



Gil Dutra Furtado^{1*} 

Abstract

The communication between animal patient, owner and veterinarian proves to be a point of outstanding importance, which can influence many real developments that affect the general quality of all involved. A relatively high risk of interaction was described between veterinarians, which produced impacts on the relationship of these mentioned individuals, demonstrating how important the study and comprehensive research is to prevent certain relationships that influence the professional action of the veterinarian, the guardian, and the main individual, which is the animal patient. Seeking to elucidate these aspects, this article explains, in the light of psychobiology and psychopedagogy, factors such as perceived stress, anxiety, depression, emotional suffering, emotional exhaustion, personal fulfillment, secondary traumatic stress and satisfaction through compassion, looking for associations between satisfaction of the client and measures of welfare of the veterinarians, under the action of the treatment of the animal patients. The need for greater attention to this topic, so important and so present in the life of the veterinary medical professional, is highlighted.

Keywords: Psychobiology. Veterinarian. Psychopedagogy.

¹Maurício de Nassau University Center, João Pessoa, Paraíba, Brazil

*Corresponding author: gdfurtado@hotmail.com

Submitted on: 15 Jun. 2023

Accepted on: 11 Aug. 2023

Published on: 31 Aug. 2023



1 Introduction

A relatively high risk of mental health problems has been described among veterinarians. However, few studies have been done and published addressing this reality and the impact that veterinary mental health can have on animal clients and patients. This association is important due to the many realities that animal health professionals are exposed to, which can lead them to stressful professional conditions that may interfere with the quality of the provided clinical care (FURTADO, 2020).

Factors such as resilience, perceived stress, anxiety, depression, emotional suffering, emotional exhaustion, personal fulfillment, burnout (psychic disorder characterized by a state of emotional tension and stress caused by exhausting work conditions), secondary traumatic stress and compassion satisfaction bring situations that are problematic for people. This situation is not different with veterinarians. The associations between customer satisfaction and measures of mental health of veterinarians, as well as the health reality of animal patients, are strongly influenced by the well-being of the professional (KANJI et al., 2012; BAINS, 2015).

Some works suggest an impactful relationship between the mental well-being of a veterinarian and the results experienced by his clients. In turn, customer satisfaction can influence customer adherence, and this is the revenue of the business in the veterinary sector (KANJI et al., 2012; BAINS, 2015).

2 Material and Methods

An extensive literature review was carried out on the factors involved in the adaptation syndrome found in behavior, psychobiology and psychopedagogy, including the interpretations provided by veterinarians on this topic.

This activity was carried out by a student of the 10th period of the UNINASSAU University, João Pessoa, Paraíba, from the course of Veterinary Medicine.

This article represents a study based on the review of the specific literature that deals with ethology, psychobiology and psychopedagogy.

It synthesizes information available in electronic databases such as GOOGLE™ and GOOGLE SCHOLAR™, using keywords such as “Behavior”, “Tutors”, “Environmental perception”, and “Veterinary Medicine”. The relevant literature was read critically to extract the most important issues (GIL, 2008).

3 Results and Discussion

The described behaviors can be perceived by words and also by gestures of each professional, leading to reflection on the importance of the behavior of each veterinarian in his work environment. The personal accomplishment of the veterinarian is of great importance and is positive for the satisfaction of the client who is served. With regard to mental health, points such as perceived stress, anxiety, and emotional exhaustion are closely linked to the reality of the professional (ARGENTERO; DELL'OLIVO; FERRETTI, 2007; HALBESLEBEN; RATHERT, 2008; WILLIAMS et al., 2009).

Even when the veterinarian is happy for being successful in the treatment, the points listed are present in the interaction, because all the effort and work done ends up having a side reaction, which in many cases is negative. These relationships are somewhat unexpected, given the more intuitive relationships reported in human health, where positive measures of mental health have commonly been associated with relatively high patient satisfaction; negative measures of mental health are often correlated with lower satisfaction (ARGENTERO; DELL'OLIVO; FERRETTI, 2007; HALBESLEBEN; RATHERT, 2008; WILLIAMS et al., 2009).

