

# Reputation Management on Facebook: Awareness Is Key to Protecting Yourself, Your Practice, and the Veterinary Profession

Cynthia A. Weijs, BA, MPH, Jason B. Coe, PhD, DVM, Amy Muise, PhD\*, Emily Christofides, MSc†, Serge Desmarais, PhD

## ABSTRACT

Social media use by health professionals occurs in a digital environment where etiquette has yet to be solidly defined. The objectives of this study were to explore veterinarians' personal use of Facebook, knowledge of privacy settings, and factors related to sharing personal information online. All American Animal Hospital Association member veterinarians with a valid e-mail address (9469) were invited to complete an online survey about Facebook (e.g., time spent on Facebook, awareness of consequences, types of information posted). Questions assessing personality dimensions including trust, popularity, self-esteem and professional identity were included. The response rate was 17% (1594 of 9469); 72% of respondents (1148 of 1594) had a personal Facebook profile. Veterinarians were more likely to share information on Facebook than they would in general. Trust, need for popularity, and more time spent on Facebook predicted more disclosure of personal information on Facebook. Awareness of consequences and increased veterinary experience predicted lesser disclosure. As veterinary practices use Facebook to improve client services, they need also to manage risks associated with online disclosure by staff. Raising awareness of reputation management and consequences of posting certain types of information to Facebook is integral to protecting the individual, the practice, and the veterinary profession. (*J Am Anim Hosp Assoc* 2014; 50:227–236. DOI 10.5326/JAAHA-MS-6069)

## Introduction

Social media have rapidly changed the face of communication in society. One of the most popular sites is Facebook, with approximately 608 million users worldwide at the time of this study (2011).<sup>1</sup> Facebook is popular because it bridges distance between friends. On Facebook, friends can share family photos, plan social events, talk about important personal events, and perhaps more notably, discuss commonplace daily happenings. A benefit of social networks is increased social support or connection among individuals who have low self-esteem or low life satisfaction. Sharing personal information on Facebook is thought to fulfill social needs for popularity.<sup>2–4</sup> For example, young adults in

particular use Facebook to maintain contact with both long-distance and geographically close, real-world friends.<sup>2</sup> Although younger individuals (18–35 yr) are the largest users of Facebook, at the time of this study, the most rapidly growing demographic was older (36–49 yr and 50–65 yr).<sup>5</sup>

Facebook's popularity has spread beyond personal use as businesses develop profiles to connect with clients and customers. Originally, Facebook provided a place where real-world friends could meet online and share thoughts and photos. Increasingly, Facebook is being used for business promotion, networking, and relationship building. As a result, Facebook has moved toward sharing more broadly and lowering privacy, both of which

From the Department of Population Medicine, Ontario Veterinary College (C.W., J.C.), and Psychology Department (A.M., E.C., S.D.), University of Guelph, Guelph, ON, Canada.

Correspondence: [cweijs@uoguelph.ca](mailto:cweijs@uoguelph.ca) (C.W.)

AAHA, American Animal Hospital Association; SD, standard deviation

\*A. Muise's present affiliation is the Department of Psychology, University of Toronto, Mississauga, ON, Canada.

†E. Christofides' updated credentials since article acceptance are MSc, PhD.

provide increased value for advertisers.<sup>6</sup> That value has potential benefits to veterinary practices as Facebook's user base expands to include older age demographics and becomes more representative of the veterinary client base. Business Facebook pages help maintain contact with current clients, reach potential clients, provide education and information, and simply allow for an Internet presence.<sup>7</sup> Specific to veterinary medicine, there is evidence that clients search online for veterinary practitioners and pet health information.<sup>8</sup> One veterinary practice management company suggests that potential clients are in the habit of googling a practice to screen it, even if they are referred by word of mouth.<sup>7</sup> Use of Facebook is promoted as a low cost way to foster the client-veterinarian relationship and allows veterinary practices to communicate an image to current and potential clients.<sup>7</sup>

Facebook's new focus on business marketing has drawn attention to privacy implications for those who have personal profiles. Facebook is oriented toward sharing more broadly and individuals' have a propensity to share more personal details on Facebook than they might otherwise.<sup>3,4</sup> It is, therefore, not surprising that concerns have been raised within the popular media and the academic literature about personal security and safety (e.g., identity theft and stalking), as well as image or reputation damage, including potentially unprofessional comments and photos that may put the individual's reputation at risk.<sup>9-16</sup>

