The veterinary workforce shortage has become a topic at the forefront of the veterinary industry. A recent study identified an existing shortage of veterinarians and veterinary technicians, which is projected to worsen as the gap between pet-care demand and provision of care expands.\(^1,2\) An estimated shortage of close to 15,000 companion-animal veterinarians could exist by 2030 in the US alone.\(^3\) The Canadian Veterinary Medical Association has also listed the veterinary workforce shortage, including veterinarians and veterinary technicians, as a priority area due to increasing concerns with the present and future state of the veterinary profession.\(^3\) While a multifaceted approach is needed to address the veterinary workforce shortage, developing an understanding of factors that contribute to employee commitment will support the profession in taking action to manage the shortage.

Workplace psychosocial factors are associated with veterinary employees’ organizational commitment to their current veterinary hospital

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OBJECTIVE
To classify a sample of veterinary professionals into distinct organizational-commitment profiles and to identify associations between psychosocial aspects of the workplace and organizational-commitment profile membership.

SAMPLE
487 veterinary employees who worked for a corporate veterinary organization in Canada.

METHODS
Survey components measured for this study included the Three-Component Model (TCM) Employee Commitment Survey–Revised, the Copenhagen Psychosocial Questionnaire, and participant demographics. First, latent profile analysis was used to identify distinct organizational-commitment profiles based on 3 components of commitment (affective, continuance, and normative). Next, the Mann-Whitney \(U\) test was used to compare participants’ intention to leave their hospital on the basis of organizational-commitment profile. Finally, logistic regression was performed to assess the association between perceived psychosocial workplace characteristics and organizational-commitment profile membership.

RESULTS
2 organizational-commitment profiles were identified: Affective/Normative (AC/NC) Dominant (\(n = 388\)) and Mid-Low Commitment (\(n = 99\)). Participants in the Mid-Low Commitment Profile had a significantly higher intention-to-leave score (median, 3.0) than participants in the AC/NC Dominant Profile (median, 2.0; \(P < .001\)). Psychosocial factors found to predict membership in the AC/NC Dominant Profile included the following: influence at work (OR, 2.08; \(P < .001\)), meaning of work (OR, 1.38; \(P = .067\)), rewards/recognition (OR, 1.63; \(P = .007\)), and quality of leadership (OR, 1.85; \(P = .003\)). Members of the AC/NC Dominant Profile also experienced greater work-life conflict (OR, 1.65; \(P = .003\)) compared to the Mid-Low Commitment Profile.

CLINICAL RELEVANCE
Findings identified potential psychosocial aspects of the workplace that can be considered to support more desirable organizational-commitment profiles that are likely to lead to favorable outcomes for veterinary practices and their employees.

Keywords: organizational commitment, psychosocial environment, latent profile analysis, veterinary employees, commitment profile
The degree of employee commitment in a workplace impacts both individual- and organization-level outcomes, although it has yet to be thoroughly examined in the context of veterinary medicine. Despite disagreements about the best way to conceptualize commitment, it is understood that employee commitment ties an individual to their workplace, reducing the likelihood of turnover. Employee commitment has also been found to predict on-the-job behavior, such as attendance and job performance, and aspects of employee health and well-being. While studies have examined the importance of work culture in relation to well-being within the veterinary industry, further examination of the impact of workplace environment on employee commitment and turnover is essential for creating solutions to lower the current rate of workforce attrition experienced within the veterinary profession.

Furthermore, factors associated with one’s work experience, such as clarity of or conflict within one’s role, or perceived alternative employment opportunities are generally more strongly correlated with employee commitment compared to personal characteristics. Thus, as a part of a larger study, the purpose of the present study was to explore the relationship between perceived psychosocial aspects of the workplace and organizational commitment among veterinary professionals. To accomplish this purpose, the first objective was to establish unique organizational commitment profiles within a sample of veterinary professionals working at a large corporate veterinary group. The second objective was to identify associations between perceived psychosocial aspects of the workplace and organizational commitment profile membership.

### Methods

The study protocol was reviewed and approved by the University of Guelph Research Ethics Board (REB No. 22-02-026) and is reported following Strengthening the Reporting of Observational Studies in Epidemiology guidelines.