The causes for these associations, once reflected upon, may be due to verbal and non-verbal behaviors of veterinarians. Observing the reaction of the owner, in a health context, it is noticeable that the attitude of the animal patient serves as a key attribute (or identifier) of the owner's satisfaction. Examples include the friendliness and approachability of the veterinarian. In addition, the tone of voice of the veterinarian reflects the level of anxiety or concern, and this is reported to be associated with a history of complaints by owners. Such unsatisfactory interactions also likely reflect dissatisfaction with the treatment of the animal patient in the place of care treatment (AMBADY et al., 2002; WILLIAMS et al., 2009; RUSSELL; BRICKELL, 2015; NG; LUK, 2019).

It is important to evaluate the satisfaction of the tutor and the veterinarian, considering measures of verbal and non-verbal behaviors, as possible indicators of satisfaction for both. Such factors may affect associations with measures of mental health of veterinarians (AMBADY et al., 2002; WILLIAMS et al., 2009; NG; LUK, 2019; RUSSELL; BRICKELL, 2015).

Among veterinarians, empathy and empathetic behaviors have a well-documented association with owner satisfaction, but they are also hypothesized to increase the risk of burnout or compassion fatigue. This may result in an unexpected inverse association between the owner's mental health and the veterinarian's satisfaction.

Veterinarians with high levels of empathy may have higher levels of customer satisfaction, but they will also experience a higher risk of mental health issues due to emotional labor. This may also explain the higher level of customer satisfaction in veterinarians with high scores in anxiety and emotional exhaustion (POLLAK et al., 2011; NEWTON, 2013; LAFRENIERE et al., 2016; SAMRA, 2018).

In contrast to negative measures of mental health, veterinarian compassion satisfaction has a negative relationship with client satisfaction at various time points, with a more positive association with compassion satisfaction. Recent research on sources of stress in the veterinary profession has drawn attention to the ethical conflict in the veterinarian-client-patient relationship, highlighting the importance of differentiating between the veterinarian-patient relationship and the veterinarian-client relationship (MOSES; MALOWNEY; WESLY BOYD, 2018).

It is possible, for example, that while veterinarians derive satisfaction from empathizing with their animal patients, client satisfaction is more dependent on client-directed expressions of empathy. Other studies may focus on distinguishing veterinary feelings of compassion, satisfaction and empathy arising from their treatment of animal patients, and those feelings derived from their work with human clients (McARTHUR; FITZGERALD, 2013).

Another relevant point in the interaction between veterinarians, guardians and animal patients is gender. It was observed that the interaction between age and gender of the veterinarian appears as an important factor in customer satisfaction, and often impacted the magnitude of the association between customer satisfaction and mental health measure. The age of the veterinarian emerges with a positive association with customer satisfaction. Research on physician-patient age suggests that the veterinarian's gender may impact guardian behavior (HALL; ROTER, 1998; BYLUND; MAKOUL, 2002).

Female veterinarians are more likely to communicate a high degree of empathy, and their patients' satisfaction is more dependent on this display of empathy compared to male veterinarians (HALL; ROTER, 1998; BYLUND; MAKOUL, 2002).

The veterinarian's age can be perceived as work experience or skill, which is associated with greater tutor satisfaction. Furthermore, the veterinarian's age seems to mediate the negative association between burnout, which is stronger among young physicians. As with gender, the veterinarian's age affects both the professional's behavior and the tutor's expectations, as well as the veterinarian's behavior and communication style.

More experienced veterinarians may also experience less mental and emotional impact based on the satisfaction or dissatisfaction of their clients, compared to younger ones (CHEN; ZOU; SHUSTER, 2017; PANAGIOTI et al., 2018).