A recent study of Facebook profiles belonging to veterinarians early in their career highlighted some of those risks. In that study, 71% of veterinarians who newly registered between 2004 and 2009 with the College of Veterinarians of Ontario had Facebook profiles. Among those, 75 of 352 (21%) were categorized as having high exposure (i.e., posted content that had the potential to reflect poorly on the person as a professional).<sup>16</sup> Concerns have also been raised by regulators about business or veterinary practice profiles.<sup>17</sup> Specifically, those concerns relate to allowing clients to post information on the practice profile, monitoring the profile and comments regularly, and the veterinarian's ability to adhere to regulatory standards while using social media.<sup>17</sup> Research about the risks associated with Facebook has centered around the sharing or disclosure of personal and private information to a broad audience and factors that may account for disclosure. Time spent on Facebook is thought to be related to disclosure.<sup>4</sup> Personal factors are also thought to play a role. Previous research found that self-esteem and trust were related to the use of Facebook's privacy settings to limit disclosure, while a greater need for popularity and lesser awareness of consequences were related to more disclosure on Facebook.<sup>3,4</sup>

The goal of this study was to understand personal Facebook use among veterinary professionals that could, in turn, inform the

development of either practice guidelines or policies that would protect individuals, practices, and the profession. Specifically, the objectives were to describe veterinarians' personal use of Facebook and their knowledge of privacy settings, explore veterinarians' beliefs about professionalism and accountability online, and explore factors that contribute to their disclosure of information on Facebook.

## Materials and Methods

The study protocol was reviewed and approved by the University of Guelph Research Ethics Board.

### Study Population

All members of the American Animal Hospital Association (AAHA) with active e-mail addresses were invited to complete an online survey between January 2011 and February 2011. Veterinarians were initially contacted through a standardized e-mail of introduction prepared by the researchers and distributed by AAHA. The e-mail outlined the study and provided a direct link to the survey located at an online survey service<sup>a</sup>. An incentive was provided to maximize participation, with each survey participant having the chance to win one of four Apple iPads. To maximize participation, one reminder e-mail was sent 2 days before the close of the survey, which stayed open for 2 wk in total. To provide anonymity of responses, no personally identifying information was collected as part of the original survey. Upon completion of the survey, participants were redirected to a separate page where they could provide an e-mail address to enter the iPad drawing.

### Survey Development

A survey exploring veterinarians' personal use of Facebook was developed based on a similar survey used in previous Facebook research.<sup>3,4</sup> The survey sought information about veterinarians' personal Facebook use, their views about accountability on Facebook, acceptability of certain posts, awareness of consequences of posting on Facebook, and privacy on Facebook.<sup>3,4,18</sup> Four personality measures were included to assess individual's level of trust in others, need for popularity, self-esteem, and professional identity.<sup>2,19-21</sup> A summary of the survey content is provided in **Table 1**.

### Survey Measures

The first five measures of Facebook factors (i.e., Facebook use, information disclosure, knowledge of privacy and default settings, and awareness of consequences) were established in previous Facebook research.<sup>3,4</sup> Participants were asked about their Facebook use,

**TABLE 1****Content Summary of Facebook Survey Sent to Participating Veterinarians Between January 2011 and February 2011**

Question categories	Exemplar information assessed
<b>Facebook factors (no. of questions on topic)</b>	
Facebook usage (3)	<ul style="list-style-type: none"> <li>• Length of account ownership</li> <li>• Frequency of signing into Facebook account</li> <li>• Time spent on Facebook</li> </ul>
Information disclosure (3)	<ul style="list-style-type: none"> <li>• Types of information/photos shared</li> <li>• Likelihood of sharing personal information</li> </ul>
Facebook privacy knowledge (6)	<ul style="list-style-type: none"> <li>• Knowledge of how to limit sharing of information/photos</li> <li>• Knowledge of how to either block or limit others</li> <li>• Knowledge of Facebook's default privacy settings for sharing information/photos</li> </ul>
Knowledge of default settings (4)	
Awareness of consequences (8)	<ul style="list-style-type: none"> <li>• Awareness of characteristics of posted content (i.e., what is permanent, searchable, easily and quickly dispersed)</li> </ul>
<b>Personality factors</b>	
Trust (10)	<ul style="list-style-type: none"> <li>• Level of individual's trust in others</li> </ul>
Self-esteem (7)	<ul style="list-style-type: none"> <li>• Level of individual's self-esteem</li> </ul>
Need for popularity (12)	<ul style="list-style-type: none"> <li>• Level of individual's need to be popular</li> </ul>
Professional identity (9)	<ul style="list-style-type: none"> <li>• Strength of individual's veterinary professional identity</li> </ul>
<b>Online etiquette and professionalism factors</b>	
Accountability (9)	<ul style="list-style-type: none"> <li>• Extent to which individuals agree with personal responsibility and accountability for online content they post</li> <li>• Extent to which individuals agree with the acceptability of various types of workday content posted to Facebook</li> </ul>
Acceptability (7)	