### Participants and procedures

Participant recruitment and procedures have been previously described. In brief, participants were recruited from a large veterinary corporation in Canada. Eligibility criteria included being employed by or volunteering for a veterinary hospital owned by the corporation and being at least 16 years old, which was chosen to be inclusive of younger volunteers and employees and is permitted by Health Canada’s research ethics guidelines. All 4,676 individuals employed by the veterinary corporation at the time of recruitment were invited via email from the corporation’s internal communications department to participate in the study by responding to an online survey, offered in both English and French. Email reminders were sent to all employees 1 and 2 weeks after the initial invitation. Consent was obtained when participants clicked “Agree” and proceeded with the survey. Survey data were collected from May 10, 2022, to June 30, 2022, using the online survey platform Qualtrics (version May/June 2022; Qualtrics). No incentives were provided for participation in this study.

### Survey and measurement tools

The survey design and measurement tools have been previously described. The survey components used for the model within the presently reported study included researcher-designed participant demographic questions; organizational commitment, measured using Meyer and Allen’s TCM Employee Commitment Survey–Revised; and perceived psychosocial environment within the hospital, measured using the Copenhagen Psychosocial Questionnaire (COPSOQ). Additionally, a researcher-generated measure of intention to leave one’s current hospital was incorporated as a means of validating participants’ employee commitment.

#### Demographic questions

Demographic information collected and used in the present study included primary role in the participant’s veterinary hospital (area medical director, medical director, veterinary specialist, emergency veterinarian, primary care veterinarian, hospital/general manager, assistant manager, registered veterinary technician, veterinary technician, technician assistant/veterinary assistant, client care specialist/receptionist, animal care attendant/kennel assistant, client care manager/coordinator, patient care coordinator, or other), whether they were a role lead (yes or no), area of primary work (primary care, emergency, or specialty), average hours worked per week (open text), employment status (permanent full time, permanent part time, temporary full time, temporary part time, or casual/locum), length of time in their current hospital (open text), and length of time in the veterinary profession (open text).

#### Organizational commitment TCM

This study used Meyer and Allen’s TCM as a framework to measure commitment to their current veterinary hospital using the TCM Employee Commitment Survey–Revised. The TCM incorporates the multi-dimensionality of commitment by encompassing 3 main constructs: affective commitment (AC), continuance commitment (CC), and normative commitment (NC). Affective commitment describes the emotional attachment and desire to stay with the organization. Continuance commitment conveys the perceived costs associated with leaving the organization. Normative commitment reflects a sense of obligation to remain with the organization. Each construct was measured using a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7). Meyer and Allen’s TCM has been found to be a reliable measure of the 3 distinct constructs of commitment (ie, AC, CC, and NC), which have demonstrated generalizability across organizations and occupations.

Individuals can identify with all 3 components of the TCM at differing levels, and therefore research-
ers have used these components to develop distinct commitment profiles among samples of employees in various organizational settings. Meyer and Herscovitch theorized that 8 organizational commitment profiles exist in the workplace, based on different combinations of low and high AC, CC, and NC scores.

Copenhagen Psychosocial Questionnaire—The COPSOQ measures employees’ psychosocial work environment and individual well-being within the veterinary hospital. The psychosocial work environment describes the sociostructural opportunities in a workplace that support worker well-being, productivity, and positive self-experiences, such as self-efficacy and self-esteem. The COPSOQ instrument has been validated internationally, in multiple languages, and across a wide variety of occupational industries. In the present survey, 46 items were used, 45 of which corresponded to the items employed in a Canadian validation study of the COPSOQ. A subset of these 46 items was examined in the present paper, focusing on 9 COPSOQ scales comprising 22 items that measure the perceived psychosocial work environment: Influence at Work (2 items), Possibilities for Development (3 items), Meaning of Work (2 items), Rewards/Recognition (2 items), Quality of Leadership (3 items), Job Insecurity (3 items), Vertical Trust (2 items), Organizational Justice (2 items), and Work-Life Conflict (3 items).