Observations have shown that aspects of veterinarian-tutor communication are strongly linked to the perception of social class. Owners with higher levels of education seem to place a greater value on pet-centered care and tend to be more active participants in pet care. On the other hand, tutors who perceive themselves as having a lower socioeconomic status than the veterinarian may be less likely to ask questions and participate in decisions about their Pet's treatment (CHEN; ZOU; SHUSTER, 2017; PANAGIOTI et al., 2018).

The time that the tutor has known the veterinarian has a strong relationship with the satisfaction of the tutor and has a strong impact on the mental health of the veterinarian. This fact can be explained by the patient always having the services of the same veterinary professional for many years and thus being more easily satisfied with the care. Veterinarians who interact with a long-term client may behave or communicate differently than with a new client. Veterinarians who are satisfied with their clinical environment may be less likely to seek employment elsewhere and are therefore more likely to develop long-term relationships with clients (SINGH et al., 2018).

Thus, general satisfaction of the client has a significant impact on the mental health of the veterinarian. This can be explained by the "psychopedagogical" nature of the relationship between the veterinarian and the tutor. Among veterinarians, several aspects of the physician-guardian relationship have been associated with professional satisfaction with consultations, including the number of previous consultations with the same patient (SUCHMAN et al., 1993; SHAW et al., 2012; POLACHEK; WALLACE, 2018).

Likewise, the satisfaction of veterinarians with the veterinarian-tutor-animal patient relationship predicts their overall satisfaction with the consultation. Building relationships between tutors and their assisted pets demonstrates a strong contribution to compassion satisfaction, but also provokes compassion fatigue in the professional. This may explain, in part, why the relationship between veterinary mental health and client satisfaction it is so complex (SUCHMAN et al., 1993; SHAW et al., 2012; POLACHEK; WALLACE, 2018).

Conducted research suggests that if owner satisfaction affects veterinarian mental health, clinical-level interventions to improve client satisfaction would have the potential to positively impact veterinary mental health.

In this case, the clinic can have a valuable role to play in improving the mental health of the veterinarian, instituting practices that can increase the satisfaction of the owner and his pet (HORROCKS; ANDERSON; SALISBURY, 2002; KONDASANI; PANDA, 2015; PYATT et al., 2017).

For example, full integration for professionals such as health care team members has been suggested to improve service quality. Veterinary nursing professionals can play an important role in the primary care setting, providing care equivalent to that of veterinarians in many cases. These veterinary technicians could also assume a greater role in client communication, education and consultation (HORROCKS; ANDERSON; SALISBURY, 2002; KONDASANI; PANDA, 2015; PYATT et al., 2017).

Most small animal veterinary practices rely heavily on a small business model and customer satisfaction is an important determinant of customer loyalty (HORROCKS; ANDERSON; SALISBURY, 2002; KONDASANI; PANDA, 2015; PYATT et al., 2017).

Research results suggest that immediate customer satisfaction after consultation is based mainly on the quality of communication and interaction between veterinarian and tutor. On the other hand, customer satisfaction surveys carried out after the end of treatment are exposed by the results obtained in the health of the animal patient (JACKSON; CHAMBERLIN; KROENKE, 2001; BYLUND; MAKOUL, 2002).

Faced with this reality, it is observed that other factors contribute to the mental health of the veterinarian, some of which are the structure of the work environment, accumulation of functions, and work overload (OLIVEIRA, 2020).

However, the need to obtain a source of income, even if incompatible with the performance of the professional, induces the submission of veterinary medical professionals to problematic working conditions, leading to personal and professional devaluation (OLIVEIRA, 2018).

Nonetheless, many veterinarians would not like to practice another profession, demonstrating satisfaction in practicing veterinary medicine because they experience contentment and well-being in the care of their patients, within the experience of “veterinarian, guardian and animal patient”. These feelings that professionals experience stand out from the negative feelings of professional devaluation. Under these conditions, rescuing the profile of veterinarians and feelings of professional appreciation, it is clear that satisfaction stands out in the theme related to direct dealing with animals, favoring their mental health (VELEDA; MÜLLER, 2022).

