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PSYCHOLOGICAL PROBLEMS OF COMPANION ANIMALS

Introduction

Two important questions must be asked at the outset when considering this topic. Firstly, do companion animals have psychological problems in the sense in which this term is used for man? And subsequently, if there are psychological problems, do these affect the welfare of these animals?

The next section of this paper presents a motivational approach to the bases of psychological problems. As a consequence of the great complexity of the behaviour of companion animals, it is concluded that they can have most of the psychological problems which man himself can have. There is also much evidence that neurological diseases, and a wide range of other pathological conditions, affect companion animals and result in psychological problems.

A conclusion from studies involving the measurement of animal welfare is that effects involving no pathogen can lead to aberrations of behaviour, as well as to abnormal adrenal function, immune system function, growth and reproduction (Broom 1988 a,b). Whereas the welfare of an individual is its state with regard to its attempts to cope with its environment (Broom 1986), there is no doubt that welfare can be poor in situations where the conditions or treatment of the animal have mental effects. These mental effects may lead to physical consequences, but even if they do not there can be a serious welfare problem. These conclusions are drawn from the evidence presented in the main part of this paper.

A motivational approach to psychological problems

Animals regulate their lives by negative feedback control, (in which a displacement from the tolerable range results in a corrective physiological or behavioural response), or by feed-forward control (in which they predict that changes affecting their bodies will occur and take the corrective action before any effects have become apparent). Much research has shown that the feed-forward control involving predictions and expectancies is much commoner in the lives of animals than many people realise (Broom 1987). Expectancies for food at certain times and disturbance responses to situations in which an action does not have an expected effect, are well known to pet owners.

Where animals have the capacity for elaborate expectancies

about events in their world and about the consequences of their actions, they are disturbed if the system is upset in much the same way that people would be. Hence events may be aversive because of some direct physical effect on an animal, or because of a variety of mental effects. An action which should prevent discomfort might fail to do so. An individual might be frustrated because it knows what to do in a particular situation, but it is unable to do it. An unpleasant stimulus might be much worse if its occurrence is unpredictable.

Situations or treatment which may lead to psychological problems

Inadequacies of care or accommodation

Inadequacy of care by an owner can result directly in poor welfare, but it can also cause psychological disturbance to the pet. Failure to feed animals, keep them clean, give them adequate exercise and provide proper veterinary treatment, can have such effects. An animal which is normally well fed and is suddenly given inadequate food will be disturbed by more than just the lack of food.

An inappropriate diet can result in behavioural disorders. Some of these have been described by Mugford (personal communication), who has reported that individual golden retrievers showing high levels of aggression can sometimes be treated by giving them a low protein diet. The behavioural effects must be thought of as a psychological disturbance. Inadequacy of dietary balance can also lead to animals eating plant material, human artefacts, faeces, wood, etc., and it is likely that the animal concerned feels at least unease in this situation.

It is possible for the environment of an animal to be inadequate in that it lacks complexity. Even animals given much space may respond to a rather bare and uninteresting environment by depression, involving inactivity and unresponsiveness, by self mutilation, or by inflicting damage on their surroundings. Provision of an environment which either lacks variety or which lacks certain sources of stimulation which are important for members of the species can lead to psychological disturbances and behavioural problems. For many animals, the ideal way of enriching the environment is to provide a companion.

Some of the most extreme forms of environmental deprivation result from confinement in a small cage or kennel, and from being kept on a short tether. Many birds are kept in small cages with little of interest to do or see. Some respond to this in noticeable ways, such as by

plucking out their own feathers, but there are probably many other psychologically disturbed birds in small cages.

Dogs kept in small kennels or on a short tether for long periods, may demonstrate their disquiet by barking excessively or may become inactive and listless. Quantitative studies of such effects are lacking. Horses kept in stables with little room to move may show stereotypies such as cribbiting, wind-sucking, head-weaving or stall-kicking. Horses or donkeys kept on short tethers may also show stereotypies, and some confined animals are hyper-aggressive towards man.

Temporary confinement for transport or for a period in a veterinary hospital may be severely disturbing for cats, dogs and other companion animals. The psychological effects are a consequence of both the confinement itself and the unexpectedness of the situation in which the animal finds itself.

A major problem for confined animals, and indeed for a high proportion of all pets, is inability to take sufficient exercise. There are direct effects of lack of exercise on muscle efficiency and bone thickness (Lanyon, Rubin & Baust, 1986). In addition, it is known that animals deprived of exercise will spend long periods making exercising movements when given the opportunity - for example hens which have been prevented from wing-flapping (Nicol 1987). The individuals wish to exercise but are prevented from doing so and this frustration must have some psychological effect in addition to the physical effects. Animals kept in stables, kennels or in small flats wish to go out of these places for several reasons, but deprivation of exercise must be one of these.

Inadequacies of animal management

Problems associated with the absence of companions can be very severe for social animals. For some species, such companions should be of the same species, but dogs in particular and other companion animals to varying extents, can form mutually beneficial social relationships with man. An animal which has formed such a relationship can be much disturbed by prolonged or even relatively short periods of social deprivation. Guinea pigs kept with a companion often synchronise activities with that companion and are usually more active than guinea pigs kept alone (Broom and Hellebrekers, in preparation). Horses kept alone are much more likely to show abnormalities of behaviour. Dogs left alone all day while the owner is at work may be severely disturbed during the separation and hence this practice can lead to severe welfare problems. The effects of social deprivation are modified by the

previous experience of the animals, but such problems of social animals cannot be solved by changing rearing management procedures. If social animals are kept as pets they should be provided with adequate social contact with their own species or, failing that, with man.

Failure to socialise with members of their own species and inappropriate or inadequate socialisation with man, can lead to serious behavioural problems in dogs and other pets. This topic is discussed in detail by Serpell (1986, and elsewhere in this volume).

Specific events which result in psychological problems

When an owner, or another person, is deliberately cruel to a companion animal, or when the animal is neglected, the effects are usually psychological as well as physical. An animal which continually fears physical abuse, or does not trust the owner to provide food or water for it, can show obvious disturbances of behaviour.

In addition to obvious types of cruelty, changes in the behaviour of the owner towards the pet can cause substantial problems for the animal.

The most extreme change is desertion of the pet. Less extreme changes result from owners being themselves disturbed by illness, family problems, or financial difficulties. A change in the interests of the owner can also have effects on the pet, for example: becoming bored with the pet and ceasing to give it attention, or acquiring a new baby, or pet, or car, or other distraction. The complex array of expectations which the pet has concerning owner behaviour can lead to extreme frustration and uncertainty in such situations. Psychological problems and behaviour disorders commonly occur at this time.

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Discussion on Professor Broom's Paper

Dr J Serpell (Cambridge University): Training may result in a conflict between the long-term and the short-term interests of companion animals.

Professor Broom: We should be thinking of the long-term interests of the animal, and in training we should think of that. We may have to take decisions which are unpleasant for the animal in its best interests. We do this, just as we take similar decisions for children in their long-term interest.

Mr J Cooper (Bristol University): What is known about the physiology behind these abnormal behaviours, such as stereotypies?

Professor Broom: Little is known about stereotypic behaviour in companion animals, a small amount in zoo animals, and a large amount in farm animals. Stereotypic behaviour is not a universal response, but one of several