

Selected Abstracts

What's in it for the companion animal? Pet attachment and college students' behaviors toward pets

Shore ER, Douglas DK and Riley ML 2005 What's in it for the companion animal? Pet attachment and college students' behaviours towards pets. *Journal of Applied Animal Welfare Science* 8(1): 1-13

Research on the human-nonhuman animal bond has focused primarily on its advantages to the human. The purpose of this study is to investigate behaviors of caregivers (owners) of companion animals (pets) and to examine the relationship between such behaviors and scores on a pet attachment scale. Participants were 501 largely nontraditional (older, married, employed full-time) college students living with a pet dog or cat. The study categorized owner behaviors as Essential, Standard, Enriched, or Luxury Care. Almost all participants reported engaging in Essential Care behaviors, with numbers declining from category to category. Pet attachment scores appeared related to Standard and Enriched Care behaviors but not to Essential Care. Too few participants reported doing Luxury Care behaviors to link them to attachment. The results suggest that even pet owners reporting low attachment provide beneficial care and attention to their pets and that pet attachment may be of limited use when looking at the benefit of the human-animal bond to the companion animal.

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The importance of 'awareness' for understanding fetal pain

Mellor DJ, Diesch TJ, Gunn AJ and Bennet L 2005 The importance of 'awareness' for understanding fetal pain. *Brain Research Reviews* 49(3): 455-471

Our understanding of when the fetus can experience pain has been largely shaped by neuroanatomy. However, completion of the cortical nociceptive connections just after mid-gestation is only one part of the story. In addition to critically reviewing evidence for whether the fetus is ever awake or aware, and thus able to truly experience pain, we examine the role of endogenous neuroinhibitors, such as adenosine and pregnanolone, produced within the fetoplacental unit that contribute to fetal sleep states, and thus mediate suppression of fetal awareness. The uncritical view that the nature of presumed fetal pain perception can be assessed by reference to the prematurely born infant is challenged. Rigorously controlled studies of invasive procedures and analgesia in the fetus are required to clarify the impact of fetal nociception on postnatal pain sensitivity and neural development, and the potential benefits or harm of using analgesia in this unique setting.

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Behavioural and physiological responses of naïve European rabbits to predator odour

Monclús R, Rödel HG, von Holst D and de Miguel J 2005 Behavioural and physiological responses of naïve European rabbits to predator odour. *Animal Behaviour* 70: 753-761

Animals show a variety of antipredator strategies in response to the presence of chemical cues from mammalian predators. Nevertheless, there is no general agreement as to whether recognition of predator odours is dependent upon experience. We conducted an experiment on European rabbits *Oryctolagus cuniculus* naïve to any contact with predators and we investigated (1) whether they possessed a mechanism for the recognition of the odour of a predator, and (2) how they responded behaviourally and physiologically to that odour. We used fox *Vulpes vulpes* faeces as the source of the predator odour and sheep *Ovis aries* faeces as a nonpredator control odour. The experiments were conducted in small outdoor enclosures where the animals were kept singly. We recorded patterns of vigilance, activity and feeding, and changes in glucocorticoids and body mass. The rabbits showed a clear antipredator response to the presence of fox faeces, whereas they behaved neutrally in response to sheep odour. The response consisted of increased avoidance and vigilance while feeding and more investigation before feeding. Furthermore, the rabbits showed a physiological alarm response, that is, an increased responsiveness of their adrenocortical system and weight loss. However, the total activity budget, measured as time spent outside the burrow, the time spent feeding, and the amount of food ingested remained largely stable during the experiment. We conclude that rabbits recognise predator odours and that this recognition was independent of experience.

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Use of buspirone and enrichment to manage aberrant behavior in an American badger (*Taxidea taxus*)

Gage LJ 2005 Use of buspirone and enrichment to manage aberrant behavior in an American badger (*Taxidea taxus*). *Journal of Zoo and Wildlife Medicine* 36(3): 520-522

A captive adult female American badger (*Taxidea taxus*) suffered periodic episodes of agitation and self-mutilation over the course of its lifetime. Initially environmental enrichment curtailed the aberrant behavior; however, intensifying clinical signs periodically required the use of diazepam for amelioration of the problem. When diazepam treatment failed to effectively manage a series of escalating behavioral problems, alternative therapy with buspirone, an azaperone anxiolytic, was initiated. The badger was treated with 10 mg buspirone p.o. b.i.d. for over 18 months, during which time no undesirable behaviors or noticeable side effects were observed.

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