

Factors influencing job and career satisfaction in veterinarians 10 years or fewer from graduation

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Abstract

Retention of veterinarians in practice is critical to long-term practice success. Understanding factors influencing satisfaction can provide information for practice managers to positively influence the work environment. The study objective is to identify potential factors influencing job and career satisfaction in veterinarians less than 10 years from graduation. Secondary outcomes include factors influencing current financial, physical, and emotional health. A cross-sectional, anonymous online survey with 82 complete responses was used for analysis. Respondents were representative of recent graduates and most respondents were satisfied with their job (83.0%) and career (84.1%). Both job and career satisfaction were higher when respondents believed they received adequate recognition. Financial health was associated with technician-to-veterinarian ratio, adequate recognition, current debt, and raise frequency. Physical health was associated with length at the current job and current debt. Emotional health was significantly associated with years at the current job, having held an internship, and technician-to-veterinarian ratio. In general, most veterinarians within 10 years of graduation were satisfied with their job and career choice. Several factors influenced job satisfaction, career satisfaction, and financial, physical, and emotional health. Understanding these factors can help employers and employees maintain a healthy working environment.

Key words: veterinary career satisfaction; employee retention

Introduction

Understanding factors impacting overall job and career satisfaction within veterinary medicine is important for not only the future of the profession, but for the wellbeing of the clients they serve and the animals for whom they are responsible. Workload, educational debt-to-income ratio, and work-life balance all could impact job and career satisfaction.^{2,6} Improved understanding of veterinary specific factors that influence satisfaction in recent graduates could facilitate changes to improve job satisfaction and employee retention. Several components of the job can influence overall satisfaction, but little work has been done focusing on relatively recent graduates. Physical, emotional, and financial health

are also important components of overall professional career satisfaction. Despite the importance of these areas, only sparse data exists on factors influence these health aspects in recent graduates.

Improved understanding of factors driving job satisfaction, financial, emotional, and physical health could greatly assist in promoting a positive working environment. This information could improve employee retention and reduce the need for continued recruitment of highly skilled professionals. The objective of this research was to identify potential factors influencing job and career satisfaction in veterinarians who graduated from Kansas State University's College of Veterinary Medicine 10 or fewer years prior to the survey. Secondary outcomes include identifying factors influencing current financial, physical, and emotional health.

Materials and Methods

The survey instrument was designed by the research team and reviewed by the Kansas State University Institutional Review board and deemed exempt from needing full IRB review. This survey was distributed through a listserv of Kansas State University College of Veterinary Medicine Alumni consisting of 1,416 alumni, and was first available on November 1, 2018. The target audience was practitioners with no more than 10 years since graduation; thus, the email list was constructed with only those practitioners targeted and the survey description clearly described the target population.

Primary study outcomes assessed current job and career satisfaction. These outcomes were assessed using a response scale adapted from a five-point Likert-type scale with 1 being extremely dissatisfied and 5 being extremely satisfied. Secondary study outcomes included a self-assessment of current financial, physical, and emotional health. A similar response scale was utilized with 1 indicating very unhealthy and 5 indicating extremely healthy. To further analyze the data, the Likert-type scale responses were then grouped into 2 categories with a response of 1, 2, or 3 being deemed as not satisfied/unhealthy, and a response of 4 or 5 being deemed satisfied/healthy.

Two questions were asked for respondents to further descriptively evaluate job satisfaction: 1) if you could change 1 thing to increase job satisfaction it would be: and 2) what is your biggest current source of job satisfaction. Both questions

assessed the same series of response areas: compensation, time off work, relationships with co-workers/boss, relationships with clients, community, types of cases, and other.

The survey queried respondents on potential factors hypothesized to be related to satisfaction and health outcomes. Factors assessed included: graduation year, gender, years worked in current workplace, current practice focus, practice role, current community size, numbers of veterinarians and technicians in the practice, hours of CE attended, salary raise frequency, base salary (and method of pay), professional organization membership, hours worked per week, nights on call, receiving adequate recognition, student debt at graduation, and current student debt. Most factors were assessed on a closed question with independent choices except for questions with numerical answers which were entered as free text.

Logistic regression models were used to determine potential associations among various survey responses and the outcomes of interest (job and career satisfaction, financial, physical, and emotional health). Univariate logistic models were created for each potential factor and the binomial outcome of interest and a final multivariable model was performed using factors identified as associated with the outcome variable with a significance level of $P < 0.10$. The final model was generated through an iterative process until only factors associated with the outcome at $P < 0.05$ remained. Both Akaike Information Criterion and Bayesian Information Criterion were applied in the model selection process.

Results

Responses were received from 99 veterinarians engaged in various career pathways within the profession, and after removing incomplete responses, 82 survey responses were included in the statistical analysis. Survey respondents were 63% female and 37% male, which is consistent with the data for 2018 US Employed Veterinarians in private practice of 59.9% female and 40.1% male.¹ Among respondents, 92% work in private practice with 69% being associates and 60% working in communities larger than 10,000 people. The mean years since graduation among the survey respondents was 4.5 years with a median of 5 years since graduation. The overall average debt at graduation was \$129,265 and an average annual debt reduction of \$7,607 per year since graduation.