4 Conclusions

In this article it is clear that there is variation in tutor satisfaction, in the potential for additional impacts on customer compliance, in the income from the veterinarian and/or the clinic, as well as in the satisfaction with the career of the veterinarian.

The correlation of these factors with the well-being of the studied veterinarians corroborates the notion that greater attention must be given to this topic. This represents a very important aspect for the life of the veterinary professional.

CREDIT AUTHORSHIP CONTRIBUTION STATEMENT

GDF participated in all stages of the article, applying his experience and practice of psychopedagogical and psychobiological performance.

DECLARATION OF INTEREST

The author declares that he is not subject to any kind of conflict of interest with the participants or any other collaborator, directly or indirectly.

FUNDING SOURCE

This article has been produced without financial contribution for its development.

ACKNOWLEDGEMENTS

The authors thank COOPAGRO and UNINASSAU, João Pessoa, Paraíba, Brazil.

REFERENCES

- AMBADY, N.; LaPLANTE, D.; NGUYEN, T.; ROSENTHAL, R.; CHAUMETON, N.; LEVINJON, W. Surgeons' Voice Tone: A Clue to the History of Negligence. *Surgery*, v. 132, n. 1, p. 5-9, 2002. Available from: <https://doi.org/10.1067/msy.2002.124733>.
- ARGENTERO, P.; DELL'OLIVO, B.; FERRETTI, M.S. Staff burnout and patient satisfaction with the quality of dialysis care. *American Journal of Kidney Diseases*, v. 51, n. 1, p. 80-92, 2008. Available from: <https://doi.org/10.1053/j.ajkd.2007.09.011>.

BAINS, B.; Measuring Customer Satisfaction. *In Practice*, v. 37, n. 4, p. 203-205, 2015. Available from: <https://doi.org/10.1136/inp.g5286>.

BYLUND, C. L.; MAKOUL, G. Empathic communication and gender in the doctor-patient encounter. *Patient Education and Counseling*, v. 48, n. 3, p. 207-216, 2002. Available from: [https://doi.org/10.1016/s0738-3991\(02\)00173-8](https://doi.org/10.1016/s0738-3991(02)00173-8).

CHEN, J. G.; ZOU, B.; SHUSTER, J. Relationship between patient satisfaction and physician characteristics. *Journal of Patient Experience*, v. 4, n. 4, p. 177-184, 2017. Available from: <https://doi.org/10.1177/2374373517714453>.

FURTADO, G.D. Report of practical activities in a discipline of study animal behavior in a post-graduate program from the Federal University of Paraíba, Brazil [*Relato das atividades práticas em uma disciplina de estudo do comportamento animal em um programa de pós-graduação da Universidade Federal da Paraíba, Brasil*]. *Environmental Smoke*, v. 3, n. 1, p. 79-086, 2020. Available from: <https://doi.org/10.32435/envsmoke.202031079-086>.

GIL, A.C. Métodos e Técnicas de Pesquisa Social. 6 ed. São Paulo, Atlas, 2008. Available from: <https://ayanrafael.files.wordpress.com/2011/08/gil-a-c-mc3a9todos-e-tc3a9cnicas-de-pesquisa-social.pdf>. Accessed: 5 Jun. 2023.

HALBESLEBEN, J.R.B.; RATHERT, C. Linking physician burnout and patient outcomes: exploring the dyadic relationship between physicians and patients. *Health Care Management Review*, v. 33, n. 1, p. 29-39, 2008. Available from: <https://doi.org/10.1097/01.HMR.0000304493.87898.72>.

HALL, J.A.; ROTER, D.L. Medical communication and gender: a research summary. *Journal of Gender-Specific Medicine*. v.1, n.2, p39-42, 1998. Available from: <https://pubmed.ncbi.nlm.nih.gov/11281011/>. Accessed: 5 Jun. 2023.

HORROCKS, S.; ANDERSON, E.; SALISBURY, C. Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors. *BMJ-British Medical Journal*, v. 324, n. 7341, p. 819-823, 2002. Available from: <https://doi.org/10.1136/bmj.324.7341.819>.