All scales except Work-Life Conflict and Influence at Work were rated on a 5-point response scale to indicate how strongly the situation affected the participant. The items from the Work-Life Conflict scale measured the degree to which the participant was affected by the situations described, rated on a 4-point response scale (0 = not at all; 3 = yes, but only very little; 6 = yes, to a certain degree; 10 = yes, certainly). The items in the Influence at Work scale were rated on the basis of frequency (i.e., 0 = not at all, 5 = to a small extent, 10 = to a large extent). The scores for each scale were calculated as the mean of the combined item scores comprising the scale. For all scales in the COPSOQ instrument, higher scores indicate greater endorsement of the dimension being assessed.

Intention to leave—To support the construct validity of the organizational commitment profiles identified through latent profile analysis (LPA; see Statistical analysis), intention to leave one’s current veterinary hospital to work for another hospital was assessed using a single question (i.e., “I am considering leaving this hospital and working for another veterinary hospital”) measured on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). A higher score indicated increased intention to leave one’s current hospital. The a priori hypothesis was that participants belonging to the profile demonstrating greater commitment to their veterinary hospital would also demonstrate lesser intention to leave their current veterinary hospital.

Statistical analysis

Descriptive statistics were calculated including mean, median, SD, minimum, and maximum for continuous data and frequency for categorical data. These statistics were used to characterize participant demographics and present data pertaining to organizational commitment, intention to leave, and psychosocial aspects of the work environment. Participant responses were assessed for normality visually using a histogram and Q-Q plot, as well as statistically using the Shapiro-Wilk test.

Exploratory analysis of the TCM Employee Commitment Survey data was performed using cluster analysis conducted via SPSS (version 28.0.1.1; IBM Corp) to identify homogenous groups within the data. Next, LPA was performed to identify clusters of individuals based on participant responses to the 3 components of organizational commitment. LPA is a statistical approach that assigns participants to a specific group of individuals presenting with similar response patterns, while minimizing within-group variation. Nonparametric data (AC and NC, which were both negatively skewed) were transformed with a Box-Cox transformation to normalize the respective distributions and were reassessed for normality. The optimal number of profiles was determined by specifying a 2-profile model and adding additional profiles consecutively with differing model parameters (tidyLPA R package models 1, 2, 3, and 6; The R Project for Statistical Computing) using an iterative process. The models were assessed using an analytical hierarchical process to identify the model structure with the best fit on the basis of the following fit indices: Akaike information criterion, approximate weight of evidence criterion, Bayesian information criterion, classification likelihood criterion, and Kullback information criterion in the tidyLPA R package. The bootstrapped likelihood ratio test was used to assess the fit of k profiles compared to k-1 profiles, and the number of individuals per profile was assessed to ensure that no profiles contained < 5% of the sample. LPA produced a subsample of 2 groups, reflecting 2 main organizational-commitment profiles (i.e., Profile 1: AC/NC Dominant; Profile 2: Mid-Low Commitment). The 1-tailed Mann-Whitney U test was used to compare participants’ intention to leave their hospital on the basis of their organizational-commitment profile membership to assess whether participants belonging to Profile 1 demonstrated lesser intention to leave, which would support the validity of the LPA. A backward stepwise logistic regression analysis was performed to ascertain associations between organizational-commitment profile membership and 9 measures of the psychosocial work environment. During the modeling process, all COPSOQ scales were adjusted to represent the original response options; for example, a 1-unit increase in Quality of Leadership represented a 25-point increase (eg, 50 = somewhat, to 75 = to a large extent). First, unconditional analyses were conducted using a significance level of
With the 9 independent variables from COP-SOQ reflecting the psychosocial work environment (i.e., Influence at Work, Possibilities for Development, Meaning of Work, Recognition/Rewards, Quality of Leadership, Job Insecurity, Work-Life Conflict, Vertical Trust, and Organizational Justice), with the 2 organizational-commitment profiles resulting from the LPA treated as the dependent variable (i.e., 1 = AC/NC Dominant Profile, 0 = Mid-Low Commitment Profile). To test for multicollinearity among the 9 independent variables to be used in the logistic regression, correlation analyses were performed to determine whether any correlation coefficients exceeded 0.70, defined as a strong correlation, using Pearson or Spearman correlation coefficients for parametric or nonparametric variables, respectively. All variables that were previously removed during the modeling process were independently reintroduced to conduct a final check for significance. Listwise deletion was used to handle missing data. A significance level of $P < .05$ was used for the final model. Statistical analyses were performed using standard statistical software (R version 4.2.1; The R Project for Statistical Computing).