including how long they have had a Facebook profile, how many minutes they spend/day on Facebook, and how many “friends” they presently have on Facebook. “Information disclosure” was measured with the following question: “How likely are you to disclose personal information on Facebook?” Participants had seven response options, ranging from 1 (very unlikely) to 7 (very likely). Using a similar response format (with response options from 1 to 7), participants were also asked questions about how likely they were to share personal photographs, their knowledge of how to limit or control their information on Facebook, and the extent to which they were aware of the consequences of disclosing information on Facebook. Participants were also asked to identify the types of information that they have shared on Facebook and were asked to answer questions about their knowledge of Facebook's default privacy settings. The questionnaire was set such that participants who reported not having a Facebook profile bypassed the Facebook use questions and were directed to the personality measures, questions about the acceptability of posting certain types of information on Facebook, and questions about the extent to which individuals are accountable for their posts.

The personality factors assessed were trust, self-esteem, need for popularity, and professional identity.<sup>2,19–21</sup> Each was measured on a 5-point Likert scale, consistent with previously published versions of the scales. The response choices for the trust scale ranged from 1 (this is very untrue of me) to 5 (this is very true of me). The responses for self-esteem, need for popularity,

and professional identity were 1 (strongly disagree) to 5 (strongly agree) and measured the extent to which participants agreed with statements assessing the characteristic. For example, one of the trust statements was, “I find it difficult to fully trust anyone,” and a sample statement from the self-esteem measure was, “I feel that I have a number of good qualities.” Need for popularity was assessed with statements such as, “I’ve been friends with some people, just because others liked them” and “At times, I’ve changed the way I dress in order to get attention from others.” Professional identity statements included, “I am pleased to belong to this profession.”

Likert scales include a number of questions about a particular concept that, when combined, form a composite score that is understood to reflect an underlying aspect of an individual's personality (e.g., level of trust, self-esteem).<sup>22,23</sup> The composite score for an individual is the arithmetic mean of their responses to all questions in that particular scale. For example, individuals who are more trusting will have a higher mean trust score than those who are less trusting. Accordingly, those with high self-esteem should have a high score on the self-esteem scale, and those with a greater need for popularity should score highly on the need for popularity scale. All four personality measures (trust, self-esteem, need for popularity, and professional identity) are well-accepted scales used in social research.

To explore attitudes and beliefs about online etiquette and professionalism, a measure of professional accountability modified

for veterinary use and seven questions about the perceived degree of acceptability of certain posts were included.<sup>16,18</sup> The acceptability questions were developed based on qualitative findings from a previous study of actual Facebook profiles belonging to veterinarians and explored veterinarians' perceptions of how acceptable it is to post specific types of workday information to Facebook, such as "venting" about work, information about clinical cases, or pictures of clients' animals.<sup>16</sup> The response choices for the acceptability questions had seven options ranging from 1 (very unacceptable) to 7 (very acceptable). Unlike the personality scales described above, the acceptability and accountability questions were believed to reflect several related concepts rather than one core concept, so were described individually rather than as a composite score.<sup>23</sup>