JACKSON, J.L.; CHAMBERLIN, J.; KROENKE, K. Predictors of patient satisfaction. *Social Science & Medicine*, v. 52, n. 4, p. 609-620, 2001. Available from: [https://doi.org/10.1016/S0277-9536\(00\)00164-7](https://doi.org/10.1016/S0277-9536(00)00164-7).

KANJI, N.; COE, J.B.; ADAMS, C.L.; SHAW, J.R. Effect of veterinarian-client-patient interactions on client adherence to dentistry and surgery recommendations in companion-animal practice. *Journal of the American Veterinary Medical Association*, v. 240, n. 4, p. 427-436, 2012. Available from: <https://doi.org/10.2460/javma.240.4.427>.

KONDASANI, R.K.R.; PANDA, R.K. Customer perceived service quality, satisfaction and loyalty in Indian private healthcare. *International Journal of Health Care Quality Assurance*, v. 28, n. 5, p. 452-467, 2015. Available from: <https://doi.org/10.1108/IJHCQA-01-2015-0008>.

LAFRENIERE, J.P.; RIOS, R.; PACKER, H.; GHAZARIAN, S.; WRIGHT, S.M.; LEVINE, R.B. Burned out at the bedside: patient perceptions of physician burnout in an internal medicine resident continuity clinic. *Journal of General Internal Medicine*, v. 31, n. 2, p. 203-208, 2016. Available from: <https://doi.org/10.1007/s11606-015-3503-3>.

McARTHUR, M.L.; FITZGERALD, J.R. Companion animal veterinarians' use of clinical communication skills. *Australian Veterinary Journal*, v. 91, n. 9, p. 374-380, 2013. Available from: <https://doi.org/10.1111/avj.12083>.

MOSES, L.; MALOWNEY, M.J.; WESLY BOYD, J. Ethical conflict and moral distress in veterinary practice: A survey of North American veterinarians. *Journal of Veterinary Internal Medicine*. v. 32, n. 6, p. 2115-2122, 2018. Available from: <https://doi.org/10.1111/jvim.15315>.

NEWTON, B.W. Walking a fine line: is it possible to remain an empathic physician and have a hardened heart? *Frontiers in Human Neuroscience*, v. 7, article 233, 2013. Available from: <https://doi.org/10.3389/fnhum.2013.00233>.

NG, J.H.Y.; LUK, B.H.K. Patient satisfaction: concept analysis in the healthcare context. *Patient Education and Counseling*, v. 102, n. 4, p. 790-796, 2019. Available from: <https://doi.org/10.1016/j.pec.2018.11.013>.

OLIVEIRA, A.L. *O desemprego dos jovens*. 2018. 29 f. Trabalho de Conclusão de Curso (Bacharelado em Ciências Econômicas) – Universidade de Brasília, Brasília, 2018. Available from: <https://bdm.unb.br/handle/10483/24489>. Accessed on: 25 Feb. 2023.

OLIVEIRA, D.C.B.S. **O papel do Médico Veterinário na Saúde Pública e sua visibilidade como profissional de saúde: experiência e reflexões.** 2020. 39 f. Trabalho de Conclusão de Curso (Especialização em Saúde Pública) – Escola de Saúde Pública do Estado de Minas Gerais, Minas Gerais, 2020. Available from: <http://repositorio.esp.mg.gov.br:8080/xmlui/handle/123456789/356>. Accessed on: 3 Mar. 2023.

PANAGIOTI, M.; GERAGHTY, K.; JOHNSON, J.; ZHOU, A.; PANAGOPOULOU, E.; CHEW-GRAHAM, C.; PETERS, D.; HODKINSON, A.; RILEY, R.; ESMAIL, A. Association between physician burnout and patient safety, professionalism, and patient satisfaction: a systematic review and meta-analysis. *JAMA Internal Medicine*, v. 178, n. 10, p. 1317-1331, 2018. Available from: <https://doi.org/10.1001/jamainternmed.2018.3713>.

