

CHAPTER 1 INTRODUCTION

1.1 Background

Veterinarians can consciously participate in effecting cultural change that can address recycled, abandoned, and throw-away pets, and the abuse, neglect, entrapment, and fear that is the burden of far too many dogs. Understanding the dog from the evolutionary or ethological perspective of a dog in a way that addresses their cognitive, social, and mental health needs. Engaging in a partnership with our patients based on shared and clear communication. For such an approach to succeed, understand that all our interactions with animals are based on the animal's ability to translate what we are signalling to them into a language or application that is meaningful to them. The animal then must translate the resultant response back into signals that we, as humans, can understand. This is the rule for our interactions with our patients, and it is the rule for studies of the ability to "learn language" in primates and dogs (Overall, 2013).

A visit to a veterinary clinic can be very stressful for the dog, and stress may interact with pain. The aim of this study was to observe the behaviour of dogs in a veterinary clinic and to correlate it with subjective stress assessments by different persons. Systems have already been developed to assess stress in dogs. With a standardize dogs scoring from 0-5 depend on the dog's behaviour and appearance (Lind *et al.*, 2017). Although various situations tend to elicit different patterns of stress responses, there are also individual differences in stress responses to the same situation and are therefore difficult to separate.

Visits to a veterinary clinic are also for routine checks, vaccination, or

an operation such as castration, on an otherwise healthy dog. They can, however, still be stressful for the dog (Hellyer *et al.*, 2007). Within the veterinary field, studies have shown that animals can respond to “the white coat effect” Understanding members of our own species can be difficult. Given the translations needed, understanding another species can mean that a long way to go. Veterinary care is an essential element of maintaining good welfare of companion animals. Great majority of dogs show signs of fear when visiting the veterinarian, making veterinary visits stressful also for their owners. Dogs may react based on earlier negative experiences in a clinic (Edwards *et al.*, 2019). Animals’ stress associated with the veterinary visit can distort physiological measurements, hamper the physical examination and, in case of aggression, pose a risk to the veterinary team (Riemer *et al.*, 2021).

Stress in animals is sometimes defined as when an animal is suffering a threat to its homeostasis, but with such a nonspecific response and variety of ways that an individual animal may try to cope (Moberg, 2000). It is not obvious how much agreement there should be between people when scoring stress. The advantage for an owner when assessing the level of stress in their dog is that they are very familiar with the dog’s normal behaviour and more likely to see deviations.

A veterinarian on the other hand is trained to recognize symptoms of stress but probably only sees the dog for a limited period, most likely in the examination room. Thus, the question arises of who the best person would be to score the dog and whether any of these subjective scorings would correlate with

the behaviour of the dogs in standardized tests designed to assess its reactions under pressure (Hydrino-Sandberg *et al.*, 2016). When measuring stress, it is usually suggested that a combination of behavioural and physiological measures is the most reliable approach (Schneiderman *et al.*, 2008). However, taking the physiological measures may in turn influence the dog's experience of the clinic, and there is a delay before the results of the analysis are available.

There is a clear need for more research in this area to evaluate the potential of developing a feasible, reliable scoring system for assessing stress in veterinary clinics. There are already several tests available to test the reactions of dogs in different situations. For example, the "Swedish Working Dog Association" uses the behaviour of dogs in standardized tests as an indicator of whether they have an appropriate personality to work in different services, such as rescue, guide dogs, and so forth. The test is nowadays called the "Dog Mentality Assessment" and consists of 10 separate subtests, which are performed outdoors in a specific order. Over the years, the different subtests have been evaluated and are now considered sufficiently validated that they are often used by researchers in other situations (Strandberg *et al.*, 2002). Other studies directed specifically at dogs in a clinic have shown that dogs in pain are less willing to eat (Downing, 2011). One might expect the same also in dogs that are stressed. It is known that the support of the owner can affect the behaviour of the dog, especially in a stressful situation (Darlene *et al.*, 2017). By assessing with the dog stress scoring, we can collect these data for any other further studies or research (Abdisa, 2017).

The importance of this research is for the dog owners, veterinary doctors and staff in a veterinary clinic. To further understand the behaviour of the animal patient during examination. It is stressful for the patient and animal to be examined properly and accurately when the animal is stressed. The patient might sometimes struggle, bite, growl, or scratch leading harm to the veterinarians from getting hurt. Veterinarians are also not able to fully examine properly the patient through palpation, percussion and auscultation methods used to detect clinical signs of abnormalities.

1.2 Problem Formulation

The formulation of problem is based on the background above, are there any sign of changes of stress when the dog patient visits from during home, during and after the consultation in a veterinary clinic?

1.3 Research Objective

The objective of this research is to determine are there any sign of changes of stress of each dog patient during home, during consultation and after consultation using the Table of stress scoring of dogs during clinic visits.

1.4 Benefit of Research

The benefit of the research is for veterinarian to have better understanding and assessment of their patient from biting, scratching and attacked by the patient. To also minimize casualties to the patient and veterinarians during medical practises. This research may also be able to identify what could be the underlying

factors to cause the patient to be stress or react into an aggressive way by using the Table of stress scoring of dogs during clinic visits to determine the stress score of the dog during home, during clinic consultation and after clinic consultation.

1.4.1 Theoretical benefit

This research could provide a theoretical basis for the development of research of stress scoring of dogs during clinic visits of 0-5. This scoring is used to apply during home, during and after the consultation in a veterinarian clinic for further understanding of the dog patient behaviour.

1.4.2 Practical benefit

The result of this research is expected to provide information for veterinarians to have a better understanding and reduce stress to their patients during clinic visits.

1.5 Theoretical Basis

Some dogs may experience short-lived or acute stressors, but other dogs may live with chronic stress. An enhanced awareness and understanding of stress, Feedback triggers, stress-related behaviours, and physiological stress consequences can help us identify and reduce canine stress and its negative health consequences (Schneiderman *et al.*, 2008). Dog behaviour as indicators of stress, such as piloerection, trembling, and panting Dogs may avoid eye contact or look away. Trembling and body shaking are often indicators of high psychological stress and could be accompanied by a lowered body posture, cowering, and hiding. As these symptoms shown and exerted by the dog during the clinic visit. The

researcher shall determine the intensity of the level of stress of the dog using the Table of Stress Scoring of Dogs During Clinic Visits of 0-5. Dogs with zero scores are calm and dogs with a score of 5 are in extreme stressed and need help. By recording the animal's responses at each visit, veterinary staff and owners can measure changes in the animal's behaviour to help maximise patient care, as well as reducing the levels of relinquishment/euthanasia of problem dogs. If the patient is extremely stressed and the exam is not medically urgent, it may be better to delay further evaluation and discuss anti-anxiety medications and behaviour modification with the client before the next visit (Lloyd, 2017).