

# Separating A Dog's Bite From Its Owner's Problem: - Conceptualising Behaviour Problems.

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## **Introduction:**

The classification of behaviour problems is a problematic area in both human and animal medicine. Elsewhere in these fields, diagnoses tend to be made on the basis of aetiology or an organic pathology. Those conditions for which such information is not available may be described by reference to their symptoms. The aim is to describe discrete entities by reference to any pathology, symptoms, progression and probable outcome. This approach is widely applied to disorders within the field of animal behaviour therapy, but is not universally applicable. Whilst an underlying pathophysiology in the traditional sense is recognised in many behaviour problems (Reisner, 1991; Mills, 1995), many patients do not fit neatly into the available categories of functional classificatory systems such as that proposed by Borchelt and Voith (1982). Medical models of animal behaviour problems have been proposed by a number of clinicians e.g. Pageat (1995). This recognises a greater potential for psychoactive agents in behaviour modification and an expanding role for the veterinarian. Thus we must be prepared to evaluate the potential for conditions such as involuntal depression, and dysthymia. The modest proposal of Tuber et al (1974) for animal clinical psychology is rapidly being superseded by a bold and exciting demand for animal clinical psychiatry. For the well-being of animals which are so afflicted, it is essential that the veterinary profession recognises and meets this call. Ideas borne out of psychiatry should complement those which are well established and largely developed from a sound base in experimental psychology. This will depend on the integration of good fundamental and applied research across the disciplines in order to develop the most valid construct for the range of behaviour problems encountered.

Some behaviour problems relate solely to the perceptions of the owner whereas others are genuine disorders of behaviour and form the focus of this paper. This is not intended to diminish the importance of recognising the unique personal and "problematic" nature of all cases presented for treatment. The perceptions of the owner are what define the case as a behaviour problem and client counselling is an essential part of case management. Other disorders of behaviour may have been learned, reflect an underlying pathology or a certain physiological state or tendency. These conditions are not conceptually equivalent and if we wish to build a scientific consensus then it is important to evaluate the validity and reliability of the taxonomic system used to describe the disorders we encounter.

Standards for the application of diagnostic behaviour categories:

Martin and Bateson (1993) suggest that the validity of a behaviour measure depends on three factors:

**Accuracy:** This is the extent to which the measure can be made in an unbiased way. This is most effectively achieved by reference to descriptive as opposed to interpretive factors. Askew (1996) defines dominance aggression as "aggression directed towards family members in competitive situations or in response to what the dog perceives as dominant behaviour on the

part of the owner". Whilst the former part of this definition is relatively clearly defined the latter part, which refers to the animal's perception, is indeterminable and open to observer bias. Specificity: This is the degree to which the measure describes only what it is supposed to describe. Categories must be inclusive i.e. include all forms of the disorder and exclusive i.e. exclude all behaviours which are not part of the problem. Behaviours are not independent of the environment and so should not be described as such. The prelude to and consequences of a behaviour may be important descriptive factors which help us in the deductive process of diagnosis. Biochemical differences are apparent between individuals exhibiting certain behaviour patterns ( Reisner et al 1996) and may one day be useful diagnostic aids because of their specificity and accuracy.

Scientific validity: i.e. how meaningful is the measure? This is a subjective decision, but it may be argued that this should relate to the predictive value of the term used. Greater value may be obtained from measures which tell us more accurately how an animal is likely to behave in other circumstances or more precisely how the problem may be prevented. In the case of aggression, this has important implications as it allows us to identify individuals at risk and the prognosis for the case. It is interesting to compare the implications of two terms used to describe physically similar conditions i.e. "dominance aggression" and "generalised competitive aggression". The latter relates to a general learning phenomenon and all its associated limitations, whereas the former is more context specific but somewhat suggestive of a nativist view of behaviour. The term dominance aggression also leads to some management problems extending from a confusion with dominance ranks and hierarchies. ( Bernstein 1981)

The reliability of a measure is determined by a number of factors. These relate to its precision, consistency and the level of resolution. Disorders should be described in an unambiguous way at a level appropriate to the specificity of the treatment proposal and prognostic limitations. It is ridiculous to suggest that all aggressive behaviours should be grouped together as a single entity, since aggression is a heterogeneous concept (Moyer 1968). The treatment of predatory aggression is radically different to that which is associated with protection; similarly there is no point in subdividing behaviours into a multitude of syndromes which require the same principles of treatment and carry the same broad prognosis.

An important concern over categorical classificatory systems relates to their appropriateness for the conditions seen. Often they do not really fit into the categories proposed. Some diagnoses are frequently multiple e.g. dominance and possessive aggression ( Borchelt and Voith 1982) and may suggest validity problems with the system. At a practical level, clinicians may be tempted to apply a hierarchy to the diagnostic categories so that in such circumstances one condition takes precedence over another. If treatment were successful in such circumstances it would seriously call into question the value of the system.

#### Classification of problems by score:

Some disorders may be described more effectively by reference to a dimensional classificatory system. Here the patient is scored in relation to certain traits such as reactivity, sociability and emotionality. These scores incorporate the concepts of a normal range and abnormality. The latter may be expressed in a tendency towards a range of problem behaviours. Whilst this system has its merits, there is still controversy over the range of traits which should be used. Mills (In Press) argues that those with a biological basis are of most use, since they have the greatest external validity. Some progress towards a psychobiological model has been made (Zuckerman 1991) but this awaits evaluation in the veterinary clinical field. The use of a

dimensional system for the determination of behaviour disorders does however depend on a subjective judgement in order to determine what exactly constitutes a significant abnormality. Precise biologically based traits are not always necessary as tests may be developed and validated for a specific purpose other than the description of a behaviour disorder( e.g. Ledger and Baxter elsewhere in this publication). The dimensional system reflects well the complex of tendencies which underly an animal's behaviour and its use may not only be essential in the determination of specific disorders but also help in the identification of risk factors influencing other conditions.

### **Conclusion:**

Concepts will continue to be borrowed from experimental psychology and will continue to contribute much to companion animal behaviour therapy, but a medical model for some disorders is appropriate and should be incorporated into the assessment of an individual. This must, however, be done with care and understanding rather than by the vagaries of superficial similarity and fashion. Much work has been conducted at an experimental level through the development and use of animal models in psychopharmacy. It is our responsibility to see that this information is applied appropriately to our own discipline for the well-being of our patients and our clients.

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