Results

Demographics

A total of 578 (12.36% [578/4,676]) veterinary professionals participated in the survey, of which 487 provided complete responses to the TCM Employee Commitment Survey and were included in the present study. Responses reflected participation from all provinces in which the corporation’s veterinary hospitals were located at the time of the survey (i.e., Alberta, British Columbia, Ontario, Quebec, and Saskatchewan). The roles contributing most frequently to the TCM Employee Commitment Survey included registered veterinary technicians (21.3% [104/487]), client care specialist/receptionists (14.4% [70/487]), and hospital/general managers (12.7% [62/487]). Participants had been employed with their current hospital for a median of 3.4 years (mean, 6.3; SD, 7.06; min–max, 0.2–37) and had been working in the veterinary profession for a median of 6.0 years (mean, 9.6; SD, 8.87; min–max, 0.2–44). Participant demographics are described further (Table 1).

<table>
<thead>
<tr>
<th>Role (n = 487)</th>
<th>n (%)</th>
<th>Mean (SD); Median; Min–max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Director</td>
<td>29 (6.0)</td>
<td></td>
</tr>
<tr>
<td>Veterinary Specialist</td>
<td>21 (4.3)</td>
<td></td>
</tr>
<tr>
<td>Emergency Veterinarian</td>
<td>12 (2.5)</td>
<td></td>
</tr>
<tr>
<td>Primary Care Veterinarian</td>
<td>37 (7.6)</td>
<td></td>
</tr>
<tr>
<td>Hospital Manager/General Manager</td>
<td>62 (12.7)</td>
<td></td>
</tr>
<tr>
<td>Assistant Manager</td>
<td>8 (1.6)</td>
<td></td>
</tr>
<tr>
<td>Registered Veterinary Technician</td>
<td>104 (21.3)</td>
<td></td>
</tr>
<tr>
<td>Veterinary Technician</td>
<td>49 (10.1)</td>
<td></td>
</tr>
<tr>
<td>Technician Assistant/Veterinary Assistant</td>
<td>60 (12.3)</td>
<td></td>
</tr>
<tr>
<td>Client Care Specialist/Receptionist</td>
<td>70 (14.4)</td>
<td></td>
</tr>
<tr>
<td>Animal Care Attendant/Kennel Assistant</td>
<td>12 (2.5)</td>
<td></td>
</tr>
<tr>
<td>Client Care Manager/Coordinator</td>
<td>13 (2.7)</td>
<td></td>
</tr>
<tr>
<td>Patient Care Coordinator</td>
<td>1 (0.2)</td>
<td></td>
</tr>
<tr>
<td>Othera</td>
<td>9 (1.8)</td>
<td></td>
</tr>
<tr>
<td>Role lead (n = 485)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>343 (71)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>142 (29)</td>
<td></td>
</tr>
<tr>
<td>Area of primary work (n = 487)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary care</td>
<td>318 (65)</td>
<td></td>
</tr>
<tr>
<td>Emergency</td>
<td>95 (20)</td>
<td></td>
</tr>
<tr>
<td>Specialty</td>
<td>74 (15)</td>
<td></td>
</tr>
<tr>
<td>Employment status (n = 487)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent FT</td>
<td>441 (91)</td>
<td></td>
</tr>
<tr>
<td>Permanent PT</td>
<td>35 (7)</td>
<td></td>
</tr>
<tr>
<td>Temporary FT</td>
<td>4 (0.8)</td>
<td></td>
</tr>
<tr>
<td>Temporary PT</td>
<td>1 (0.2)</td>
<td></td>
</tr>
<tr>
<td>Casual/locum</td>
<td>6 (1)</td>
<td></td>
</tr>
<tr>
<td>No. of hours worked per week (n = 486)</td>
<td>41.5 (19.0); 40.0; 0-140</td>
<td></td>
</tr>
<tr>
<td>Length in veterinary field (n = 187)</td>
<td>9.6 (8.87); 6.0; 0.2-44</td>
<td></td>
</tr>
<tr>
<td>Length in current hospital (n = 225)</td>
<td>6.3 (7.06); 3.42; 0.2-37</td>
<td></td>
</tr>
</tbody>
</table>

FT = Full time. PT = Part time.

aRoles held by < 8 employees across the corporate veterinary organization were recategorized into “Other.”
sented a greater expression of that type of commit-
ment to the participant’s veterinary hospital.

