

Logistic analysis of responses to the 2018 survey of AABP members about gender bias

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Introduction

In 2018, a survey regarding member perceptions related to gender bias encountered in clinical practice settings was made available to the members of the American Association of Bovine Practitioners. The definition of gender bias included with the survey was “when a member of 1 gender is advantaged or disadvantaged for the reason of their gender”.

Materials and Methods

Survey questions were designed to capture general descriptive information, personal experiences when hired in a veterinary practice and as a veterinary practitioner, and experiences of veterinarians who have hired practice associates. Responses to free-text questions and comments are reported in a separate abstract. Access was through the AABP website. Any member identification used to access the survey was not meshed with data. The survey was deemed exempt from review by the Institutional Review Board at Kansas State University.

Survey responses about those experiencing client gender bias in their current practice, client gender bias experienced in the first year of practice, employer gender bias in their current practice, and first year employer gender bias were categorized to binomial (yes/no) from discrete continuous responses (0 to 10 scales) for use in model prediction. The binomial outcomes were derived from survey responses of 0 as no gender bias and those marking any other response as experiencing gender bias; the model then predicted a probability of experiencing gender bias for each of the outcomes and associated factors. Factors such as graduation year, gender, first of gender in a practice, pre-college community size, post-college community size, food animal background, and practice activities were categorized and evaluated as covariates for potential association with each outcome. A multivariable generalized logistic model was developed for each outcome including covariates from the survey, with the final model including variables with a significance level of $P < 0.05$.

Results

A total of 207 survey respondents provided responses for all factors being evaluated and were included in the analysis, including 99 women and 108 men.

The graduation year was found to be significantly associated with client gender bias in their current practice and this effect was modified by gender. Women showed a significant increase in likelihood to observe current client gender bias from graduating before 1990 (0.33 SE 0.14) to graduating in 2011 to 2018 (0.95 SE 0.03). Men were more similar throughout, with those graduating before 1990 (0.45 SE 0.07) seeing slightly less current client gender bias than those graduating in 2011 to 2018 (0.68 SE 0.11). Regarding client gender bias within the first year of practice, graduation year and gender were associated. Graduation year tended to increase the risk of client gender bias over time, with those graduating before 1990 (0.70 SE 0.07) experiencing less client gender bias in the first year of practice than those graduating in 2011 to 2018 (0.87 SE 0.05). Women tended to see more client gender bias in the first year of practice (0.95 SE 0.02) compared to men (0.60 SE 0.06).

There were no significant associations to employer gender bias in their current practice, but employer gender bias in the first year of practice was found to be significantly associated with gender. Men were roughly half as likely (0.31 SE 0.04) to observe employer gender bias in the first year of practice compared to women (0.65 SE 0.05).

Significance

The survey data indicated that gender and graduation year were significantly associated with encountered client and employer gender bias in the current practice, as well as client and employer gender bias in the first year of practice. The results support the conclusion that gender bias is encountered by our veterinary colleagues, with more being perceived by more recently graduated women.