POLACHEK, A.J.; WALLACE, J.E. The paradox of compassionate work: a mixed-methods study of satisfying and fatiguing experiences of animal health care providers. *Anxiety, Stress, & Coping*, v. 31, n. 2, p. 228-243, 2018. Available from: <https://doi.org/10.1080/10615806.2017.1392224>.

POLLAK, K. I.; ALEXANDER, S. C.; TULSKY, J. A.; LYAN, P.; COFFMAN, C. J.; DOLOR, R. J.; GULBRANDISEN, P.; OSTBYE, T. Physician empathy and listening: associations with patient satisfaction and autonomy. *JABFM-Journal of the American Board of Family Medicine*, v. 24, n. 6, p. 665-672, 2011. Available from: <https://doi.org/10.3122/jabfm.2011.06.110025>.

PYATT, A.Z.; WRIGHT, G.H.; WALLEY, K.E.; BLEACH, E. Value co-creation in high-involvement services: the animal healthcare sector. *International Journal of Retail & Distribution Management*, v. 45, n. 5, p. 518-531, 2017. Available from: <https://doi.org/10.1108/IJRDM-11-2016-0209>.

RUSSELL, M.; BRICKELL, M. The “double-edge sword” of human empathy: a unifying neurobehavioral theory of compassion stress injury. *Social Sciences*, v. 4, n. 4, p. 1087-1117, 2015. Available from: <https://doi.org/10.3390/socsci4041087>.

SAMRA, R. Empathy and burnout in Medicine—acknowledging risks and opportunities. *Journal of General Internal Medicine*, v. 33, n. 7, p. 991-993, 2018. Available from: <https://doi.org/10.1007/s11606-018-4443-5>.

SHAW, J.R.; ADAMS, C.L.; BONNETT, B.N.; LARSON, S.; ROTER, D.L. Veterinarian satisfaction with companion animal visits. *Journal of the American Veterinary Medical Association*, v. 240, n. 7, p. 832-841, 2012. Available from: <https://doi.org/10.2460/javma.240.7.832>.

SINGH, S.; EVANS, N.; WILLIAMS, M.; SEZGINIS, N.; BARYEH, N.A.K. Influences of socio-demographic factors and health utilization factors on patient-centered provider communication. *Health Communication*, v. 33, n. 7, p. 917-923, 2018. Available from: <https://doi.org/10.1080/10410236.2017.1322481>.

SUCHMAN, A.L.; ROTER, D.; GREEN, M.; LIPKIN Jr, M.; THE COLLABORATIVE STUDY GROUP OF THE AMERICAN ACADEMY ON PHYSICIAN AND PATIENT. Physician satisfaction with primary care office visits. *Medicine Care*, v. 31, n. 12, p. 1083-1092, 1993. Available from: <https://doi.org/10.1097/00005650-199312000-00002>.

VELEDA, P.A.; MÜLLER, D.C.M. The professional profile and feeling of appreciation of veterinarians working directly with assistance to patients in the municipality of Santa Maria/RS/Brazil [*Perfil profissional e sentimento de valorização dos médicos veterinários atuantes na assistência direta aos pacientes no município de Santa Maria/RS/Brasil*]. *Research, Society and Development*, v. 11, n. 3, p. e9411326161 (1-10), 2022. Available from: <https://doi.org/10.33448/rsd-v11i3.26161>.

WILLIAMS, E.S.; LAWRENCE, E.R.; SYDOW CAMPBELL, K.; SPIEHLER, S. The effect of emotional exhaustion and depersonalization on physician-patient communication: A theoretical model, implications, and directions for future research. In: SAVAGE, G.T.; FOTTLER, M.D. (Ed.). *Biennial Review of Health Care Management: Meso Perspective* (Advances in Health Care Management, Vol. 8). Bingley: Emerald Group Publishing Limited, 2009. p. 3-20. [https://doi.org/10.1108/S1474-8231\(2009\)0000008005](https://doi.org/10.1108/S1474-8231(2009)0000008005).