**COPSOQ scales**—Descriptive statistics for the 9 COPSOQ scales included in the present study are presented (Table 2).

**Organizational commitment profiles**

The results from the LPA suggested the presen-
tce of 2 profiles, with varying variances and varying
covariances (ie, model 6). Model 6 was suggested as
the best fit according to the computed fit indices.23
The 2-profile model was supported with the highest
Bayesian information criterion value (8,725.77), a
significant bootstrapped likelihood ratio test (P = .01),
and a minimum profile membership that exceeded
5% of the sample. Two clusters were also identified
during the exploratory cluster analysis conducted in
SPSS, validating the presence of 2 profiles.

Based on the LPA, 80% (n = 388) of participants
had membership in Profile 1, representing high AC
and high NC (Profile 1: AC/NC Dominant), and 20%
(n = 99) of participants had membership in Profile
2, demonstrating mid-low levels of all 3 organiza-
tional-commitment components (Profile 2: Mid-Low
Commitment). The mean scores for Profile 1 for AC,
CC, and NC were 5.39, 4.00, and 5.11, respectively.
In contrast, the mean scores for Profile 2 for AC,
CC, and NC were 3.19, 3.09, and 2.87, respectively
(Figure 1).

Furthermore, participants in the AC/NC Dominant Profile (Profile 1) had a median intention-to-
leave score of 2.0 (mean, 1.97; SD, 1.06; min–max,
1–5), which was significantly lower (W = 8,179.5; P < .001) than participants in the Mid-Low Commitment Profile (Profile 2), who had a median intention-to-
leave score of 3.0 (mean, 3.33; SD, 1.25; min–max,
1–5). This significant difference supported the a pri-
ori hypothesis that those with stronger commitment
(Profile 1) to their veterinary hospital would demon-
strate lesser intention to leave.

**Psychosocial factors associated
with profile membership**

Of the 487 survey responses with complete data
for all 3 organizational-commitment scales, 16 were
dropped due to a lack of complete responses to the
COPSOQ scales examined in the present study, re-
sulting in a total of 471 surveys with complete cases
used in the analysis of psychosocial factors associ-
ated with profile membership. Five COPSOQ scales
were retained in the final multiple logistic regres-
sion: Influence at Work, Meaning of Work, Rewards/
Recognition, Quality of Leadership, and Work-Life
Conflict. All 5 COPSOQ scales were positively as-

<table>
<thead>
<tr>
<th>COPSOQ scale</th>
<th>n</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>Min–max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence at Work (2 items)</td>
<td>481</td>
<td>52.2</td>
<td>50.0</td>
<td>21.68</td>
<td>0-100</td>
</tr>
<tr>
<td>Possibilities for Development (3 items)</td>
<td>479</td>
<td>74.7</td>
<td>75.0</td>
<td>16.45</td>
<td>0-100</td>
</tr>
<tr>
<td>Meaning of Work (2 items)</td>
<td>479</td>
<td>80.25</td>
<td>75.0</td>
<td>18.57</td>
<td>0-100</td>
</tr>
<tr>
<td>Rewards/Recognition (2 items)</td>
<td>475</td>
<td>64.03</td>
<td>62.50</td>
<td>24.13</td>
<td>0-100</td>
</tr>
<tr>
<td>Quality of Leadership (3 items)</td>
<td>477</td>
<td>70.0</td>
<td>66.7</td>
<td>24.01</td>
<td>0-100</td>
</tr>
<tr>
<td>Job Insecurity (3 items)</td>
<td>477</td>
<td>16.4</td>
<td>8.3</td>
<td>19.33</td>
<td>0-83.3</td>
</tr>
<tr>
<td>Work-Life Conflict (3 items)</td>
<td>475</td>
<td>54.6</td>
<td>55.7</td>
<td>28.21</td>
<td>0-100</td>
</tr>
<tr>
<td>Vertical Trust (2 items)</td>
<td>474</td>
<td>67.35</td>
<td>75.0</td>
<td>20.82</td>
<td>0-100</td>
</tr>
<tr>
<td>Organizational Justice (2 items)</td>
<td>473</td>
<td>58.4</td>
<td>62.5</td>
<td>22.71</td>
<td>0-100</td>
</tr>
</tbody>
</table>

