

# **Improving canine welfare by characterising the perfect pet dog for Australia**

Pauleen C. Bennett

Companion dogs face unique welfare challenges, mostly because they live embedded within the human community, in a private sector not readily amenable to the enforcement of welfare standards. In Australia, anyone can purchase a pet dog. There is no requirement for dog owners to demonstrate a minimum level of competence in identifying the needs of the animal, or that they have the training and resources necessary to provide appropriate housing, nutrition, health care and quality of life. This does not necessarily lead to poor welfare. Many dog owners are well informed about the needs of their canine companions and highly committed to ensuring that these needs are met. The provision of dog goods, ranging from comfortable beds and colourful toys through to diamond studded collars and expensive food treats, is identified as a growth area by economists<sup>1</sup>. Those providing dog services including walking, grooming, boarding and health care services are similarly in great demand. Many thousands of dogs experience lives that are described in the press as being 'fit for royalty'.

This raises the question of whether dog welfare is something welfare scientists should be concerned about, but there are three reasons justifying this concern. First, the way that dogs are perceived in the community has far reaching implications for animal welfare policy development. Approximately 40% of the Australian public own pet dogs<sup>1</sup>. For many people, these are the only living animals with which they have any form of personal contact. Hence, public perceptions of what dogs require inform opinions about the needs of other animals. Citizens who believe that their pet dog requires access to day care services and expansive off leash parks, to doggie café's and replacement hips, may find it increasingly difficult to tolerate the conditions under which many other domesticated animals are kept.

Second, many pet dogs are not treated like royalty at all. Welfare shelters in Australia annually put to death thousands of unwanted dogs<sup>2</sup>. Many others are subjected to cruelty, neglect or inappropriate care. Some cases of cruelty and neglect reflect psychopathology on the part of the perpetrator. Many more arise because of inappropriate selection and management decisions on the part of dog owners. Poorly selected, under-socialised or untrained dogs may display behaviours that are inappropriate or dangerous. These behaviours, many of which are within the spectrum of 'normal' canine responses to the environment, can lead to abandonment, neglect, abuse or euthanasia<sup>2</sup>, as well as owner anxiety, community disharmony and, in some cases, serious injury to humans or other animals<sup>3</sup>.

Third, the welfare of dogs treated like royalty may be compromised despite the best intentions of devoted owners. Pet dogs are increasingly challenged by disorders of excess, as well as by new stresses associated with modern, high density, living. Up to 40 percent of the Australian dog population suffers from obesity<sup>4</sup>, which is associated with diseases similar to those associated with human obesity. A recent study by our group (unpublished) suggests that owners and veterinarians are often unwilling to tackle this issue. Other pampered dogs suffer when owners attempt to enrich their pet's life inappropriately or when the animal is subjected, often for safety reasons, to hours spent alone in a barren yard or room. Even those dogs most admired by our community can suffer welfare challenges. A recent study by our group (unpublished) showed that dogs entering kennels to be trained as assistants for visually impaired persons experience stress associated with the kennel environment. While most service dog training centres and owners attempt to provide their dogs with exceptional care, from an ethological perspective it is not surprising that even much-loved dogs may show signs of severe and chronic psychological distress.

In other domestic animal sectors, two broad strategies have been used to address animal welfare issues. The first involves changing human caregiver attitudes and behaviours through education, incentives and legislation. The second involves using science to selectively produce animals better suited to the available environment. In most Australian states pet owner education programs are well established. Legislation to enforce responsible ownership practices has also been forthcoming. In the remainder of this presentation the focus will be on the second strategy. Several projects will be described which, taken together, are aimed at finding out what dog

owners want, what different dogs are able to provide, and how we might best match dogs with owners so that they are likely to enjoy good welfare throughout long, healthy and happy lives.

### **Characterisation of what dog owners want**

One of our initial studies focused on exploring the dimensions of the relationship between owner and companion dog. A study involving over 1000 participants established that there are two important positive dimensions, perceived emotional closeness and shared activities. We also identified one negative dimension, the perceived costs of dog ownership, which had not previously been reported<sup>5</sup>.

Psychologists have established that social relationships are maintained only as long as the benefits to each participant are perceived to outweigh the costs. Hence, we knew from the outset that it was important to identify why dog-owner relationships fail, as well as why they succeed.

To address this issue we examined why dogs are admitted to welfare shelters and what happens to them when they get there, tracking over 20,000 dogs admitted to shelters in Victoria<sup>6</sup>. As expected, we found that many dogs are relinquished to shelters because of owner issues, such as moving house or a change in family circumstances. Sometimes these issues are unavoidable but often these are perfectly lovely dogs, surrendered primarily due to a lack of owner commitment. Many other dogs are relinquished because of canine behaviours, such as boisterousness, hyperactivity and aggression, which owners are unable to tolerate<sup>6</sup>. Not all dogs are created equal. Some suit the requirements of modern owners more than others.

