of lameness</td>
<td>3.50</td>
<td>3.54</td>
</tr>
<tr>
<td>Diagnosis/treatment of parasitic disease</td>
<td>3.70</td>
<td>3.95</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>3.75</td>
<td>3.84</td>
</tr>
<tr>
<td>Fluid therapy</td>
<td>3.73</td>
<td>3.84</td>
</tr>
<tr>
<td>Intravenous injection</td>
<td>4.06</td>
<td>4.30</td>
</tr>
<tr>
<td>Development/adaptation of vaccination protocols</td>
<td>3.62</td>
<td>3.86</td>
</tr>
<tr>
<td>Advising clients on nutrition</td>
<td>3.01</td>
<td>3.26</td>
</tr>
<tr>
<td>Developing diagnostic plans for difficult cases</td>
<td>3.70</td>
<td>3.83</td>
</tr>
<tr>
<td>Investigation of potential toxin exposure</td>
<td>3.17</td>
<td>3.31</td>
</tr>
<tr>
<td>Prescribing medication</td>
<td>3.85</td>
<td>4.01</td>
</tr>
</tbody>
</table>

Source: AVMA Veterinary Economics Division

Compared to male veterinarians, female veterinarians reported significantly higher scores in physical examination, history taking, diagnosis and treatment of parasitic disease, intravenous injection, development of vaccination protocols and advising clients on nutrition. Men, on average, failed to self-report any competency at a higher level than women did. So confidence in one’s clinical veterinary competencies does not explain the gender wage gap.

### Discussion

Some studies show that the wage gap between genders is declining, especially in countries with large and advanced social welfare systems. But for the time being at least, women in veterinary medicine are making about 8.6 percent less than their male counterparts when relevant variables are accounted for, and they show an overall higher self-reported confidence in clinical skills. The wage gap is a real economic phenomenon in the profession, and according to our research, lack of clinical confidence among women can’t explain it. For quantitative, economically viable answers, we’ll have to keep looking.

### References


2. Lirgg C. Gender differences in self-confidence in physical activity: A meta-analysis
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Further reading


Yaoqin Shen is an extern in the American Veterinary Medical Association’s Veterinary Economics Division. Dr. Ross Knippenberg is an economic analyst and Dr. Mike Dicks is director of the Veterinary Economics Division.

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