**Figure 1**—Box plot of Three-
Component Model employ-
ee commitment scores (af-
fective commitment [AC],
continuance commitment,
and normative commit-
tment [NC]) by organiza-
tional-commitment profile
(AC/NC Dominant Profile
and Mid-Low Commitment Profile) for 487 veterinary employees who work for a corporate veterinary or-
ganization in Canada.
sociated with membership in the AC/NC Dominant Profile. For example, with every unit increase on the Influence at Work scale, the odds of a respondent being in the AC/NC Dominant Profile were significantly greater (OR, 2.08) than being in the Mid-Low Commitment Profile (Table 3). The Meaning of Work scale was retained in the model after independently reintroducing the Work-Life Conflict scale to account for the potential existence of a confounding relationship between Meaning of Work, Work-Life Conflict, and profile membership.23

**Discussion**

The present study investigated organizational commitment among veterinary professionals working within a large corporate veterinary group. The LPA identified 2 subsamples, or distinct profiles, of which most respondents had membership in Profile 1, representing high levels of AC and NC, with only a fifth of respondents who had membership in Profile 2, characterized by mid-to-low levels of all 3 components of commitment. Of significance, members of the AC/NC Dominant Profile were confirmed to have lower intentions to leave their job at their current hospital compared to members of the Mid-Low Commitment Profile. This study also identified psychosocial aspects of the workplace that were positively associated with membership in the AC/NC Dominant Profile, which could be used to inform the development of organizational activities intended to promote employees’ commitment to their hospital.

The participants of this research represented a fairly homogeneous sample with only 2 distinct commitment profiles identified, compared to previous studies conducted in diverse industries, which have commonly identified between 5 and 7 profiles.14,15 Most respondents within the present study displayed high levels of AC and NC, as represented by Profile 1. The decision to become a veterinarian is often decided at a very young age, typically due to factors such as a desire to work with animals and improve animal health.24 Veterinary technicians share this affinity for helping animals,25,26 while veterinary support staff have only recently become the focus of similar inquiry in the literature.7 It is thought that individuals with a “calling” may have stronger organizational commitment and desire to see the organization succeed.27 Therefore, it is logical that individuals with intrinsic motivations to support animal health would cultivate an emotional attachment to working in veterinary practice that provides an opportunity to fulfill their “calling.” Affective commitment has been found to have the strongest correlations with favorable outcomes for organizations (eg, increased attendance, enhanced job performance) and employees (eg, reduced stress).5 Assessing the organizational fit of job candidates is a hiring practice that could be utilized by hospital leadership to foster alignment between a hospital or organization’s values and the values of job candidates.28 However, before adopting this practice in the context of veterinary medicine, further examination is needed.

A high level of NC was observed among respondents with membership in Profile 1, whereas a mid-to-low level was identified among respondents with membership in Profile 2. This finding of high NC among respondents with membership in Profile 1 reflects a high level of obligation to a respondent’s veterinary hospital, which can result from a variety of factors. It is possible that for many of these employees, the veterinary workforce shortage stimulated greater feelings of obligation toward participants’ hospitals, including their teams. Another explanation for the high level of NC in the present sample may pertain to receiving extensive training through one’s employer, which can result in a higher sense of obligation to remain in one’s job. Evidence in support of this line of reasoning can be found in a study11 of student and registered nurses, for whom NC was positively correlated with engagement in professional activities, such as continuing education and involvement in professional associations. Within the present study, all veterinary hospitals were associated with a large veterinary corporation that regularly provides training and development opportunities for its employees, such as mentorship activities, continuing education conferences, and access to virtual and hands-on training. These opportunities may have increased participants’ sense of obligation to stay with their hospital. It would be valuable for all veterinary employers to consider opportunities to support their staff’s involvement in continuing education and veterinary professional associations to foster NC toward their hospital.

