Stress levels in dogs, and its recognition by their handlers, during animal-assisted therapy in a prison

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Abstract

The stress on dogs and their handlers during animal-assisted therapy in a prison programme was evaluated using questionnaires and measurement of the dogs’ saliva cortisol concentrations before and after the sessions. Their handlers were volunteers who underwent training classes with their pet dogs. Overall, the dogs did not show serious signs of stress in the programme, which was also the impression of their handlers. In most cases, the dogs’ saliva cortisol values decreased following their participation in the sessions. There was an association between the dogs’ stress levels and the handlers’ self-reported stress. In 11% of cases, the dogs were evaluated as stressed during the session, but their saliva cortisol values did not change significantly from before to after the session. Some handlers might have misconstrued their dogs’ behavioural states. Improvement of the dogs’ welfare may be achievable through giving feedback to the handlers to more accurately evaluate their dogs’ behaviours, by strengthening the selection of appropriate units and classes prior the programme, by developing a programme and handling methods less burdensome to the animals, and by enhancing the aftercare of animals when they are stressed in a session. Achievement of these goals would also strengthen the bonds between dogs and handlers, contributing to a more effective programme for clients.

Keywords: animal-assisted therapy, animal welfare, behaviour, cortisol, dogs, stress

Introduction

Animal-assisted programmes exist in some prisons (primarily in Western countries) as part of vocational and social skills training. Several studies have reported that these programmes have positive physiological and psychosocial effects on inmates (Moneymaker & Strimple 1991; Fredrickson 1995; Fournier et al 2007; Furst 2011).

For the first time in Japan, our team conducted a dog-visitaton therapy programme as part of stress management and communication training, where male inmates with mental problems could interact with dogs and their handlers in a specialised prison unit. We found positive psychosocial influences of the programme not only on the inmates but also on the handlers (Koda et al 2013a,b).

It is important that these programmes be effective for clients without placing an excessive burden on the visitation handlers and their animals. The International Association of Human-Animal Interaction Organizations stated in 1998 that safeguards should be in place to prevent adverse effects on animals involved in animal-assisted programmes, and that animals must be properly cared for. There are a number of reports about the influence of such programmes on dogs. For example, assessment of behaviour and urinary catecholamine concentrations suggested that dogs might have experienced a minor degree of stress during animal-assisted activities in a nursing home for elderly people (Horii et al 2003), but also that the dogs readily acclimated to such a programme (Uetake et al 2007).

The atmosphere of prisons might stress animals in ways that other settings do not. Behaviour is a simple and useful indicator for evaluating the states of animals (Martin & Bateson 1990). Handlers are able to closely observe and monitor their animals, and notice behaviour indicating distress. Handlers working with dogs should be sensitive to the stress of their animal partners as well as their own stress, because they are perceived as authority figures by the dogs and so the handlers’ behaviour during interactions also influences the dogs’ stress levels (Jones & Josephs 2006; Horvath et al 2008). However, behavioural observations in these situations might reflect the subjective evaluation biases of the observers (Tami & Gallagher 2009), and as such their validity must be independently assessed.