

## Behaviour Therapy Techniques: A Need For Critical Evaluation

David Appleby<sup>1</sup> and Sarah Heath<sup>2</sup>

<sup>1</sup> *The Pet Behaviour Centre, Upper Street, Defford, Worcs, UK.*

<sup>2</sup> *Behavioural Referrals, 33, Hayman Road, Brackley Northants, UK.*

In an article entitled "Behaviour, Blasphemies and Balderdash" which was published in the CABTSG Newsletter ( Summer 1995. No, 10.) Daniel Mills stated that "...Certain outmoded ideas and misunderstandings, which are of relevance to the development of the discipline (of behaviour therapy), appear to stubbornly persist".

This valuable criticism of the anecdotal approach to pet behaviour therapy should prompt members of the profession to discard the outmoded ideas referred to, but identifying which elements are irrelevant or even counterproductive is not easy. The fact that they are used as part of overall treatment rationales that are generally effective can mask their lack of contribution, resulting in blind adherence to untested and unproven techniques. There is therefore a need to establish empirical evidence for the success of current methods and, in order to achieve such critical evaluation, it is necessary to formulate workable and reliable protocols. If this is not done treatment rationales that are totally inappropriate or perhaps detrimental to treatment efficacy, or even the animal's welfare, will continue to be used and passed from one generation of practitioners to the next.

Although much has been written about approaches to behaviour modification, a significant proportion of the literature is based on anecdotal evidence. Where case histories are written up and treatment rationales discussed, there is often a tendency to draw conclusions from a very small number of cases. Although of unquestionable interest to those involved in the field, such studies do not stand up to statistical analysis and the conclusions that can safely be drawn from them are limited. Over recent years, as the discipline of "behaviour therapy has gained recognition and respect, there has been an increase in a more scientific approach. Additionally the growing interest in pharmacological approaches to behaviour problems has resulted in a far more structured appraisal of behaviour therapy. As companies strive to obtain licences for psychoactive drugs within the veterinary market they are obliged to produce sound data which can be statistically analysed. In addition the firmly held belief that drug therapy alone is never sufficient to deal effectively with behaviour problems, results in the need for these companies to also evaluate the concomitant behavioural modification programmes. This aspect of evaluating treatment regimes poses many problems because recipe book approaches are not applicable to a field in which every case is individual and variations in client/animal profiles and environmental influences can dramatically modify the progression of the condition. However, if behavioural medicine is to develop further it is essential for current practice to be questioned and critically evaluated and no-one is better placed to achieve this than those working in the field.

These objectives are laudable enough, but their practical application is fraught with difficulties. Justification for treatment rationales comes, quite appropriately, from the principles of applied ethology, but formal assessment of efficacy is usually lacking. Evaluation of behaviour modification techniques in the form of controlled trials must begin by formulating realistic hypotheses and establishing workable investigation protocols. Over the years there

have been numerous attempts to accurately assess behaviour modification and many of these studies have highlighted the potential pitfalls in evaluating the techniques used. Recently Novartis Animal Health have been investigating the role of pharmacology and behavioural modification techniques in the treatment of separation related anxiety in dogs. This trial identified difficulties in assessing what is essentially an owner's subjective perception of the behavioural problem and has also proved the vital importance of establishing accurate and universally acceptable terminology in order to accurately determine the effectiveness of established treatment methods. The selection of subjects to be investigated using behavioural trials depends on a vigorous definition of the behavioural condition and rigid application of inclusion and exclusion criteria. Confusion over terminology can create enormous difficulties in the interpretation of results and diminish the value of behavioural studies on a world-wide basis. It is essential to eliminate as many variables as possible and focus on one specific behavioural condition, rather than try to study a wide range of similarly categorised behavioural patterns at one time. In the case of the Novartis trial the condition under review was separation related anxiety. This is an area which has invoked much debate within behavioural circles and controversy over diagnosis of "separation anxiety" necessitated the use of very strict defining criteria. Until recently the term "separation anxiety" has been applied to any case involving inappropriate behaviours when the owner is absent, but this can be a misleading label and it is now generally accepted that "separation related disorders" or "separation problems" are more accurate terms. Elimination, destruction and vocalisation in the owners absence have traditionally been accepted as the classic symptoms of separation anxiety, but although all of these symptoms can indeed occur in response to this type of anxiety they can also occur for a variety of other reasons. Determining the true cause of the behaviour is vital from a treatment point of view, because there is little benefit in treating a dog for anxiety when it is not in the least bit anxious, but also from a trial point of view because inaccurate diagnosis will invalidate the results. The fact that the owner is absent and the dog is showing inappropriate eliminative, destructive or vocal behaviour is not enough to reach a diagnosis of anxiety and an extensive behaviour history is required to determine the aetiology. In the Novartis study , selection of cases involved the strict use of inclusion criteria in order to determine an anxiety basis for the behavioural symptoms. Dogs needed to display at least one of the main presenting symptoms of separation anxiety:

- Destruction

- Elimination disorders

- Abnormal vocalisation

and in addition they also had to show the following signs of hyper attachment to their owner:

- Follows the owner - from room to room.