### Statistical Analysis

Descriptive statistics for demographics, number of Facebook friends, information about accountability and acceptability on Facebook, privacy knowledge, and professional identity were calculated. Student's *t* tests of means were calculated for age and veterinary experience (yr) for those with and without a personal Facebook profile. A paired *t* test calculated the difference between individual's perceptions of their disclosure on Facebook and their reported disclosure in general. The Fisher's exact test was used to test the null hypothesis that the probability of agreement with the given accountability statements was the same for those with and those without Facebook profiles. Conditional maximum likelihood estimates of odds ratios with exact 95% Sterne confidence limits were computed.<sup>24</sup> Similarly, to test the probability of agreement with the acceptability questions between those with and without Facebook profiles, the seven category responses were collapsed into three categories ("unacceptable," "neutral," "acceptable"), and, excluding the neutral category, used the same procedure as for the accountability statements. Univariate linear regression analyses were completed for unconditional associations between the outcome variable (Facebook disclosure or sharing) and each of the following predictor variables: veterinary experience (yr), male versus female, time spent on Facebook, length of time participant owned a Facebook profile (mo), trust, self-esteem, need for popularity, professional identity, and awareness of consequences. Multicollinearity among the predictor variables was assessed using Spearman rank correlations. Each variable with  $P < .20$  was retained for a multivariable linear regression model. Retained variables were then included in an initial model, and backward elimination was used to remove nonsignificant variables from the model. When the base model was reached, each of the variables that had been removed was individually

added back into the model to assess for confounding on the base model. The variable had to affect  $> 20\%$  change to the  $\beta$  coefficient of any of the base model variables to be considered a confounding variable and be retained in the model. All statistical analyses were performed with standard software<sup>b</sup>, and all tests used a significance level of .05.

## Results

### Demographics

A total of 9469 members were eligible to participate in the survey. Of 1594 AAHA members (17%) who completed the survey, 797 were practice owners (50%) and 600 were associate veterinarians (38%). The remainder of study participants identified themselves as in academia (79 of 1587), residents or interns (32 of 1587), directors or managers (24 of 1587), or "other," including locum, industry, or retired/not working (9 of 1587). In total, 940 of 1594 participants were female (59%), and 861 of 1587 respondents indicated that their veterinary workplace had a Facebook page (54%). In addition, 1149 of 1594 respondents had a personal Facebook profile (72%) and those individuals spent, on average, 18 min on Facebook/day (median, 10 min; range, 0–180 min; standard deviation [SD], 19.36 min). Personal profile owners had an average of 158 friends (median, 120 friends; range, 0–999 friends; SD, 148 friends). Note that not all respondents answered every question, which explains varying denominators for reported results.

Veterinary experience was significantly different ( $t$ , 7.0;  $P < .001$ ) between Facebook profile owners (mean, 15 yr; median, 13 yr; range, 1–56 yr; SD, 11.32 yr) and those without Facebook profiles (mean, 23 yr; median, 23 yr; range, 1–52 yr; SD, 10.78 yr). The mean age of respondents having a personal Facebook profile was 42 yr (median, 40 yr; range, 24–80 yr; SD, 11.10) versus 50 yr (median, 51 yr; range, 26–77 yr; SD, 9.72 yr) for those who did not have a Facebook profile. That difference was statistically significant ( $t$ , 13.81,  $P < .001$ ).

### Disclosure

Participants reported being more likely to disclose personal information on Facebook than they would in general (mean difference,  $-0.088$ ; SD, 1.43;  $t$ ,  $-2.06$ ;  $P = .04$ ; 95%). Participants reported that they shared or were likely to share various types of information and photos, including work-related material (Table 2, Table 3). Forty-one percent of participants with a personal Facebook profile reported that they would be likely to search for colleagues (613 of 1479) and coworkers (602 of 1479) on Facebook, and 7% of study respondents (102 of 1478) said they would be likely to search for a client.

**TABLE 2****Self-Reported Information Posted to Facebook by Participating Veterinarians**

Type of information (n = 1149)	Veterinarians posting information on Facebook No. (%)
Relationship status	850 (74)
Birthday	825 (72)
Current or previous university	818 (71)
Current city of residence	778 (68)
Hometown	771 (67)
Current profession	754 (66)
Personal interests or info	430 (37)
E-mail address	379 (33)
Work experience	318 (28)
Religious views	231 (20)
Political views	220 (19)

**Facebook Knowledge and Default Privacy Settings**

Twenty-two percent of responding veterinarians (241 of 1109) with Facebook profiles reported correctly that tagged photos were visible to “friends of friends” by default. Nineteen percent of respondents (213 of 1107) reported correctly that using Facebook’s default settings, their profile photo would be visible to anyone on the Internet. Similarly, when asked who could see their friends list by default, 8% of respondents (90 of 1106) reported correctly that it would be visible to anyone on the Internet. Seven percent of respondents (82 of 1104) correctly identified that pages they “like” (i.e., become a fan of or recommend) on Facebook can be seen by anyone on the Internet by default. Most (881 of 1112) respondents (79%) reported changing their privacy settings. Further, 55% of respondents (610 of 1109) reported