Respondents were asked to indicate what drives current satisfaction and what would improve current satisfaction levels. Current satisfaction was primarily driven by types of medical/surgical cases routinely encountered and relationships both with co-workers and clients. Respondents noted that time off from work and increased compensation would improve their current satisfaction. Table 1 shows the breakdown of possible categories and responses by overall percentage of respondents.

Overall, 83.0% of respondents indicated that they were satisfied with their current job. The only survey vari-

Table 1. Percent of respondents from the survey that indicated both current satisfaction drivers and drivers that would improve current satisfaction.

	Current satisfaction (%)	Satisfaction improvement (%)
Community/geographic location	5	11
Compensation	13	25
Relationships with clients	20	6
Relationships with co-workers	21	9
Time away/off work	11	39
Types of cases/animal interactions	25	3
Other	3	5
Not listed	2	2

able significantly associated with job satisfaction was the perception of receiving adequate recognition from current boss. Respondents who indicated they believed they were receiving adequate recognition were more satisfied (90.0% +/- 3.9) compared to those that did not believe they received adequate recognition (63.6% +/- 10.3).

Within our data, 84.1% of respondents indicated they were satisfied with their career. Career satisfaction was significantly associated with adequate recognition and the time spent doing non-veterinary activities. Respondents who received adequate recognition were more likely to be satisfied in their career (92.2% +/- 3.6) compared to those who did not receive adequate recognition (70.6% +/- 11.5). Non-veterinary activities were defined in the survey as employee management, financial, and inventory; respondents who indicated they were satisfied with their career spent a lower percent of time (16.7%) in non-veterinary activities compared to those who indicated they were not satisfied with their career (31.7%).

In the model evaluating financial health, technician-to-veterinarian ratio, adequate recognition, level of current debt, and raise frequency were found to be significantly associated with the outcome. Our data indicated that 67.1% of the population self-indicated as financially healthy. The average technician to veterinarian ratio was categorized with the first category representing less than or equal to 1, the second greater than 1 but less than or equal to 1.55, the third greater than 1.55 but less than or equal to 2, and the fourth was the remainder. Respondents in the first 2 categories were more likely to report financial health (62%, 61.7%, respectively) compared to practices with higher technician to veterinarian ratios (7.4%, 27.1%). Respondents indicating they were financially healthy were more likely (55.3% +/- 12.4) to report receiving adequate recognition compared to those stating they were not financially healthy (18.4% +/- 12.9). The level of current debt for those that indicated they were financially

healthy was found to be \$61,551 (SD: 85,450.2) and those not financially healthy at \$162,597 (SD: 120,996.6). Raise frequency was also found to be a significant influencer on financial health. The majority of the respondents (62.2%) indicated receiving a raise annually or more frequently. Among those that received a raise annually or more frequently, 71.0% indicated being financially healthy and those receiving a raise less frequently than annually, but within every 3 years, indicated 73.0% being financially healthy.

Most (92.7%) of respondents self-reported as being physically healthy. The likelihood of reporting physical health was associated with years since graduation and current debt level. Average current debt for those reporting physical health was \$91,092 (SD: 109,147) compared to those reporting not physically healthy of \$159,166 (SD: 126,820). The average number of years that physically healthy individuals had been at their current job was 2.9 (SD: 2.22) years compared to those not physically healthy at 4.7 (SD: 3.02) years.

Most respondents (85.3%) self-reported as feeling emotionally healthy, and this outcome was only associated with completing an internship. All respondents (100%) that completed an internship reported being emotionally healthy while only 83% of respondents that did not complete an internship and reported emotional health.

Discussion

Understanding the factors that could impact satisfaction for veterinarians early in their career is extremely important. Our data revealed potential factors associated with job and career satisfaction, as well as financial, physical, and emotional health statuses. An Australian study of veterinarians from entry to 10 years after graduation reported that 69% of veterinarians in a mixed practice said they would choose to be a veterinarian again compared to only 43% of those in other veterinary roles.⁵ Our survey did not specifically ask questions to ascertain whether or not early-career veterinarians would choose the same career path again, but with a high percentage of respondents reporting they were satisfied with their career and job, one could make the assumption that early-career veterinarians in this survey would choose to become a veterinarian again if able to re-establish their education and career pathway.