- Physical contact - dog tries to stay in physical contact, within a metre of owner when the owner is settled.

- Becomes distressed with increasing distance from owners when they are at home e.g. owner reports cannot get in bathroom or bedroom without the dog trying to follow them.

- Becomes distressed when owners attempt to leave - e.g. becomes agitated or depressed when owner puts coat and shoes on.

- Becomes over excited when owner returns - i.e. more pronounced than normal greeting behaviour.

To be suitable for the trial dogs needed to be over 6 months of age, to avoid anxiety attributable to maternal attachment, and the symptoms had to have been displayed for at least one month. Any drug treatment with a known action on the CNS had to be withdrawn two weeks, and any behaviour modification therapy one week, prior to enrolment on the trial.

Comprehensive exclusion criteria were also used to ensure that the separation related symptoms were not caused by other factors. For example dogs were excluded if they were:

- Less than six months of age

- Had shown signs of separation anxiety for less than a month

- Had received any behavioural drug in the last 14 days or behavioural therapy in the last 7 days.

- Were not fully house trained

- Exhibited destructive behaviour in front of the owners

- Exhibited excessive vocalisation associated with territorial behaviour.

In addition strict veterinary inclusion and exclusion criteria were applied.

After carefully selecting the patient with relation to the behavioural symptoms under investigation, detailed client selection is also needed. Application of behavioural techniques is largely outside the counsellor's control and progress monitoring depends upon accurate client reporting. Lack of motivation or accuracy on the part of the owner can be an appreciable problem in behavioural trial work and the possibility of either losing cases during the duration of the trial or invalidating data is increased if client selection is carried out effectively. Whatever the calibre of clients the success of reporting relies on the correct use of terminology in the questionnaires used for data collection. This should remove the possibility of ambiguity either in the information requested or in the interpretation of client observations. For example, in the Novartis trial clients were asked at each visit to compare the three symptoms of separation related anxiety to the first visit and use a scale of appeared, worsening, no change, improvement and disappearance to indicate the development of the behavioural problem. This sort of qualitative scale of assessment has been used extensively in behavioural studies, but it is open to subjective interpretation and the broad nature of the assessment categories can lead to problems. Setting definitions of such terms at the outset can avoid a great deal of confusion later on. In addition to the specific "separation related anxiety" symptoms owners in the Novartis study, were also asked about signs of generalised anxiety and these were assessed on the basis of being either present or absent. Although less open to misinterpretation this form of recording gives no indication of alterations in severity and therefore adds no information regarding the progression or regression of any generalised anxiety state. Hence it is important to consider what information the trial is endeavouring to collect before selecting appropriate terminology in the questionnaires. The selection of monitoring intervals is another important consideration when designing behavioural trials and the correct selection will depend on the condition under investigation. In addition in all cases long term treatment success needs to be considered and the form of follow up assessment should be established at the beginning of the trial.

Traditionally the interpretation of behavioural results has been subjective and, in order to further the scientific credibility of the discipline, accurate data analysis is essential. This will involve the collection of good quality data that can undergo accurate statistical analysis. Such an approach inevitably involves funding and there may be inherent difficulties in attracting sponsorship for some projects, but without a good level of investment in behavioural trials

traditional views will be clung to without any sound scientific justification and progression of the behavioural discipline will be stifled. 'Animal Behaviour Therapy is the application of scientific principles. to modify all animal's behaviour for the ultimate benefit of both the animal and the owner' (Mugford 1995). In order to ensure that scientific principles are genuinely effective there is a need for regular and accurate analysis of the outcome of their application. Such analysis is fraught with problems but it is not impossible to achieve. Those involved in the profession who genuinely strive for its acceptance as a genuine scientific discipline must promote controlled investigation and analysis of the techniques that they advocate and, in order to ensure that such analysis. is of practical use they must also promote widespread dissemination and discussion of the results of any studies, however challenging to current practice the conclusions may appear.

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