

Expert opinion on psychological trauma in dogs: Beliefs, causes, and clinical signs

Descovich, K.A. ^{1,2*}, Mills, D.S. ³, Zito, S. ¹, Barnes, T.S. ², Platto, S. ⁴, Shimomura, R. ⁵, Buchanan-Smith, H.M. ⁶

¹ RSPCA Australia, PO Box 531, Curtin, ACT, 2605, Australia

² School of Veterinary Science, The University of Queensland, Gatton, QLD, 4343, Australia

³ School of Natural Sciences, College of Health and Science, University of Lincoln, LN6 7TS, United Kingdom

⁴ College of Life Sciences, Jiangnan University, Wuhan, P.R. China

⁵ Independent researcher, Hokkaido, Japan

⁶ Psychology, Faculty of Natural Sciences, University of Stirling, Stirling, FK9 4LA, United Kingdom

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Animal welfare states fluctuate based on an animal's external and internal conditions (1–3). Despite this mutability, aversive experiences can result in persistently negative welfare (4,5) aligning with psychopathology in the realm of psychological trauma. Diagnosis of trauma-related disorders in people relies on verbal reporting of symptoms. This is not possible for animals however behaviour may help to identify the impact and manifestation of potentially traumatic events. This study engaged expert opinion to understand whether psychological trauma occurs in dogs. Eligible participants needed to be working in the field of dog behaviour/psychology and have tertiary-level qualifications in animal behaviour or animal psychology. Dogs were selected because their behavioural biology is well-described and abnormal dog behaviour receives substantial scientific and societal attention (6–9).

Experts (n = 204) in dog behaviour/psychology were surveyed using an online, 24-item questionnaire. Respondents were almost all women (n = 188, 92.2%) and were regionally diverse, coming from 24 different home countries, however the USA (n = 78, 38.2%), UK (n = 43, 21.1%), and Australia (n = 21, 10.3%) had the greatest amount of representation. Around half (n = 110, 53.9%) had more than 10 years of experience and just under a third were PhD holders (n = 66, 32.4%).

Participants were first asked to define the term 'psychological trauma' themselves before being provided with a working definition to use for the remainder of the survey; *"Psychological trauma results from events or circumstances that are experienced by an individual as physically or emotionally harmful or life threatening and that have long lasting adverse effects on the individual's functional and mental, social, or emotional wellbeing"* (adapted from 10). Thematic analysis of their definitions revealed 25 common features within four main themes: causation, general impacts, specific effects, and characteristics of effects. Participants were asked whether they believed dogs could experience psychological trauma according to our definition, and all except one (99.5%) agreed, with the remaining participant being unsure. Participants indicated the basis of these beliefs were primarily on direct professional (n = 194, 95.1%) and personal experiences with dogs (n = 175, 85.8%).

From a list of 21 environmental and social events/experiences participants indicated those that could be psychologically traumatic for dogs. Top-ranked potential causes were physical abuse, traffic accidents, and animal attacks. Lowest ranked were food-based training, changes to feeding schedules, and toy removal. Participants then assessed 26 behaviours on frequency of presentation in dogs with psychological trauma, on a 5-point scale from 'Never' to 'Always'.

The most common behavioural signs were general reactivity (n selections of 'Always' or 'Very often' = 139, 68.1%), noise phobias (n = 128, 62.7%), and aggression towards unfamiliar people (n = 116, 56.9%). The least common behaviours were predatory behaviour (n selections of 'Never' or 'Rarely' = 114, 55.9%), pica (n = 64, 31.4%), and fussy eating (n = 41, 20.1%).

Traumatic events may have a significant and persistent effect on the welfare of dogs, and this topic requires further scientific examination, particularly on potential causes and mitigation options. Furthermore, given the interconnection between humans and animals within communities and industries, this issue may have a large and unrecognised impact on the well-being of people and wider society.

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