Comparison of data revealed that the sample population of recent graduates from the College of Veterinary Medicine at Kansas State University was in fact representative of the total population of recent veterinary graduates in North America. According to the data, student debt at graduation was \$129,400 on average, with a median of \$104,000 and a range from \$0 to \$386,000. This information is consistent with data presented by Bain and Salois which indicated that 1,495 (54.2%) respondents accumulated more than \$150,000 in debt during veterinary school, and the percentage who reported no educational debt had increased from 14.2% in 2016 to 17.3% in 2018.³ Another report detailed that 2018

graduates had an average of \$143,000 in debt, which is an increase of roughly \$10,000 from 2017 reports.⁸ Additionally, survey respondents indicated they worked an average of 48 hours per week. The previously mentioned article by Bain and Salois indicated that those in private practice worked 46 hours per week and those in public practice worked an average of 47 hours per week, verifying our sample population.³

Receiving adequate recognition was significantly associated with job and career satisfaction. According to the study *The Effects of Employee Recognition, Pay, and Benefits on Job Satisfaction: Cross Country Evidence*, receiving adequate recognition does actually impact one's job satisfaction.⁹ Recognizing one's performance is a very simple, and important way to help ensure job satisfaction among employees.

Factors such as technician-to-veterinarian ratio, adequate recognition, level of current debt, and raise frequency were found to be associated with overall financial health. Roughly two-thirds of respondents (67.1%) indicated they were financially healthy. Our data would support a hypothesis that a lower technician-to-veterinarian ratio could be financially advantageous to early-career veterinarians; however, another study reported a positive association between technician-to-veterinarian ratio and practice economic wellbeing.⁴ When discussing financial health, it is no surprise that current level of debt and raise frequency would also be found significant. It would be logical to assume within this population that if a large amount of current debt is coupled with infrequent increases in salary, few respondents would feel financially healthy. Being able to repay educational debt is a concern for many early-career veterinarians; frequent raises are likely to make the debt seem more manageable compared to the likelihood of receiving a raise less often than every 3 years in this study.

Overall physical health was impacted by years at the current job and level of current debt. Nearly all (92.7%) of the early-career veterinarians indicated they were physically healthy. Higher levels of debt were associated with an increased likelihood of self-reporting as physically unhealthy. This could be due to with debt-associated stress leading to health or conversely, being unhealthy contributing to a greater level of debt.

The majority of our population self-reported as being emotionally healthy, and this was only associated with having held an internship. This could be due to the fact that those completing an internship were prepared at a different level to complete their job; although, the survey encompassed only the first 10 years of their career so it is surprising that this effect would be long term. While 1 study reported that holding an internship did not change their initial salary, another mentioned that 94% of respondents thought that having an internship did make them a better veterinarian.⁷ While having held an internship was significant, a small portion of our population actually held an internship.

As a limitation of this study, we recognize that the responses for financial, physical, and emotional health were all

self-reported assessments. There was no corroborating data collected or assessed for each individual to determine other measures of financial, physical, or emotional health. Additionally, as with all cross-section survey data, we are unable to determine causation among the outcomes of interest and the associated factors. The small sample size also did not allow for the model data to be interpreted and utilized in the analysis.

Conclusions

Within the primary outcomes of job satisfaction and career satisfaction, receiving adequate recognition were found to be important factors. There were several factors that appeared as reoccurring themes within the secondary outcomes of financial, physical, and emotional health such as level of current debt, years at the current job, and technician-to-veterinarian ratio. This information is important all individuals involved in the field. Client, patient, and personal wellbeing are all areas that can be impacted by understanding influential factors. This survey data gives a better understanding on making recommendations for improvements and future areas of research that are needed still.

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References

1. AVMA. Market Research Statistics: U.S. Veterinarians 2018. (n.d.). Available at: <https://www.avma.org/KB/Resources/Statistics/Pages/Market-research-statistics-US-veterinarians.aspx>. Accessed June 14, 2019.
2. AVMA. Suicide trend in the profession stretches back decades. Available at: <https://www.avma.org/News/JAVMANews/Pages/180615c.aspx>. Accessed June 15, 2019.
3. Bain B, Salois M. Employment, starting salaries, and educational indebtedness of year-2018 graduates of US veterinary medical colleges. *J Am Vet Med Assoc* 2019;254:1061-1066.
4. Brusk AM, White BJ, Goehl DR, Dhuyvetter KC. Results of a survey to determine demographic and business management factors associated with size and growth rate of rural mixed-animal veterinary practices. *J Am Vet Med Assoc* 2010;12:1385-1392.
5. Heath T. Longitudinal study of veterinarian from entry to the veterinary course to 10 years after graduation: attitudes to work, career and profession. *Aust Vet J* 2002;80:474-478.
6. Pizzolon CN, Coe JB, Shaw J R. Evaluation of team effectiveness and personal empathy for associations with professional quality of life and job satisfaction in companion animal practice personnel. *J Am Vet Med Assoc* 2019;254:1204-1219.
7. Shepard AJ, Granstrom DE, Boland LA, Murphy KF. Veterinary internship survey, 2012. *J Am Vet Med Assoc* 2013;24:976-980.
8. Successful Farming. Call the Vet! Rural Veterinary Medicine is Struggling. Available at: <https://www.agriculture.com/livestock/call-the-vet-rural-veterinary-medicine-is-struggling>. Accessed June 20, 2019.
9. Tessema M, Ready K, Embaye A. The effects of employee recognition, pay and benefits on job satisfaction: Cross country evidence. *J Bus Econ* 2013;4:1-12.