**TABLE 3****Self-Reported Likelihood of Posting Pictures by Participating Veterinarians**

Type of picture	Veterinarians likely to post picture type on Facebook* No. (%)
Profile photo	983/1125 (87.4)
Pictures with friends	833/1123 (74.2)
Pictures with spouse	791/1119 (70.7)
Pictures of you in role as veterinarian	453/1125 (40.2)
Pictures of you in a work setting	390/1121 (34.8)
Pictures of animals you are working with	286/1126 (25.5)
Pictures out at the bar	236/1123 (21.0)
Pictures in a bikini or swim suit	161/1123 (14.3)
Drinking or under influence of alcohol	103/1121 (9.1)

\*A likely response was based on the Likert responses corresponding to “somewhat likely,” “likely,” or “very likely” to post.

limiting friends’ access to their photos, however, the remaining 45% (499 of 1109) had not. Among 1112 individuals having Facebook profiles, 26% (291) had limited a Facebook friend’s access to some content, while the remainder of respondents had not limited any access to their content or did not know how to do so on Facebook. More than half (60%) of Facebook profile owners (672 of 1107) either did not know how to change the information available to others through the “Newsfeed”<sup>c</sup> or knew how but had not done so. Of the veterinarians with Facebook profiles, 24% indicated that they were planning to change their approach to Facebook as a result of having completed the current survey.

**Professional Identity, Accountability, and Acceptability**

The mean Likert rating on the professional identity scale was 4.50 (median, 4.55; range, 1–5; SD, 0.491), with higher values reflecting a higher sense of professional identity among respondents. Forty-eight percent of veterinarians (158 of 329) without a profile and 52% of veterinarians (561 of 1084) with a profile felt the image presented online through Facebook accurately reflected the individual as a professional. The majority of respondents agreed with respect to various questions about accountability; however, that proportion of agreement was smaller for those with a Facebook profile compared with those without a profile (**Table 4**).

Although there was general agreement about the acceptability of posting certain information, two questions showed a greater proportion of acceptance of posting workplace information online among Facebook profile owners than among those without a Facebook profile. These were the acceptability of posting comments about work and “venting” about work (**Table 5**).

**Factors Associated with Facebook Disclosure**

Spearman rank correlation analyses revealed that veterinary experience and age were multicollinear ( $\rho$ , 0.94;  $P < .001$ ), so only the variable “years of veterinary experience” was used in the regression model. The base model of factors resulting from linear regression on Facebook disclosure included veterinary experience, trust, need for popularity, time spent on Facebook, and awareness of consequences (**Table 6**).

**Discussion**

The goal of this study was to describe veterinarians’ personal use of Facebook, gain an understanding of veterinarians’ knowledge of privacy settings on Facebook, and explore factors that contribute to disclosure of information on Facebook. Veterinarians’

**TABLE 4****Participating Veterinarians With and Without Facebook Profiles Responding “Yes” to the Described Questions Associated With Professional Accountability on Facebook\***

Question asked	Owner of a Facebook profile <sup>†</sup>	Nonowner of a Facebook profile <sup>†</sup>	Odds ratio of answering “yes” for Facebook profile owners	Confidence interval (95%)
Do you feel that photos, groups, postings, comments, and other information posted on Facebook affects people’s opinion of you as a professional healthcare provider?	892/1087 (82.1)	376/401 (93.8)	0.30	0.198–0.469
Should veterinarians be held to higher standards than the general public regarding the image they portray on Facebook?	657/1084 (60.6)	328/411 (79.8)	0.39	0.30–0.51
Should a veterinarian be held accountable for an illegal act discovered through Facebook postings?	910/1082 (84.1)	378/410 (92.2)	0.45	0.30–0.66
Should a veterinarian be held accountable for unprofessional behavior discovered through Facebook postings?	831/1075 (77.3)	375/408 (91.9)	0.30	0.20–0.44

\*All questions had dichotomous response (i.e., yes/no).

