Recent Advances in the Welfare of Dogs in Shelters

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Introduction

A discussion of recent developments in understanding public perceptions about shelter dogs, factors contributing to the welfare of dogs in kennel environments and the value of behavioural assessment tools in determining adoptability.

Discussion

In the 2011-12 financial year, RSPCA shelters across Australia received 55,563 dogs (RSPCA, 2012). The welfare of these animals is a major issue. Their novel surroundings and separation from social attachments represent demanding circumstances that result in a range of behavioural and physiological changes ("stress") (Hilby *et al.*, 2006). Research into practical methods to ameliorate this provides opportunities for improving dog welfare. The outcome for many dogs entering shelters in Australia is determined by their performance in behavioural assessments (Mornement *et al.*, 2010). Enhanced validity of these tests may ensure suitable dogs are not needlessly euthanased. Additionally, understanding public perceptions of shelter dogs and practices identifies misconceptions and highlights potential ways to increase adoption rates. Advances in these areas of shelter management are explored in three recent studies.

Environmental enrichment is one way to improve the welfare of dogs housed in inherently stressful shelter environments (Wells, 2009). Previous research has explored sensory stimulation as a form of environmental enrichment (Wells, 2009). Kogan *et al.* (2012) investigated the effect of auditory stimulation on three behaviours deemed to indicate stress levels in kennelled dogs. The impact of classical, heavy metal and psychoacoustically altered classical music on the activity, vocalisation and body shaking of dogs (n=117) was recorded. The study found that classical music resulted in significantly more time spent sleeping and being quiet than other music types or no music at all. Heavy metal music was associated with increased body shaking, while psychoacoustically altered music had minimal effects. These results suggest that playing classical music in shelters helps mitigate the stress associated with these environments. Apart from improved welfare provided by reduced stress and anxiety, it may also increase the likelihood of passing behavioural assessments by reducing stress-related behavioural problems (Bergamasco *et al.*, 2010). Measuring the effect of classical music on physiological stress indicators (e.g., cortisol) would have complemented the behavioural-based findings of this study. Additionally, exploration of the *aspects* of music that contribute to its stress-modulating effect, as well as measurements over a range of ambient sound levels, would assist with effective shelter implementation. Playing classical music may also positively influence shelter employees and potential adopters, which could have further implications for the welfare of dogs there (Kogan *et al.*, 2012).

In 2011-12, 26% of dogs received into RSPCA shelters in Australia were euthanased; of these, 59% were destroyed for behavioural reasons (RSPCA, 2012). The fate of most of these dogs was determined by their performance in a "behavioural assessment". That so many lives depend on these assessment tools means their validity is crucial. Lack of validity would represent major animal welfare concerns for dogs needlessly euthanased as well as a significant public safety issue if aggressive dogs are not identified (Mornement *et al.*, 2010). Previous studies have raised concerns about the reliability and validity of some behavioural assessments and have emphasised a need for scientific scrutiny of these tools (Diederich & Giffroy, 2006; Mornement *et al.*, 2010). Bennett *et al.* (2012) evaluated dogs (n=67) for which detailed behavioural histories were available, using two behaviour assessment instruments commonly used in America: the Safety Assessment for Evaluating Rehoming (SAFER) assessment and a modified version of the Assess-A-Pet (mAAP) assessment. Results were compared with the dog's aggression history as described by owners in a validated behaviour/temperament questionnaire (Hsu & Serpell, 2003). Results indicated that SAFER showed both lower sensitivity and specificity than mAAP and, worryingly, that SAFER results were not significantly aligned with categorisation of dogs into varying levels of aggression. Both tests resulted

in false positives and negatives, emphasising the need for tests to be used only in conjunction with other information, such as a history and observations (Bennett *et al.*, 2012). These results highlight the limitations of these tools in assessing behaviour and the need for accurate tools to achieve animal welfare and public safety outcomes. Further evaluation of the assessment tools in a shelter setting would be valuable in exploring the effect of high-stress environments on test accuracy.

Lack of public confidence in behavioural testing may be responsible for the fact that approximately one third of participants in a survey (Mornement *et al.*, 2012) believed that adult dogs from shelters often have behavioural problems. This study investigated perceptions and attitudes toward shelter dogs, particularly with respect to the assessment process. An understanding of perceptions about shelter dogs is important to understanding why many people appear reluctant to adopt from shelters (Mornement *et al.*, 2012). Australian adults (n=1647) participated in the study, with more than 80% indicating that they were aware of shelters routinely assessing shelter dog behaviour. Combined with perceptions that adult shelter dogs often have behavioural problems, this further suggests a lack of confidence in behavioural assessments and an urgent need to develop validated tools and to raise public awareness. Educating the public that behaviourally unsound dogs are euthanased (i.e., removed from the adoption pool) may increase confidence in the quality of shelter dogs available for adoption (Mornement *et al.*, 2012). However, this may be unpopular if it is perceived as contrary to the positive image many shelters and rescue groups try to create.

While this study reveals some key issues with perceptions of shelters, participants used were not representative of the general public – females constituted 90% of participants and 33% of respondents had experience working or volunteering with a shelter, pound or rescue team. This points to the need for shelters to further research and respond to how those members of the general public with an interest in dogs view the suitability of shelter dogs for adoption.

Conclusion

Ameliorating the stress associated with shelter environments and increasing adoption rates, to reduce the time dogs spend there, would significantly improve the welfare of shelter dogs. These studies highlight opportunities for doing so by improving shelter environments, behavioural assessment tools and public confidence in shelter dogs.

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