Only a small percentage of Australian dogs are estimated to enter a welfare shelter at some point during their life<sup>7</sup>, so studies based in welfare shelters are limited in the extent to which the findings can be generalised. Having identified lack of owner commitment and undesirable dog behaviour as the two big factors responsible for dog relinquishment, we turned our attention to finding out what factors distinguish strongly committed owners from those who are less committed, and also to finding out why some dogs make better companions than others.

In one study we surveyed over 400 dog owners to find out what factors influenced satisfaction with their canine companion<sup>8</sup>. Most participants reported being really happy with their pet dog and they engaged in a number of shared activities, including kissing, hugging and regular grooming, taking the dog visiting, buying it gifts and treats and playing games. Undesirable behaviours fell into five factors: disobedience, unfriendliness, nervousness, destructiveness and excitability. All of these were reported to occur by the participants only very infrequently. Engagement in training activities was predictive of lower scores for many of the problem behaviours. The perceived friendliness of the dog was also predictive of involvement in shared activities. This confirmed that strategies designed to increase participation in dog training activities and promote canine sociability may have significant benefits for both dog owners and their dogs. Unfortunately, most dog owners do not attend training classes<sup>9</sup>. This may be because training clubs fail to adequately address behaviour problems, serving more as a social activity for people who already own well behaved, friendly dogs.

In another study, currently underway, we are interviewing dog owners previously categorised as strongly, moderately or weakly committed to their animal. Using this qualitative methodology we hope to delve more deeply into the minds of dog owners to see how they vary. Already we are seeing a pattern in that strongly committed owners tend to emphasize that the most valuable thing about their dog is that he or she provides them with unconditional positive regard. We already know that this is a critical factor in determining whether psychological therapy is successful in improving a client's quality of life<sup>10</sup>, so this is an interesting finding. Given the relationship between owner satisfaction and engagement in shared activities<sup>8</sup>, we also hope to identify the perceived impact of constraints imposed on dog owners by a community that makes it very difficult to take dogs to public venues.

One of our most recent studies involved another on-line survey, this one completed by over 800 Australians (unpublished). Participants were asked questions about the characteristics that would be exhibited by their 'ideal' companion dog. As expected, the participants provided varied results in terms of how the idea dog would look and act. Overall, however, Australian owners want dogs that are medium sized, short haired, acquired as a puppy, desexed, safe with children, fully housetrained and healthy. They also want their ideal dog to come when called, not to escape from the property, to

enjoy being petted and to display affection to its owners. When participants were asked to list the characteristics they considered to be MOST important the most common responses included friendly, obedient, affectionate and healthy.

### **Characterisation of what dogs are able to provide**

While it is important to understand what dog owners want, another major part of our research involves characterising what different dogs are able to provide. Studies investigating the predictive validity of puppy temperament tests suggest that it is difficult to predict behavioural differences in adult dogs<sup>11</sup>. However, centuries of selective breeding has resulted in the development of hundreds of dog breeds across the world, characterised by incredible diversity in both morphology and behaviour. Because canine behavioural traits are highly heritable we can, at least in theory, genetically 'fix' desirable characteristics in dog breeds, reproducing these reliably in subsequent generations. Just as we've previously produced dogs able to herd sheep or pull sleds, so we should be able to breed dogs perfectly suited to their role as companions.

To investigate whether potential dog owners are aware of breed differences we examined breed stereotypes in a sample of 249 first year psychology students. Our results (unpublished) showed that students do differentiate among 28 common dog breeds, but that some of their beliefs are not consistent with breed standards or ratings provided by dog experts. This indicates a clear need for educational resources to be developed which are based on empirical data, rather than being unduly influenced by the popular press or people with vested interests in promoting specific breeds.

Even when breed characteristics are well established, there are often large individual differences within a breed. Poor selection choices are not always, therefore, due to impulsivity and poor planning on the part of dog owners. Sometimes the best intentions can still lead to the acquisition of an unsuitable individual dog. In order to more accurately describe canine characteristics it is necessary to first create instruments with which to measure these variables. To this end, one of our projects involved characterising canine personality dimensions, using a methodology previously used to investigate human individual differences. Five personality dimensions were identified: extraversion, motivation, training focus, amicability and neuroticism, and we now have

a simple questionnaire that owners can use to rate their dog on each of these dimensions<sup>12</sup>. This survey is currently available on-line and we are collecting breed data and also data about how the different personality characteristics relate to owner satisfaction and commitment and various aspects of dog behaviour. Our aim is to eventually develop breed descriptions based on the experiences of dog owners.

We also have two studies currently underway where we are trying to develop assessments for adult dogs that are predictive of specific behaviours. The first of these is for dogs housed in welfare shelters. The result should be a behavioural assessment that is easy and fast to administer, but that ensures that dogs are adopted into environments most suited for them. In addition, potential purchasers can be reassured that any dog they purchase from a shelter has been assessed as safe. In the second study we are extending the protocol so that we can more comprehensively characterise the behavioural predispositions of adult dogs. One of our long term goals is to introduce a scheme whereby dog breeders can elect to have their dogs independently evaluated prior to using them for breeding purposes. Good results on the assessment could be used to promote the puppies as suitable companion dogs in much the same way that things like hip scores and show ring results are currently used, with the important caveat that a behavioural assessment scheme could be implemented for both purebred and crossbred dogs, and by those who elect to breed for the companion dog market rather than for the show ring. Developing alternative sources of animals for this market may significantly improve dog welfare over the longer term.