<sup>†</sup>Data are presented as number (%).

use of Facebook showed similar patterns to those of the general public with respect to time spent on Facebook, frequency of use, and the types of information posted.<sup>4,25</sup> Participants were also similar to the general public in sharing significant personal information.<sup>4</sup> Consistent with Facebook usage statistics for the general public at the time this study was performed, those who had profiles were significantly younger than those who did not have personal Facebook profiles.<sup>5</sup> Almost half of the veterinarians with Facebook profiles in this study reported being likely to search for colleagues and coworkers, and approximately 1 in 14 study participants reported being likely to search for clients, indicating the potential for social convergence between their private and professional lives.

Individuals in this study that were more trusting disclosed more personal information on Facebook, and, similarly, individuals with a greater need for popularity disclosed more personal

information on Facebook. These findings are consistent with previous findings in the literature and make sense in that people who are more trusting are likely to be more comfortable sharing information in the digital arena.<sup>3,4</sup> The relationship between the need for popularity and sharing on Facebook supports the interpretation by other researchers that social networks satisfy social needs.<sup>3,4,26,27</sup> In light of this, veterinarians need to find ways to meet social needs while reducing the risks associated with sharing information. To this end, 79% of participants in the current study did make efforts to change their profiles rather than maintain the default “public” or “low privacy” profile. Privacy advocates report that research in the areas of computer interaction and behavioral economics has shown that people favor default settings.<sup>28</sup> In this study, despite having a low level of awareness about who could see their posted content, most participants did not defer to Facebook’s defaults in making

**TABLE 5****Percent of Participating Veterinarians With and Without Facebook Profiles Who Agree that Posting Workday Information on Facebook Is Acceptable\***

How acceptable is it to do any of the following?	Owner of a Facebook profile (%)	Nonowner of a Facebook profile (%)	Odds ratio of answering “acceptable” for Facebook profile owners	Confidence interval (95%)
Post comments about work on Facebook?	24.4	10.5	<b>2.91</b>	<b>2.05–4.17</b>
Vent about work on Facebook?	5.3	2.8	<b>2.10</b>	<b>1.11–4.04</b>
Post information about clients on Facebook?	1.1	1.9	0.52	0.20–1.34 ns
Post information about client animals on Facebook?	6.5	7.6	0.85	0.55–1.34 ns
Post pictures of client animals on Facebook?	14.5	16.9	0.82	0.60–1.11 ns
Post comments about clinical cases on Facebook?	18.2	19.1	0.92	0.68–1.24 ns
Vent about clients on Facebook?	1.3	0.9	1.36	0.43–5.00 ns

\*An acceptable answer was based on the Likert responses corresponding to “somewhat acceptable,” “acceptable,” or “very acceptable” to post. ns, statistically nonsignificant.



**TABLE 6****Factors Related to Facebook Disclosure Among Participating Veterinarians With Facebook Profiles**

Factors related to sharing on Facebook	$\beta^*$	<i>P</i> value	95% Confidence interval
Need for popularity	0.208	0.002	0.075–0.342
Trust	0.314	0.000	0.173–0.454
Veterinary experience <sup>†</sup>	–0.125	0.000	–0.165 to –0.085
Awareness of consequences	–0.285	0.000	–0.380 to –0.191
Time spent on Facebook (min)	0.419	0.000	0.300–0.537

\*Standardized  $\beta$  coefficient.<sup>†</sup>Unit is by 5 yr increments.

privacy decisions. However, even information posted only to one's friends can be seen by all those friends (average number of friends was 158) and could be subsequently reposted, saved, or redistributed by any of those friends. If comments or photos are posted to a friend's "wall," those posts are then completely out of the control of the original person posting, and the posts have the potential to be viewed by anyone. Using the friends of friends setting, information can travel at a minimum to 12,482 people (a conservative estimate of 158 friends  $\times$  79 friends, given a 50% common friend overlap).

One way to control one's posts may be to use the "friends list" feature to reduce the risks associated with sharing.<sup>29</sup> Grouping friends into lists allows profile owners to categorize their friends on Facebook the way they likely do in reality. For example, one wouldn't necessarily share the same information with a best friend, a casual acquaintance, a romantic partner, one's parents, and one's colleague. Therefore, putting friends into different Facebook lists allows profile owners to avoid the social collision that currently is inherent in Facebook.<sup>27</sup> Another option is to keep a personal profile for friends and family and a business page for professional contacts.<sup>30</sup> The difficulty with those options is the time and effort required to manage two profiles and they are not foolproof since one cannot control the privacy settings of one's friends or friends of friends.