With respect to CC, a mid-to-low level was observed across both profiles identified in the present study. A strong display of CC would suggest that an
individual remains in their job because they need to; in other words, the perceived costs associated with leaving are too high (eg, impact on salary, seniority, benefits, etc). The results of the present study suggest that participants perceived the costs associated with leaving to be low. At the time of data collection for this study, the veterinary profession was experiencing a workforce shortage. As a result of this shortage, the demand for veterinary professionals outpaced the supply, which increased job candidates’ choice of employment and leverage in the industry. These economic conditions leave veterinary hospitals in a position where there is a need to focus on both attracting and retaining veterinary employees. Findings of the present study suggest that veterinary employers are likely to benefit more from focusing on intrinsic rewards for employees such as recognition and engagement, which often contribute to AC and NC, rather than relying solely on salary or other extrinsic rewards that support CC.

In the present study, members of the profile containing high levels of AC and NC had higher odds of reporting greater recognition and fair treatment in the workplace. Recognition contributes to individual engagement in the workplace, which is associated with increased job satisfaction and encouragement to further one’s skills and knowledge. In addition, being appreciated and recognized for work has been found to be protective against burnout in veterinary medicine. Not only do organizational processes that promote employee recognition have a positive impact on workplace engagement and well-being, they have also been shown to extend beyond the individual to employees who witness recognition of their colleagues. Veterinary practice leadership should be encouraged to recognize and praise their employees directly through oral or written communication and by publicly acknowledging employees’ achievements and contributions.

Similarly, the present study found that greater perceived influence at work, specifically regarding influence on decisions that impact one’s work and workload, was positively associated with membership in the profile containing high levels of AC and NC. Lack of control, or decision latitude, has been linked to burnout across industries, eventually leading to low employee commitment, decreased productivity, and increased turnover. Having a voice in decisions regarding one’s role has been found to contribute to individual engagement within a veterinary team, which in turn promotes job satisfaction and is associated with decreased aspects of burnout, including exhaustion and cynicism. While the associations between burnout, job satisfaction, and organizational commitment were not examined in the present study, it is likely that increasing veterinary employee’s engagement in work-related decisions could positively contribute to all 3 of these outcomes. In addition, a systematic review of workplace interventions found that restructuring tasks in a manner that increases job control and autonomy has superior implications on worker mental and physical health compared to changes in workplace support (eg, social support, contact with superiors, satisfaction with coworkers).

Within the present study’s survey, the items pertaining to quality of leadership reflected a supervisors’ ability to prioritize job satisfaction, work planning, and conflict resolution, and this scale was also positively associated with membership in the profile containing high levels of AC and NC. A lack of positive leadership has been suggested to contribute to a toxic veterinary-team environment, in particular when conflict is not properly managed. Veterinary leaders have identified relationships as being at the center of their responsibilities, while also recognizing them as the biggest challenge in their daily work. Considering the wide range of leadership roles within veterinary medicine (eg, close to a third of participants in the present study stated they hold a leadership position within their role), it is prudent for veterinary professionals in a leadership role to pursue additional leadership training, including conflict-resolution training. Previous research involving focus group participants suggests that conflict avoidance and a lack of consequences for poor behavior contribute to a toxic social environment within a veterinary practice, and that a more formal leadership structure could improve the social environment. Human healthcare has benefited from interventions focused on enhancing leadership behaviors among leaders and management; interventions with the greatest efficacy included creating a personal development plan and incorporating self-directed learning, workplace-based learning, and reflection. Recognizing the impact that leadership can have on organizational commitment, veterinary practices should purposefully pursue leadership-development opportunities for hospital management and team leaders.