The potential benefits of behavioural testing of breeding dogs have recently been demonstrated in relation to the Dutch Rottweiler population. In response to threats to ban Rottweilers in this community, the Dutch Kennel Club implemented a policy in 2001 that requires all Rottweilers to be tested prior to breeding. Only puppies produced by 'approved' dogs can be registered with the governing body, with the remainder being categorised as Rottweiler look-alikes. Several years after the introduction of the scheme registered Rottweilers are reported to have significantly lower rates of dog-directed fear/aggression, stranger-directed fear and non-social fear than do look-alikes<sup>13</sup>.

Being able to match shelter dogs with suitable owners and to advise potential dog owners about the breed or family of dog most suited for their needs is important, but it

would be preferable to be able to predict the behavioural traits that will develop in individual puppies. This depends a great deal on early socialisation and training experiences, but many complex behavioural traits are strongly influenced by an animal's genes. We recently applied to the Australian Research Council for funding to conduct a large scale study to identify canine genes underlying prosocial and antisocial behaviours. If this application is successful the project will place Australia in a strong international position in terms of investigating canine behavioural genetics. Worldwide implications for dog welfare and owner satisfaction are profound.

## **Summary and conclusions**

It is important to acknowledge that companion dogs face unique welfare challenges because they live with private citizens who vary widely in their knowledge and beliefs about dogs, and in their capacity and willingness to provide the resources that dogs require. For this reason the best way to improve dog welfare is an indirect one, focusing on understanding and improving the relationships between individual humans and their canine companions. This requires a long term, multidisciplinary research program and it also requires community involvement, flexibility and an eye to the future, when small dogs and cats are expected to become more popular and where people are expected to live more transitory lifestyles in even higher density developments. Changes in human living conditions have enormous impacts on those animal species that live most closely with us, so the welfare of these animals can only be understood and promoted within a specific cultural and social context.

## **References**

1. Bis Shrapnel Global Marketing and Intelligence Forecasting (2006). Contribution of the pet care industry to the Australian economy, North Sydney, Australia.
2. Marston, L.C., & Bennett, P.C. (2003). Reforging the bond-towards successful canine adoption. *Applied Animal Behaviour Science*, 83, 227-245.
3. Ozanne-Smith, J., Ashby, K., & Stathakis, V.Z. (2001). Dog bite and injury prevention – analysis, critical review and research agenda. *Injury Prevention*, 7, 321-326.
4. McGreevy, P.D., Thompson, P.C., Pride C, Fawcett, A., Grassi, T., & Jones, B. (2005). Prevalence of obesity in dogs examined by Australian veterinary practices and the risk factors involved. *Veterinary Record* 156, 695-702.

5. Dwyer, F., Bennett, P.C., & Coleman, G.J. (2006). Development of the Monash Dog Owner Relationship Scale (MDORS). *Anthrozoos*, 19(3), 243-256.
6. Marston, L.C., Bennett, P.C., & Coleman, G.J. (2004). What happens to shelter dogs? An analysis of data for 1 year from three Australian shelters. *Journal of Applied Animal Welfare Science*, 7(1), 27-47.
7. Headey, B. (2006). National people and pets survey. Socially responsible pet ownership in Australia: a decade of progress. Petcare Information and Advisory Service Australia, Pty, Ltd. South Yarra: Victoria, Australia
8. Bennett, P.C., & Rohlf, V.I. (2007). Owner-companion dog interactions: Relationships between demographic variables, potentially problematic behaviours, training engagement and shared activities. *Applied Animal Behaviour Science*, 102, 65-84.
9. Bennett, P.C., Cooper, N., Rohlf, V.I., & Mornement, K. (2007). Factors influencing owner satisfaction with companion-dog-training facilities. *Journal of Applied Animal Welfare Science*, 10(3), 217-241.
10. Bozarth, J. (2007). Unconditional positive regard. In Cooper, M., O'Hara, M., Schmid, P.F., Wyatt, G. (Ed). *The handbook of person-centred psychotherapy and counselling*. (pp. 182-193). New York: Palgrave Macmillan.
11. Wilsson, E. & Sundgren, P.-E. (1998). Behaviour tests for eight-week old puppies - heritabilities of tested behaviour traits and its correspondence to later behaviour. *Applied animal behaviour science* 58, 151-162.
12. Ley, J., Bennett, P.C., & Coleman, G.J. (2007). Personality dimensions that emerge in companion canines. *Applied Animal Behaviour Science*, 110, 305-317.
13. Van der Borg, J. (2008). Effects of behavioural testing on the prevalence of fear and aggression in the Dutch Rottweiler population, Canine Science Forum, Eötvös Loránd University, Budapest, July 5-9.