Less veterinary experience also predicted more disclosure on Facebook, suggesting that members of the profession that are early in their careers are at greater risk of experiencing the negative effects associated with posting information on Facebook, which is consistent with previous research.<sup>16</sup> Individuals that have been in practice for a longer time may have developed some controlled behaviors regarding disclosing workplace information, which is consistent with research into the nature of professionalism and how it develops over time and with experience.<sup>31</sup> In contrast, when acceptability evaluations by veterinarians in the

current study and those of student veterinarians in another study conducted by the authors are juxtaposed, the potential impact of education efforts is apparent.<sup>32</sup> In the current study, 14.5% of veterinarians versus 1.3% of student veterinarians believed it was acceptable to post photos of clients' animals on Facebook. Similarly, 18% of veterinarians in this study versus 6.5% of student veterinarians believed it was acceptable to post comments about clinical cases.<sup>32</sup> Those findings suggest that although experience may be a factor in limiting veterinarians' personal disclosures online, specific and targeted education regarding social media use for veterinary professionals may be of value across all cohorts. Given that veterinary students and veterinarians should have a similar understanding of their professional practice standards, social media may present a new challenge to individuals in maintaining these standards. Student veterinarians may have been more likely to encounter either formal or informal education around issues of client confidentiality with respect to online posting during their professional training, whereas such education is less likely for veterinarians that have been in practice for several years already. It seems reasonable to suggest that specific education may be of value for all veterinary professionals, especially in light of older cohorts' growing use of social media such as Facebook.<sup>5</sup>

Even within the current study, differences in perceptions of acceptability were found among veterinarians with Facebook profiles and those without profiles, such that a greater proportion of Facebook profile owners felt it was acceptable to "vent" about work and to post comments about work on Facebook than did those without Facebook profiles. Additionally, with respect to accountability, a significantly smaller proportion of those with Facebook profiles felt that veterinarians should be accountable for unprofessional behavior online. Perhaps the latter finding demonstrates how individuals with Facebook profiles may be conflicted when social and popularity needs come up against the need to protect themselves online. That is, individuals disclose personal information to meet social needs, but then might later learn that those disclosures may be used against them.<sup>33</sup> Alternatively, other research suggests that e-professionalism is something distinct from general professionalism, perhaps because the pervasive use of social media means one is developing a professional identity in the context of public exposure, with the risk that errors can be made public within hours.<sup>18</sup> Regardless of the reason, it appears that people who have Facebook profiles may be different in some ways than those who do not, and that there are varying views in society about what is considered acceptable online etiquette, with no clear norm established as yet. Because social media, such as Facebook, are widely used communication

tools, resources should perhaps be directed toward education about the above-mentioned issues so that veterinarians may learn to proactively protect their professional and personal image online as a component of their professional education and maximize the social benefits of personal Facebook use while limiting the risks.

In this study, both time spent on Facebook and awareness of consequences were related to disclosure. The more time individuals spent on Facebook, the more they tended to disclose or share on Facebook, suggesting that individuals are influenced by their experiences online, such as other people's posts. For example, an individual that is at first reticent to post personal information may become more willing to do so after spending time on Facebook and viewing comments and photos posted by their friends. One researcher suggests that friends and their posts determine the context of what individuals themselves will post on social networking sites.<sup>27</sup> That suggestion seems reasonable given that group identity is a major factor in the development of a Facebook identity.<sup>34,35</sup> Still, other evidence suggests a Facebook "disinhibition" effect where the lack of social cues in computer-mediated communication causes people to lower their adherence to social behavior norms and feel more free to say things they wouldn't say in face-to-face contact.<sup>36</sup> Online environments may give people a sense of anonymity and invisibility that is enhanced by the lack of established social norms for online behavior. Nevertheless, veterinarians in this study that were aware of the consequences of posting content to Facebook were less likely to disclose personal information, which provides some indication of where efforts to reduce the risks of disclosure might be focused in the future. Although social media policies are a reasonable first step, they may present legal risks if the policy is too broad, restricting employees' free speech.<sup>37</sup> Regulators, professional associations, and employers may also choose to provide continuing education opportunities for all veterinary personnel that address the real consequences of Facebook disclosure. Such opportunities could also improve the level of Facebook privacy know-how among veterinary staff.