Meaning of work was retained in the present study as a possible confounder of the relationship between work-life conflict and organizational-commitment profile membership. Meaning of work reflects the sense of purpose that an individual derives from their work and has been considered to reduce or offset workplace incivility. The meaningfulness of working with animals has been identified by veterinary technicians in previous research as an intrinsic reward that compensates for other disadvantages of their job, such as low pay. While the present data cannot be used to make causal inferences, it is hypothesized that high-level meaning of work may increase an individual’s commitment to their job and that the intrinsic fulfillment from work may shift one’s work-life balance to favor work life at the expense of private life. Work-life conflict was positively associated with membership in the profile containing high levels of AC and NC in the present study. This conflict was expressed through items conveying the negative impact of the time and energy consumed by the workplace, specifically on respondents’ private lives. A 2022 well-being study found that 39% of veterinarians were not satisfied with their work-life balance and over half (51%) were working more hours.
than they would like. Veterinarians and veterinary staff were found to score higher in neuroticism than the general population, a trait that is most associated with well-being. Further, individuals with high scores in neuroticism are less likely to manage well with long working hours. Maintenance of a healthy work-life balance has been suggested as a strategy to promote well-being within the veterinary industry. The present findings suggest that individuals who have greater conflict between work and private life have greater odds of being in the profile containing high levels of AC and NC. Comparably, a study of veterinary technicians found that those who intended to stay in their job were more likely to report being overused. For cases in which veterinary hospital leadership leverage psychosocial aspects of the workplace to promote employee commitment (through factors related to influence at work, quality of leadership, rewards/recognition, and meaning of work), the present findings indicate that careful attention should be paid to supporting the potential conflict that may arise for these employees between their work and private life. This is particularly important, as work-family conflict has been identified to be a strong predictor of burnout.

With increasing awareness of the challenges that can be experienced by those working within the veterinary industry, including serious psychological distress, burnout, and suicide, it behooves all involved in the veterinary profession to work toward finding sustainable solutions for veterinary practices to improve the mental health and well-being of their teams. An evidence-based program focused on acceptance and commitment training has been shown to reduce occupational distress among veterinary professionals, including stress, work-related burnout, client-related burnout, and burden transfer. Similar effects have been found from facilitated and self-paced offerings, which create opportunities for broad dissemination of the training.

Interpretation of the present findings should be mindful of the following contextual considerations: First, participants were recruited via their corporate emails; hence, it is possible that employees who were less committed to or engaged with the organization were less likely to respond to the survey, potentially introducing a nonresponse bias in the present findings. Second, given the cross-sectional nature of this study, inferences cannot be made regarding the causality of the observed relationships. Third, although the response rate within the present study was higher than in a recent workforce study conducted by the Canadian Veterinary Medical Association, which obtained a response rate of 8%, the present findings come from a sample of employees from a corporate veterinary organization and may not be generalizable to the wider veterinary-employee population (ie, the wider population being inclusive of both corporate-owned and independent veterinary hospitals with different management structures). The latter consideration suggests that the veterinary industry would benefit from further research into organizational commitment that includes a more diverse population of veterinary employees to determine whether additional organizational-commitment profiles exist. Further, the veterinary industry may also benefit from an examination of workplace psychosocial factors that impact employees’ occupational commitment (ie, commitment to the veterinary profession), as the factors that promote one’s commitment to their hospital may differ from those that promote commitment to the veterinary profession.

This study identified the significance of one’s influence at work, rewards/recognition, quality of leadership, and meaning of work as positive predictors of organizational commitment, while also creating awareness of the potential work-life conflict that may arise when employees perceive a greater level of commitment to their job. In considering the findings of the present study, veterinary hospitals may wish to start by reviewing current work processes as they relate to the factors identified, followed by a hospital-development plan to enhance these characteristics of the workplace. This approach could prove to be a beneficial step toward favorable outcomes for veterinary practices and their employees, such as increased employee attendance at work, enhanced job performance, reduced stress, and a decrease in turnover.

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**Disclosures**

VCA Canada reviewed and cleared the final survey procedure and instrument prior to dissemination, provided a means of direct communication with VCA Canada associates for the purposes of study recruitment, and reviewed and cleared the final manuscript prior to submission with no requested changes. VCA Canada was not involved in the development of the survey or recruitment materials, data collection, analysis, interpretation, or writing of this manuscript.

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