There have been several legal cases related to job loss as a result of comments and photos posted to Facebook that may put consequences in context for veterinarians using Facebook.<sup>38</sup> Of particular concern is that the legal landscape with respect to Facebook is still novel and ambiguous so anyone involved in such a case draws significant and unwanted attention across the Internet. Given that a number of participants in this study felt it was acceptable to post comments about work and clinical cases on Facebook and perceived themselves as unaccountable for unprofessional Facebook postings, it is probable that such comments posted on Facebook could create problems for the individual

and/or the employer, leading to negative repercussions. A recent example of such a case involved an emergency room physician in the Boston area who posted comments about her workday with sufficient detail that one of her patients was identified by a community member. Despite posting no personally identifying information about the patient, the physician lost her job at the hospital and was disciplined and fined by her regulatory body.<sup>39</sup>

Practice owners have good reason to be concerned about the practice image and reputation, so it is fitting that they provide training for employees about social media use in and out of the professional setting. Training is especially important when a veterinary professional's personal Facebook profile is explicitly linked to his or her employer's Facebook practice page as part of the veterinary practice marketing effort. Over half of the respondents in this study reported that their practices had a Facebook page, suggesting that a substantial portion of the veterinary profession has embraced Facebook to enhance client relationships. A drawback, however, is that the risks associated with blurring the boundaries between the private and the professional will be heightened for individuals and practices. Such blurring contributes to the ambiguous context in which people make decisions to post photos and comments and adds to the difficulty that even responsible individuals will have in making posting decisions if they want to actively engage others on Facebook. Similar challenges have been experienced by other health professionals that seek the benefits of marketing and reputation development online, but must manage the attendant risks to protect that reputation.<sup>40</sup> Today's consumers of health services search online for professional services even if they receive a word of mouth referral.<sup>7</sup> They give significant weight to online reputation and transparency, which in turn demands both effort and caution on the part of the professional.<sup>41,42</sup>

## Conclusion

This study describes the use of Facebook by members of the veterinary profession, including their attitudes toward privacy and sharing information online. There is the possibility that this study selected for individuals that are more comfortable with computers and are also more likely to use Facebook. However, surveys of access to the Internet report a high level of Internet availability and of social network use in general, and a previous study of veterinarians found a ratio of Facebook users to nonusers similar to that found in this study.<sup>5,16,43</sup> Nevertheless, the primary goal of this study was to explore the attitudes of veterinarians that use Facebook. Results of this study will be of interest to those wishing to proactively protect their own image and reputation (as well as that of the veterinary profession) as social



media sites such as Facebook continue to be used as communication and marketing tools, both personally and professionally. To their credit, many veterinary practices are using Facebook to enhance client relationships and attract new clients; however, significant attention is given to the benefits of Facebook as a practice management tool, with relatively little attention paid to managing the reputational risks associated with its use. This study suggests that the use of Facebook by veterinary professionals and practices is neither simple nor merely a matter of common sense. Facebook poses a complex and challenging opportunity. It provides benefits to veterinarians as social individuals and to veterinary clinics as a practice enhancement tool, but the convergence of professional and private lives on Facebook invites risks to reputation that must be foreseen and managed. This study shows that 24% of veterinarians surveyed were planning to change their approach to Facebook based on the survey information alone, suggesting that educational opportunities may be of value. Generating awareness of some of the consequences of sharing information on Facebook offers a potential route toward managing those risks and enhancing the benefits to all stakeholders. ■

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#### FOOTNOTES

- <sup>a</sup> SurveyMonkey; SurveyMonkey, Palo Alto, CA.
- <sup>b</sup> SPSS version 19.0; SPSS Inc., Chicago, IL
- <sup>c</sup> Newsfeed is a constantly updated list of the activities of Facebook “friends” that typically includes profile changes such as photos or relationship status, upcoming events, birthdays, and other status updates. Profile owners are given the ability to control some information though other pieces are controlled by Facebook default settings and cannot be changed. Information on Newsfeed is available at: <http://www.thedailybeast.com/articles/2010/10/18/the-facebook-news-feed-how-it-works-the-10-biggest-secrets.html>. Accessed April 21, 2014.

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